

RECYCLING-BASED FINANCIAL INCENTIVE SYSTEMS IN TEXAS

AN ECONOMIC ANALYSIS
JANUARY 2023

Introduction - Current Landscape

The current recycling reality in Texas is one that sees Texas leaving money on the table. Currently, only 16% of Texans recycle (Eunomia/Ball 2021). This paltry percentage lags behind the national average of 46% (Eunomia/Ball 2021). In the absence of robust statewide recycling programs, increased littering and pollution negatively impact Texas agriculture. The Texas Farm Bureau and the U.S. Cotton Trust Protocol, inclusive of Texas farmers, are committed to improving sustainability efforts such as expanded recycling programs (Texas Farm Bureau 2019, U.S. Cotton Trust Protocol 2022) Additionally, roughly 9,900 jobs (at ~\$47,000/year) are created or supported by the current landfill system across the state (AngelouEconomics 2022, IMPLAN 2022). Recycling-based financial incentive systems coupled with the retrofit and/or construction of recycling facilities have the potential to positively impact job opportunities across the state.

Recycling across the state is an inconvenient patchwork system predicated on a genuine sense of goodwill winning the day. Individuals, groups, and communities make recycling decisions based on limited resources. While that approach is admirable, there is more that the State of Texas can achieve through more convenient recycling. While Texas boasts a robust 8.2% increase in gross domestic product in 2022 and is repeatedly identified as a premiere business destination, many businesses report additional opportunities for Texas to grow with the adoption of more robust recycling programs. More businesses would more seriously consider Texas for relocation and/or expansion and more international trade would be conducted if more recycling policies were in place.

Beyond the economic impact, Texas' "Don't Mess with Texas" motto is a direct response to statewide littering and its negative consequences. If Texas wants to truly embody that motto, the adoption of a more convenient and/or incentivized recycling program is the path forward. These recycling programs incentivize initiatives that allow Texans to spend more money in the Texas economy and would create new jobs throughout the state.



Executive Summary

Recycling-based financial incentive systems: the commonsense approach to increasing Texans' participation in statewide recycling.

Through the implementation of such legislation, Texas can capture millions of dollars that are currently being lost through inaction, create new jobs, increase economic activity, and improve infrastructure across the state.

A bag drop hub-and-spoke system could lead to:

- **\$258.6M to \$1.6B** in economic activity
- **1,176 to 9,1768 FTEs** created or sustained
- **\$4.9M to \$26.0M** in new local and state tax revenues.

A more aggressive, recycling-based financial incentive system would create an additional:

- **\$124.1M to \$248.6M** in increased disposable income
- **741 to 1,482 FTES**
- **\$7.5M to \$14.8M** in new tax revenues.

Texas ranks 42 out of the 50 states, with the current (as of 2021) recycling rates for plastics (10.5%) and aluminum (16%) (Eunomia, 2021). **A coordinated approach that included bag drop collection infrastructure and a financial incentive system could lead to:**

- **10,660 FTEs created or sustained**
- **\$1.9B in economic activity**
- **\$40.8M in new tax revenue**
- **\$248.6M in increased income for Texans**

These actions have the potential to accelerate business expansion in Texas, business relocation to Texas, and increase international trade through Texas.

Methods

The legislative analyses executed for this report include three scenarios for consideration. Each demonstrates a different financial incentive to the State of Texas, its residents, and its businesses. Each scenario represents a different opportunity to improve infrastructure throughout the state. These options present commonsense solutions to addressing low recycling rates across the state.

To model each of the scenarios, data was collected from a representative collection of leaders in the aluminum, glass, and recycling and repurposing industries. Dozens of recycling-based financial incentive system documents from across the United States provided additional datapoints. These business leaders and job creators provided key insights into the potential economic benefits that recycling-based financial incentive systems could provide:

- Improved infrastructure
- Increased tax revenues
- Job creation
- Business expansion and relocation in and to Texas
- Pathways to increased international trade
- Increased recycling modalities
- Increased recycling rates.

Data was extracted from interviews and document analysis to evaluate three scenarios:

1. No Change - Texas loses economic development opportunities through inaction.
2. Moderate Recycling - Texas spurs some economic growth and infrastructure investment via the adoption of a bag drop collection system feeding to strategically located recycling facilities through a hub and spoke model.
3. Aggressive Recycling - Texas empowers its residents to contribute directly to the Texas economy through recycling-based financial incentives in addition to the benefits of the Moderate Recycling scenario.

Each model was built and analyzed using IMPLAN, an industry-leading input-output modeling tool. For each scenario, impacts were modeled for the State of Texas and its twelve regions (as defined by the Texas Comptroller's office).

- Scenario 1, "No Change", represents lost opportunities.
- Scenario 2, "Moderate Recycling", includes the retrofit of existing facilities and the construction of new recycling facilities.
- Scenario 3, "Aggressive Recycling", includes the impacts of the Moderate Recycling scenario and the impacts of implementing an additional 5- or 10-cent financial incentive system.

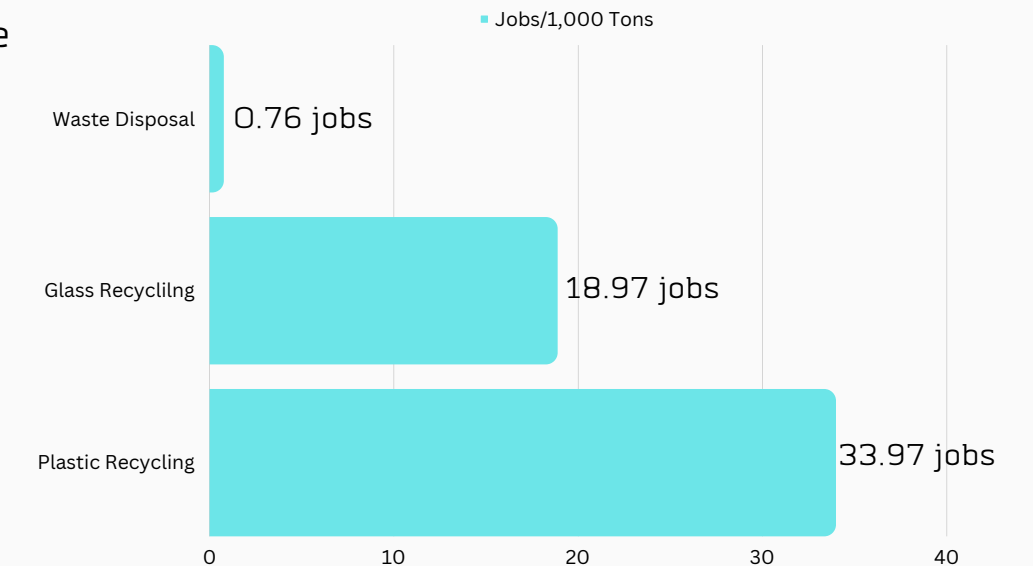
Each scenario captures job support/creation*, labor income, economic output, local tax generation, and state tax generation.

* jobs are measured as full-time equivalents (FTEs)

Transition - Becoming More Recycling Competitive Nationwide

Texas prides itself on being at the forefront of economic development. However, it is lagging behind other states as those states are leading the way in recycling programs and their related economic benefits. **In the absence of more robust and more convenient recycling legislation, Texas prevents job creation.**

Job creation in waste removal and remediation is measured in jobs per 1,000 tons. For traditional disposed waste process of glass (including collection, landfill, and incineration), 0.76 jobs exist per 1,000 tons. For recycling efforts of glass (sometimes referred to as diverted waste), 18.87 jobs would be created or sustained per 1,000 tons of diverted waste. For the same recycling efforts of plastics, 33.97 jobs would be created or sustained per 1,000 tons of diverted waste (AngelouEconomics 2022, Ball Corporation 2022, Tellus Institute 2011).



Legislation-driven convenient recycling would initiate the construction of new recycling facilities and/or the retrofitting of existing facilities. **The retrofit of a single facility would mean the support or creation of over 116 FTEs, the addition of over \$7.8 million in labor income, and over \$26.5 million in additional economic output across Texas.** The construction of a single facility increases these impacts. **A new build would support or create over 869 FTEs, generate over \$58.8 million in labor income, and create an additional \$164.2 million in economic output across Texas** (AngelouEconomics 2022, IMPLAN 2022).

As more states move towards circular economies (those economies in which products and materials are kept moving through the economy for as long as possible), it becomes clear that those states with recycling-based financial incentive bills and other supportive legislation lead the way. Currently, eight of the ten highest recycling states have a deposit return system for beverage containers. These programs are often referred to as “bottle bills” (Eunomia 2021) but here are referred to as recycling-based financial incentive bills, because they provide a pathway for Texans to participate in a statewide recycling program and boost their finances and the Texas economy at the same time. In contrast, Texas ranks forty-second in the country in terms of plastics recycling (10.5% recycling rate) (Eunomia 2021). In order to improve Texas’ standing nationwide, A recycling-based financial incentive bill implementing a deposit return system is the most direct, data-driven approach to improving Texas’ ranking nationwide. In addition to improving its national ranking, a recycling-based financial incentive bill, either at five cents or at ten cents, would provide an immediate economic boost to all 254 Texas counties (AngelouEconomics 2022, IMPLAN 2022).

Incentivizing Recycling in Texas - Accelerating Job Creation

Very simply put, investment in incentivized recycling programs in Texas (' recycling-based financial incentive bills') would accelerate job creation throughout Texas. Additionally, a deposit return system would return money to Texans to turnaround and spend immediately and locally again. Deposit return systems through recycling-based financial incentive bill legislation would generate the need for the construction of new recycling facilities and the retrofitting of existing facilities to handle increased tonnage of recyclable materials. The construction, retrofitting, and operation of those facilities all mean the creation and support of jobs across Texas.

Beyond those benefits, the adoption of increased convenience recycling (bag drop collection systems) provides another recycling modality and would reduce the need for the expansion of truck networks to pick up recyclable materials from residential locations. By providing bag drop collection sites in public places throughout the state, the barrier to participating in recycling programs is reduced. This is especially important for rural residents who would otherwise need to drive extended distances to participate.

In summary, the adoption of convenience recycling (bag drop collection sites) and incentivized recycling (recycling-based financial incentive bills) increases recycling rates, improves Texas agriculture, reduces CO2 rates along with other greenhouse gas emissions, and provides an immediate and long-term boost to the Texas economy, through additional jobs and additional money circulating through the local economy.



Scenario 1: No Change

In this scenario, Texas maintains the status quo regarding recycling. The absence of bag drop collection sites and recycling-based financial incentive bills puts Texas at a disadvantage compared to other U.S. states that have or are implementing such programs.

Zero action means the continued degradation of the environment which will negatively impact Texas agriculture. Likewise, it will stunt economic development and job creation across the state, including those regions in Texas that would most benefit from the injection of increased economic activity and job creation.

Maintaining the status quo, or zero action, is in reality, a net loss for the state of Texas.

No change means Texas is leaving money and business development opportunities on the table.



Scenario 2: Moderate Recycling

In this scenario, Texas adopts a bag drop collection program throughout the state. This series of collection sites, located in easily accessible public spaces, increases the likelihood of recycling and eases the burden of ordinary Texans to participate in recycling programs. Convenient recycling accelerates Texas' commitment to recycling and provides a boost to economic development and job creation throughout the state.

As bag drop collection programs are launched, it will accelerate the retrofitting of existing recycling facilities and/or construction of new recycling facilities. Temporary construction jobs will be supported and then new jobs will be created to maintain the operation of such facilities.

Those new jobs and their associated labor income, will increase economic output throughout Texas, and generate additional local and state taxes, further supporting the economic wellbeing of Texas.

Moderate recycling means Texas is beginning to capture some of the economic benefits and business development opportunities possible through recycling.



"A bag drop [collection] system would create operations, processing, maintenance, and transportation jobs" - Eric Winter, Director of Product and Business Development, Clynk

Scenario 3: Aggressive Recycling

In this scenario, Texas adopts a recycling-based financial incentive bill that incentivizes Texans to recycle recyclable containers. At either the five cent or ten cent level per return, this system provides Texans with money to spend in the local economy immediately. Such incentivized recycling-based financial incentive bills also bring with them the incentives and economic benefits of the moderate recycling efforts including the retrofitting and construction of recycling facilities across the states.

It is important to note that all analyses are done with the current (as of 2021) Texas recycling rates for plastics (10.5%) and aluminum (16%) (Eunomia, 2021). A financial incentive of \$0.05 or \$0.10 could raise those rates substantially (as evidenced in ten other US states). Economic impacts across the state of Texas would increase as rates of recycling increase. This analysis is purposefully conservative to convey what a baseline economic impact would mean for Texas.



Aggressive recycling means Texas expands its economic dominance and job creation across all regions throughout the state. Business expansions into Texas increase and additional international trade opportunities are created.

"Legislation could spur more investment and international trade through Texas." - Megan Lane, Recycling Manager, Ball Corporation

How to Read each Dashboard

The dashboards located on the following pages provide estimated economic impacts for each region across the state of Texas. Each dashboard includes:

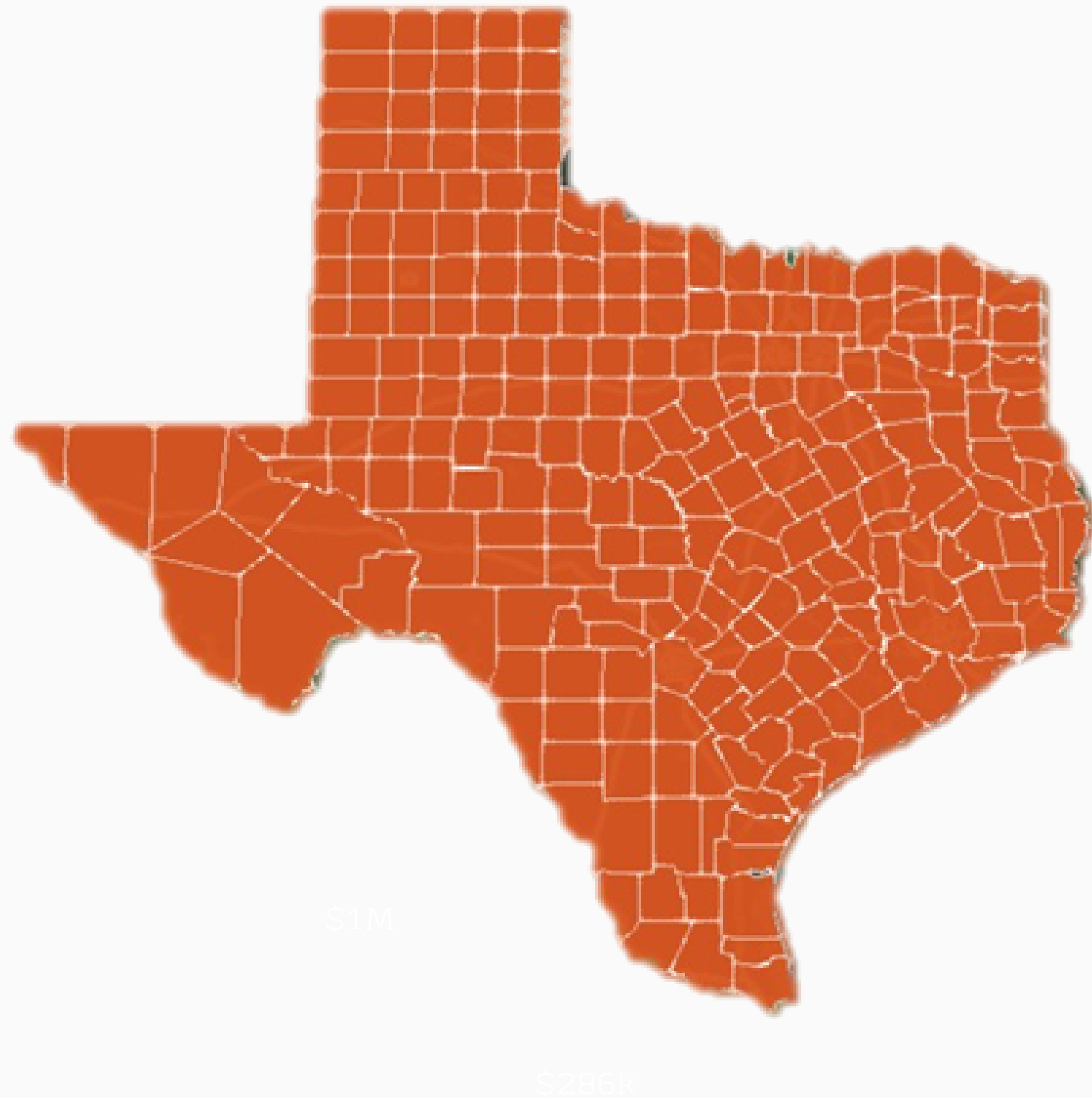
- a map of the region
- number of counties in the region
- total population of the region
- median income in the region
- additional economic impacts with each recycling scenario:
 - additional income for households for 5¢ and 10¢ recycling-based financial incentive bills
 - number of FTEs sustained and/or created
 - amount of new subcounty (i.e., special districts such as water districts), county, and state tax generation.

Each scenario is presented as an individual piece of analysis. The summary slide aggregates both scenarios to convey the overall economic impacts of each scenario.

Increases in median income are a result of the recycling-based financial incentive deposit systems and demonstrate increased purchasing power for all Texas residents. Additional FTEs are sustained and created through the retrofitting, expansion, and construction of recycling centers in each region. FTEs come from many different industries including obvious ones such as recycling and construction, but include dozens of other industries positively impacted because of the adoption of recycling-based financial incentive bills. As with most increases in economic activity, subcounty, county, and state tax generation increases, providing Texas with more opportunities to be fiscally sound.



SCENARIO 1: NO CHANGE



No Change - Texas loses economic development opportunities through inaction.

- Scenario 1, "No Change", represents lost opportunities.

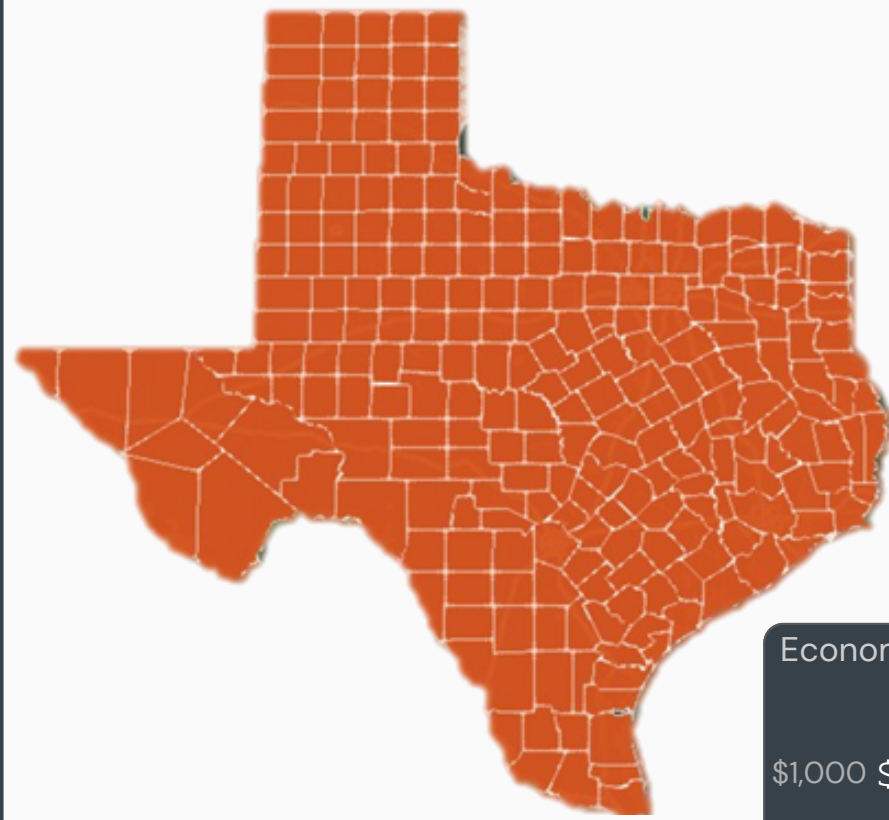
Simply put, the no change or no action scenario would see Texas continue to lose out on economic development opportunities and pathways to improve infrastructure throughout the state.

0 new jobs created

\$0 in new economic output

\$0 in new local and state tax generation

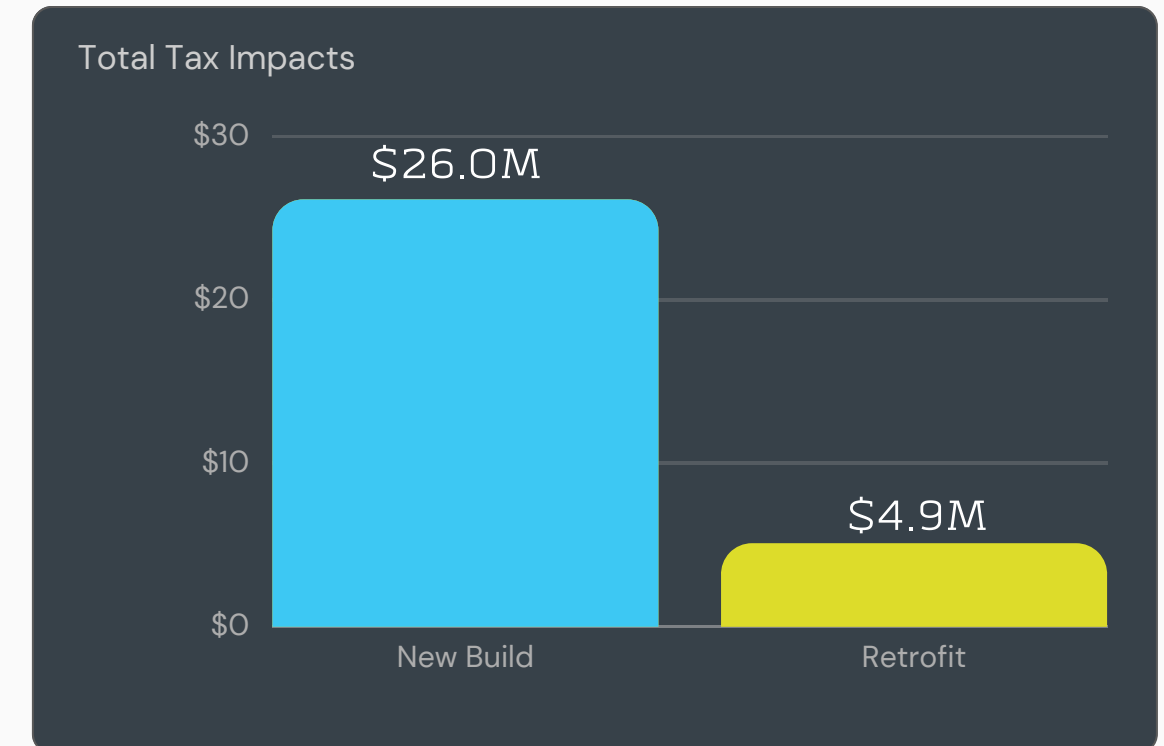
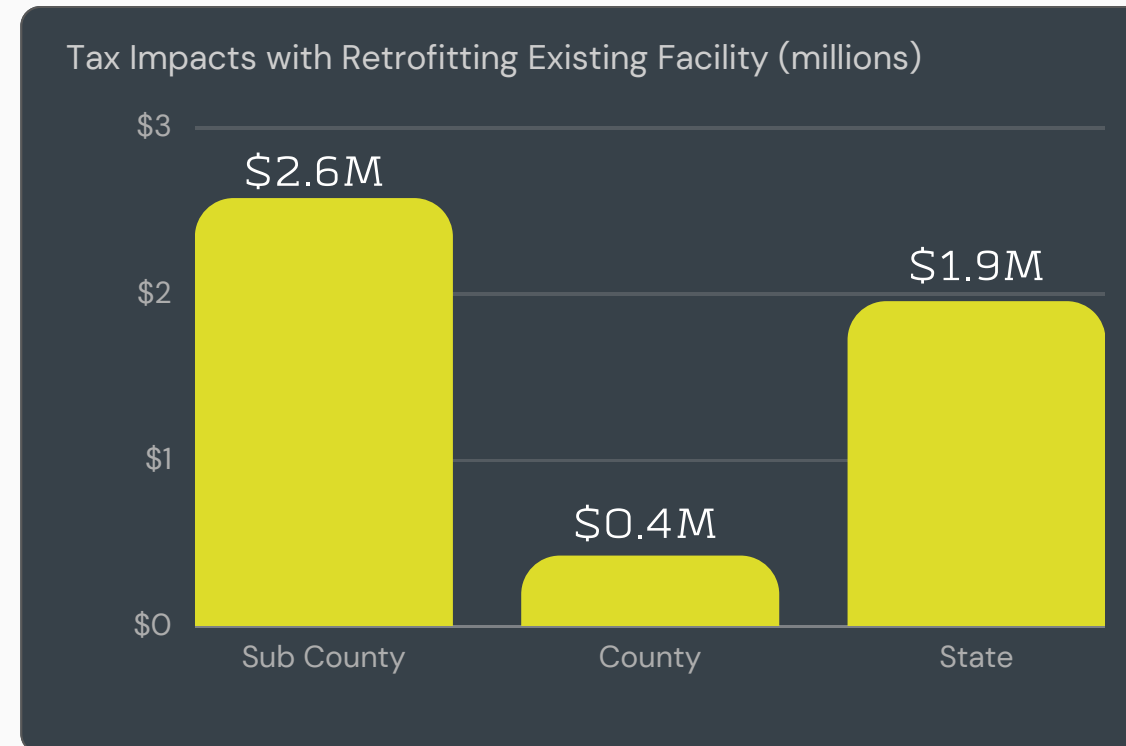
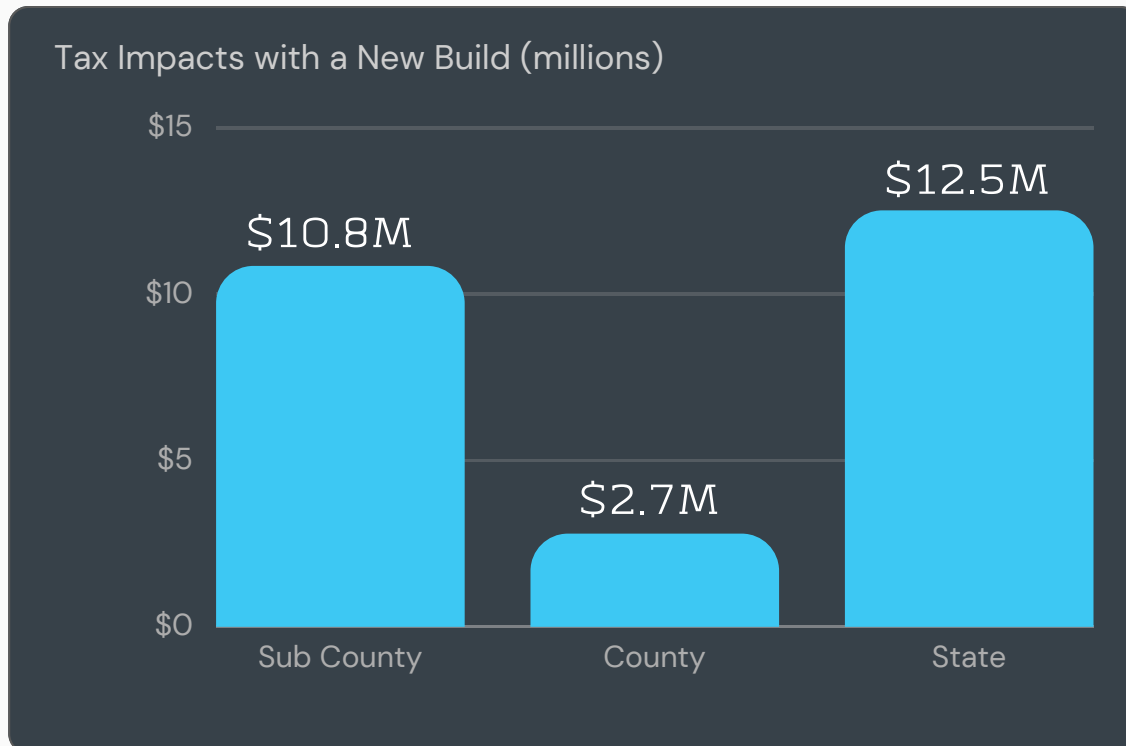
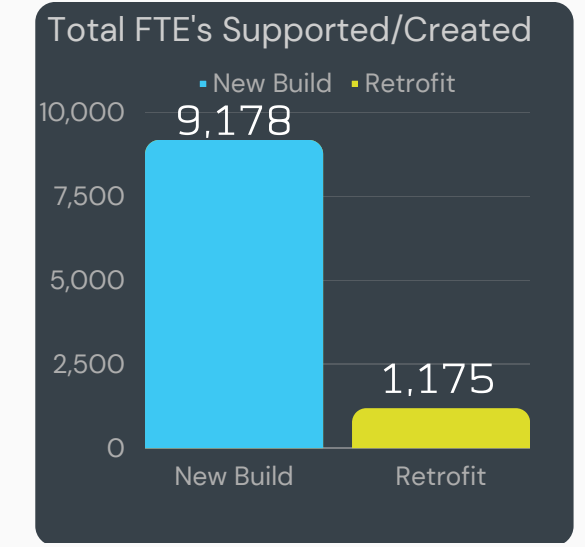
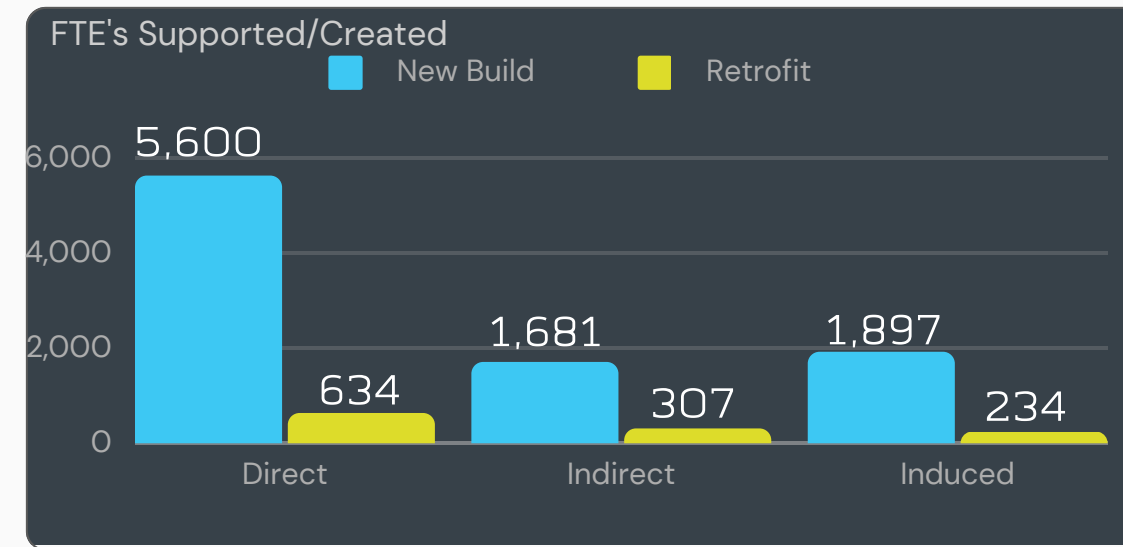
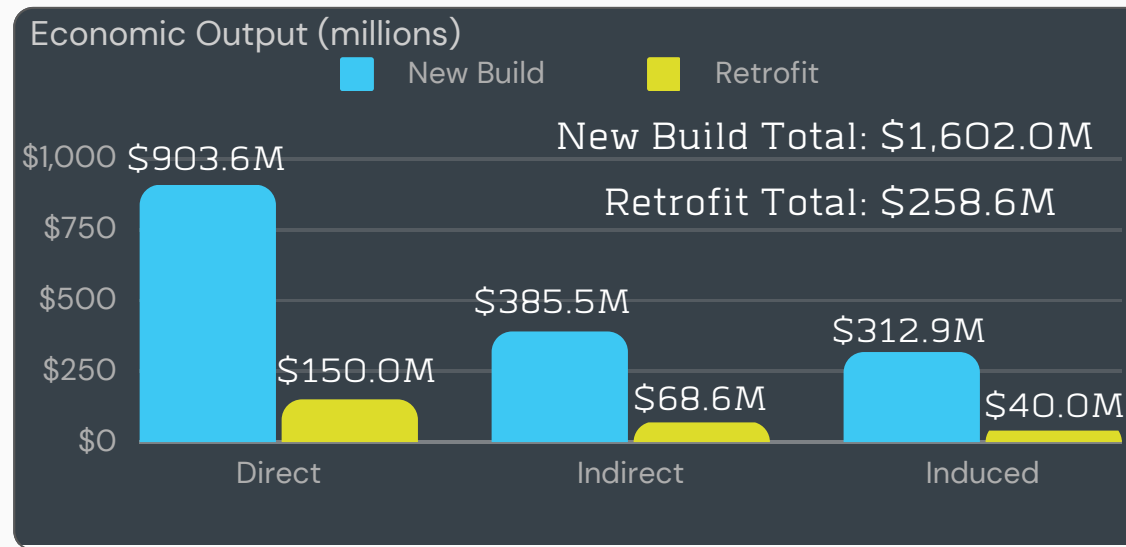
SCENARIO 2: STATE OF TEXAS



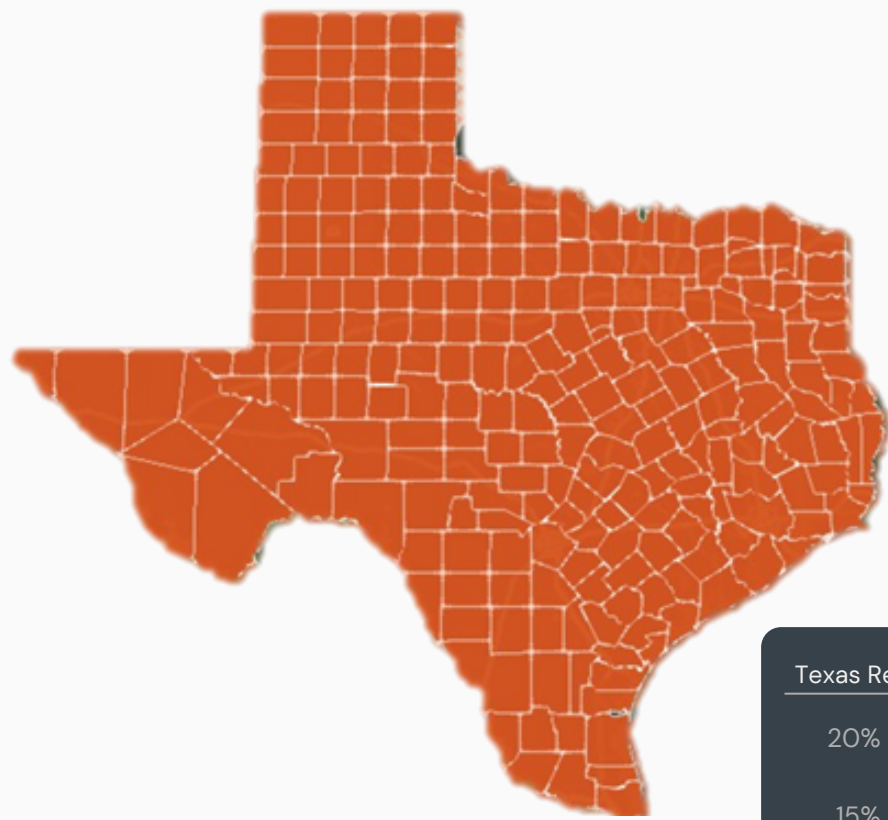
254 Counties in the state

Population
29,516,055

Median Income
\$63,826



SCENARIO 3: STATE OF TEXAS

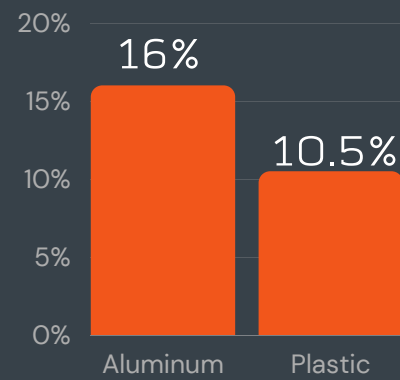


254 Counties in the state

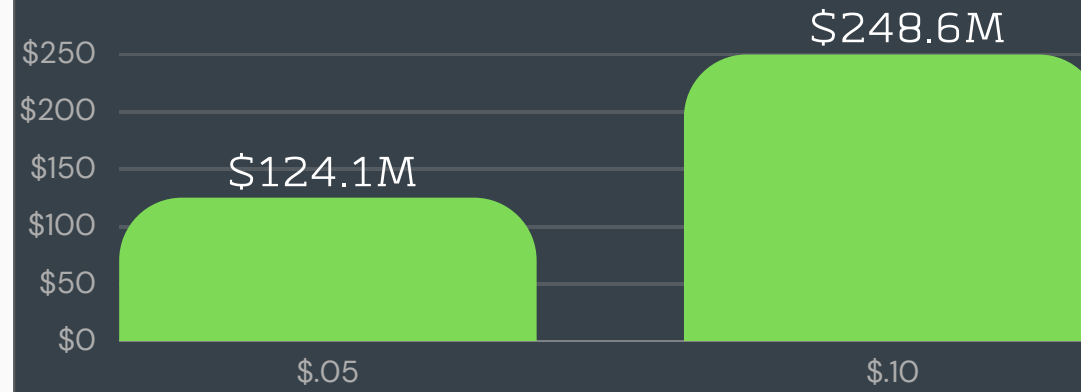
Population
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Median Income
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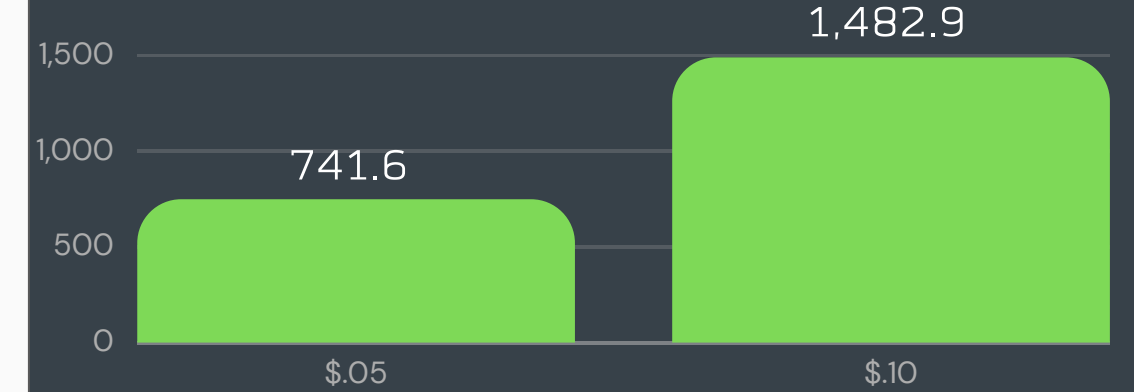
Texas Recycling Rates (2021)



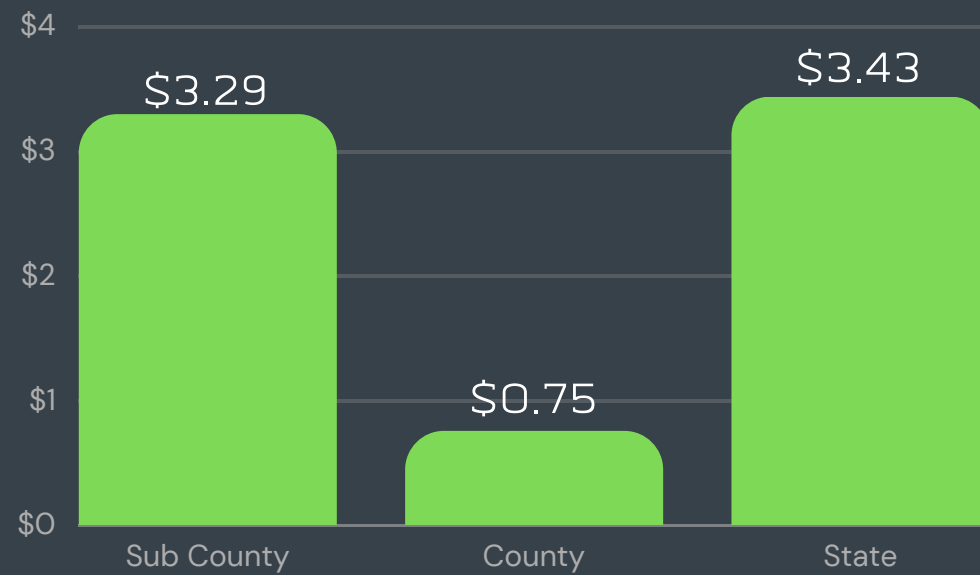
Additional Income with a Financial Incentive Bill (millions)



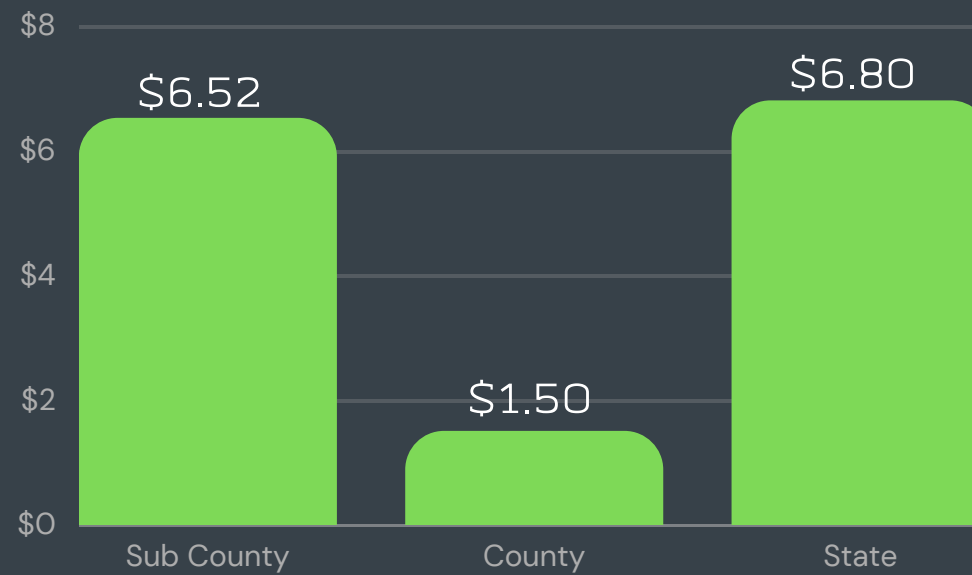
FTE's Supported/Created



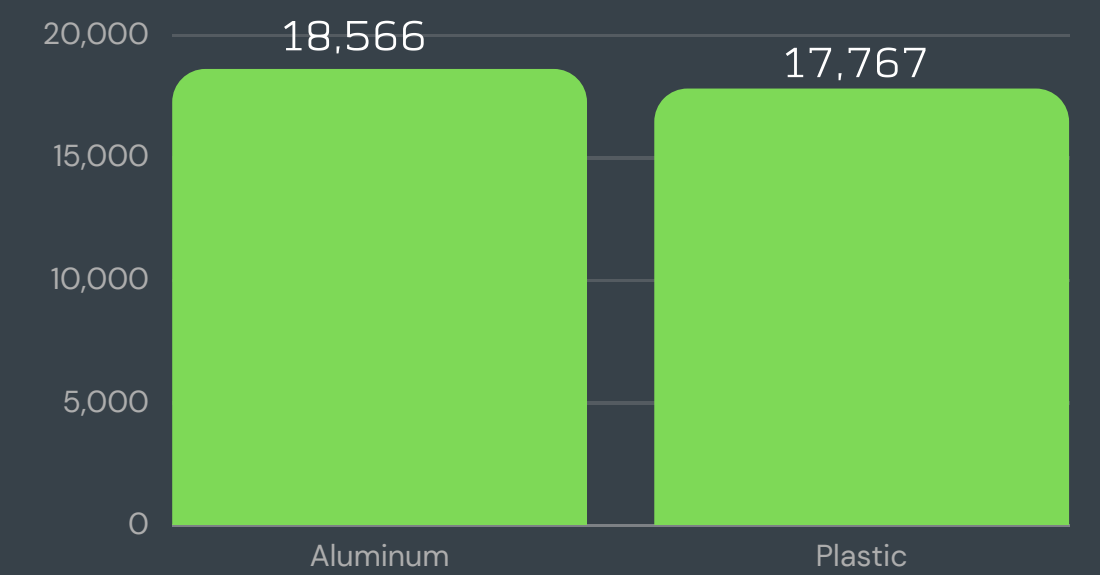
Tax Impacts with \$.05 Financial Incentive Bill (millions)



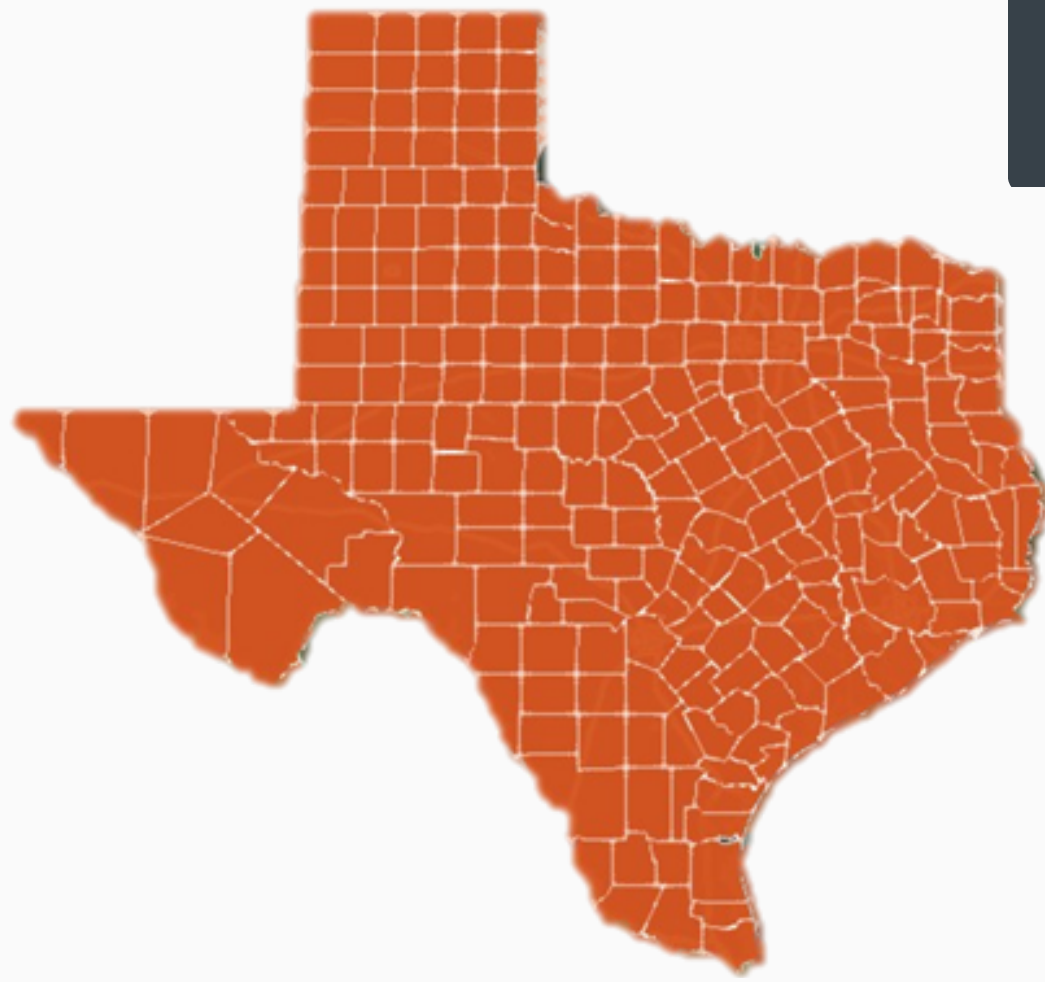
Tax Impacts with \$.10 Financial Incentive Bill



Tonnage Recycled



SUMMARY: STATE OF TEXAS



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254 Counties in the state

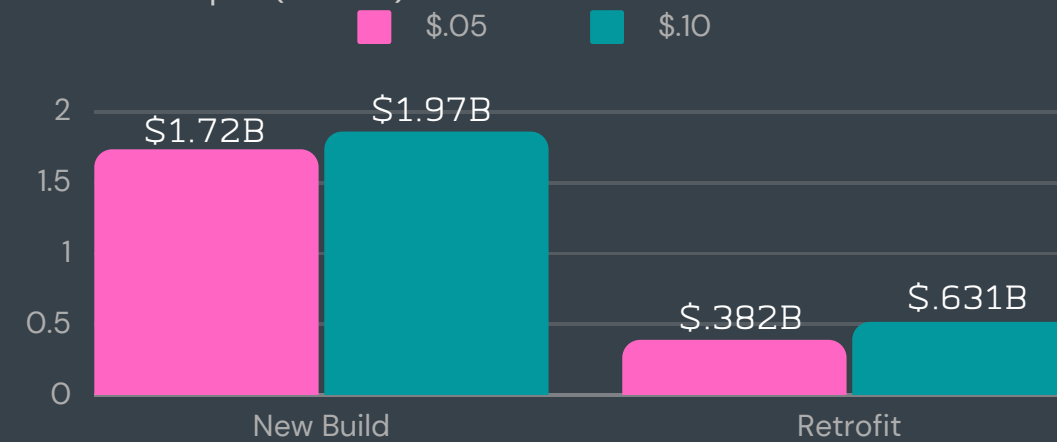
Population

29,516,055

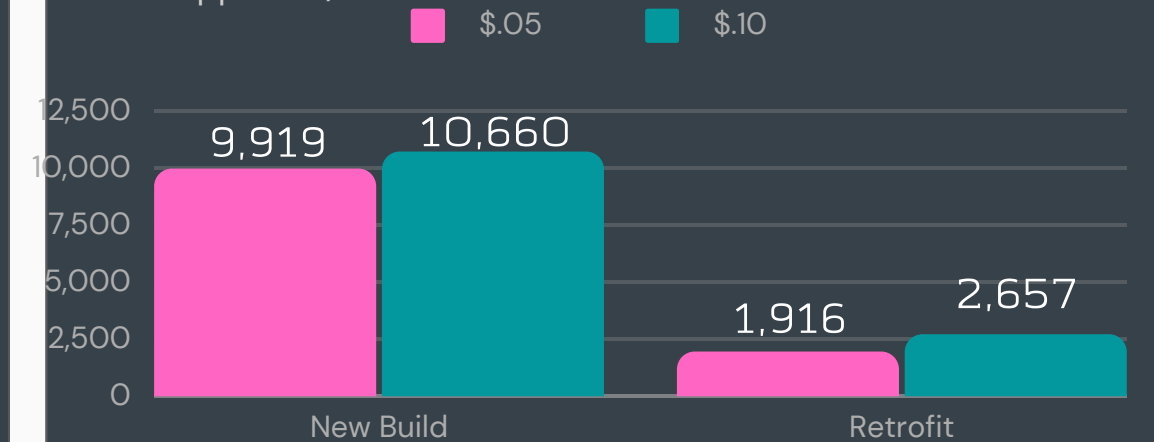
Median Income

\$63,826

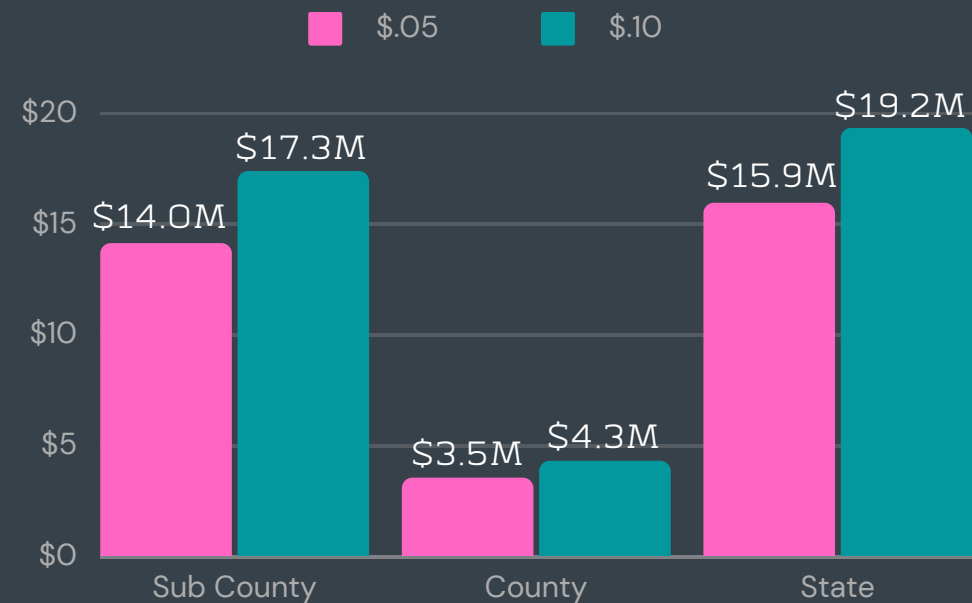
Economic Output (billions)



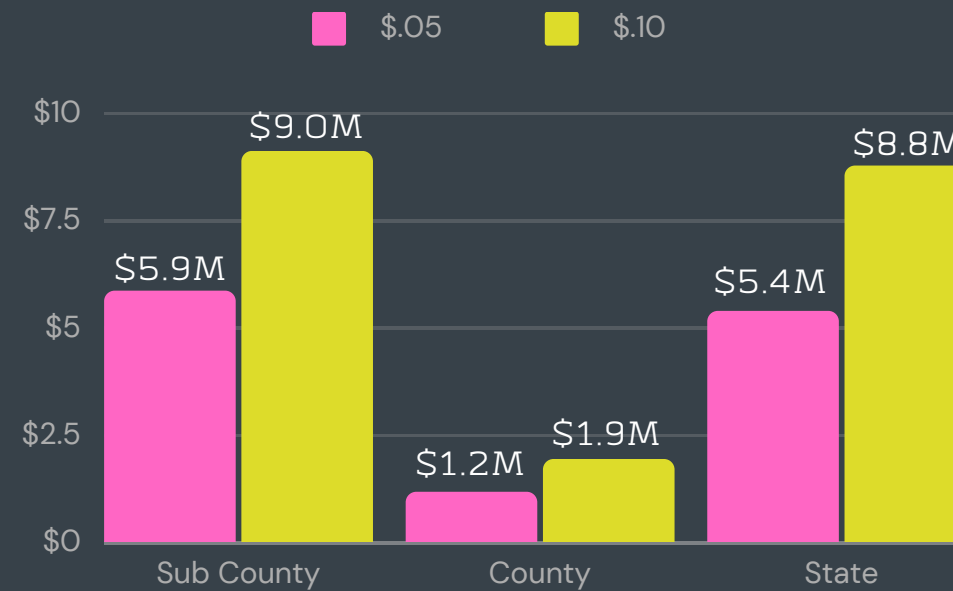
FTE's Supported/Created



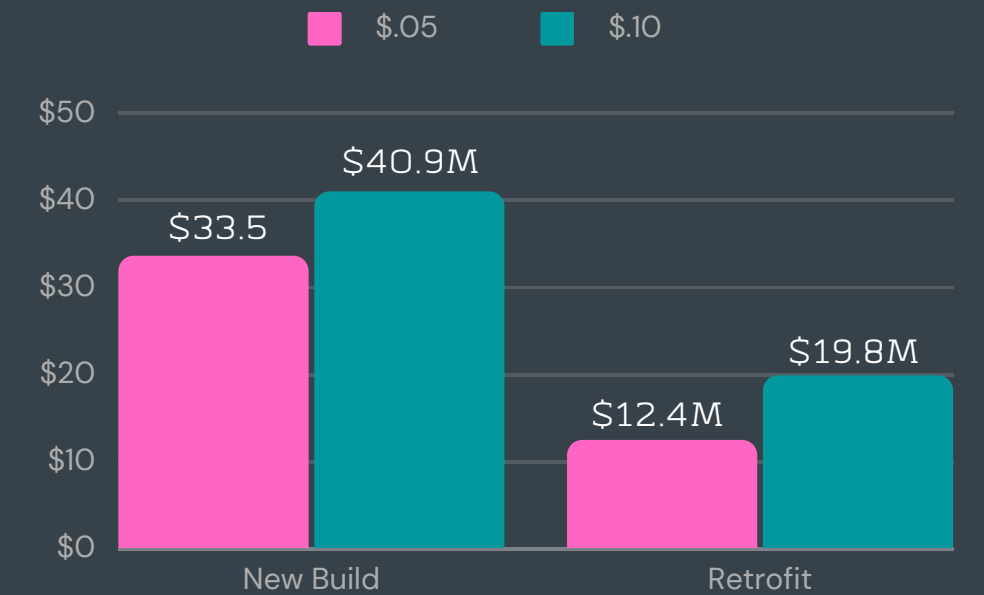
Tax Impacts with a New Build (millions)



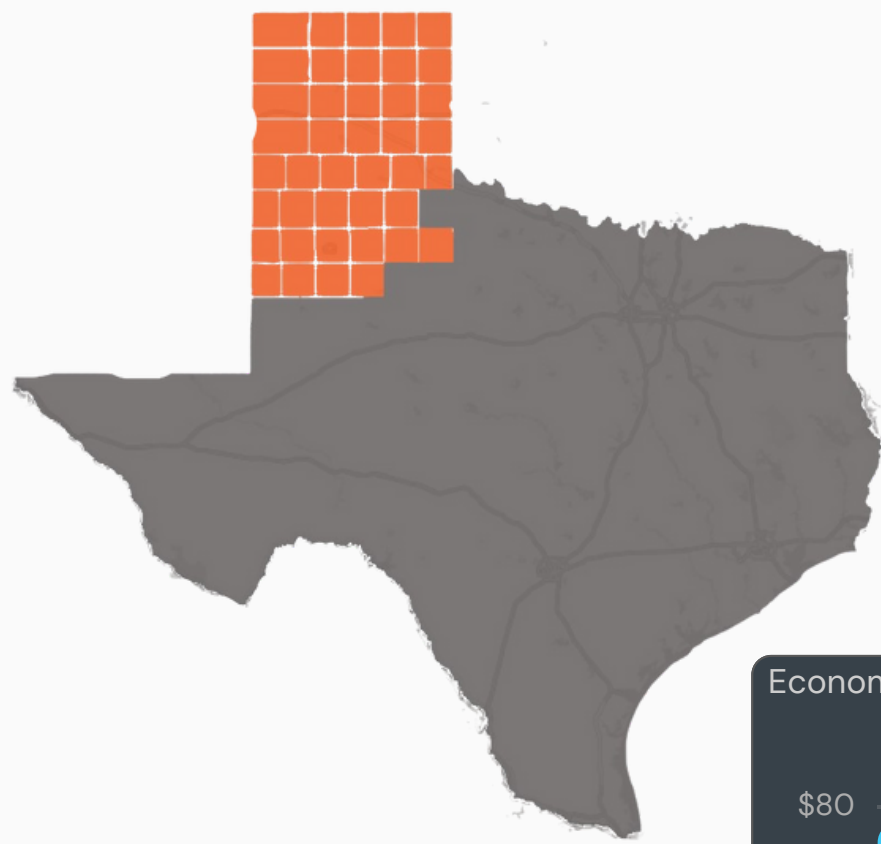
Tax Impacts with Retrofitting Existing Facility (millions)



Total Tax Impacts (millions)



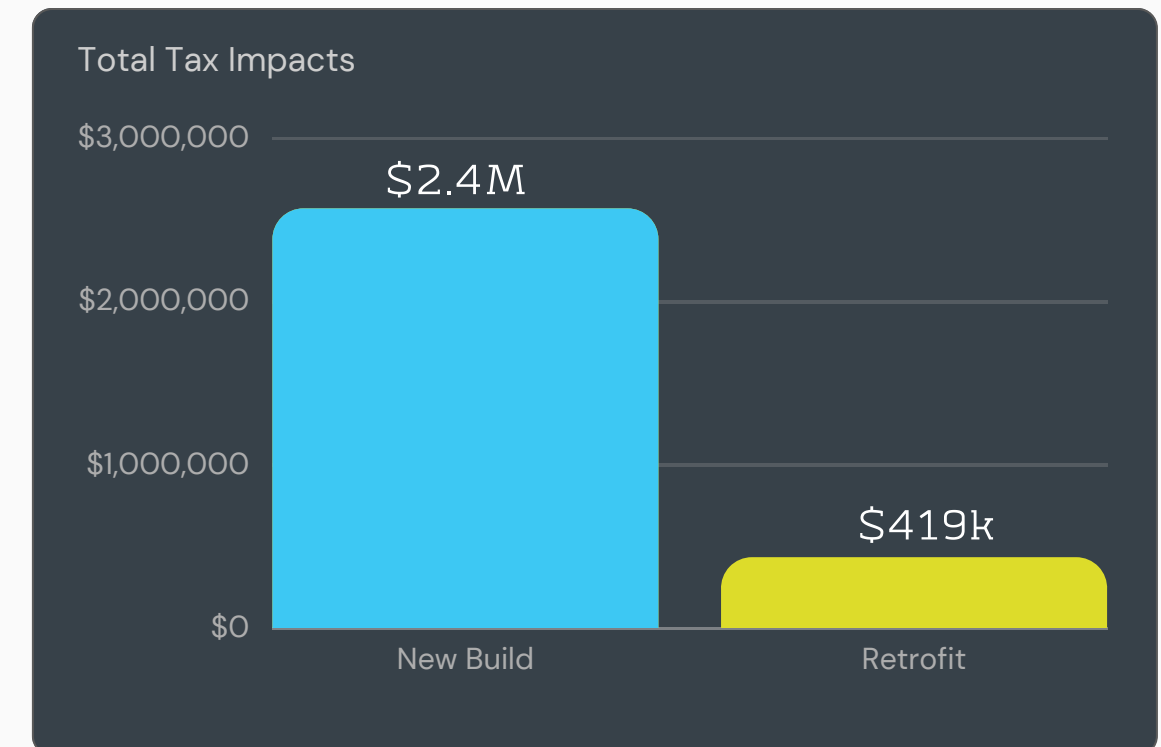
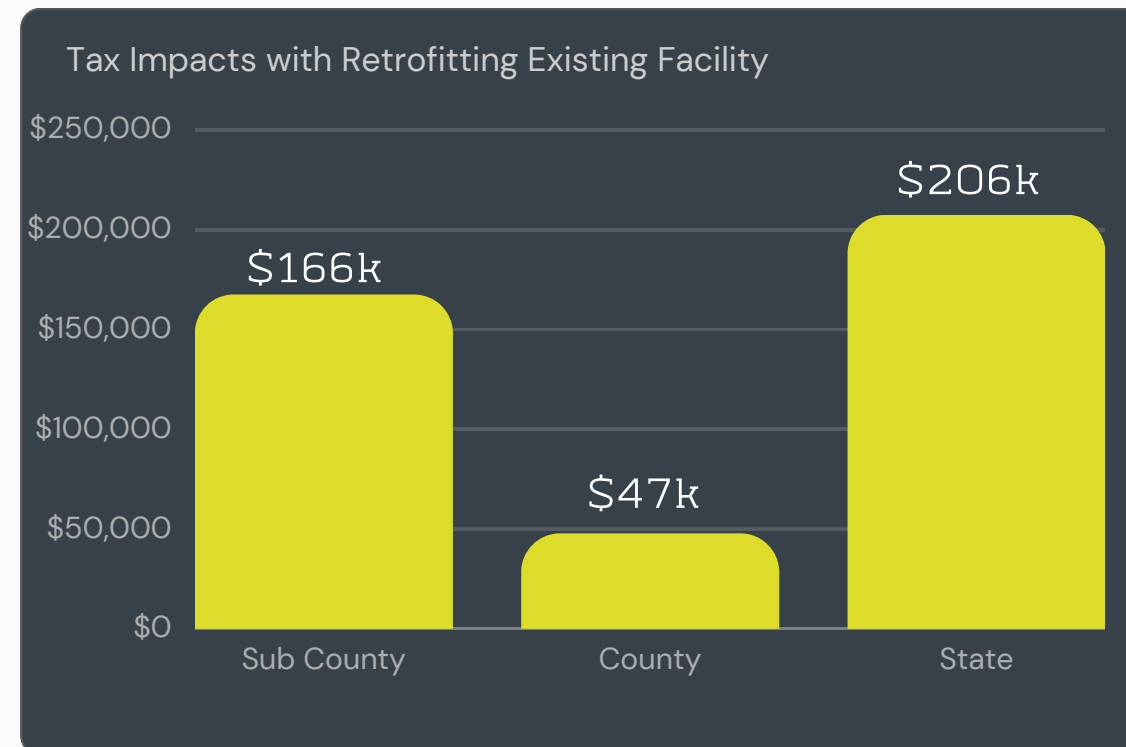
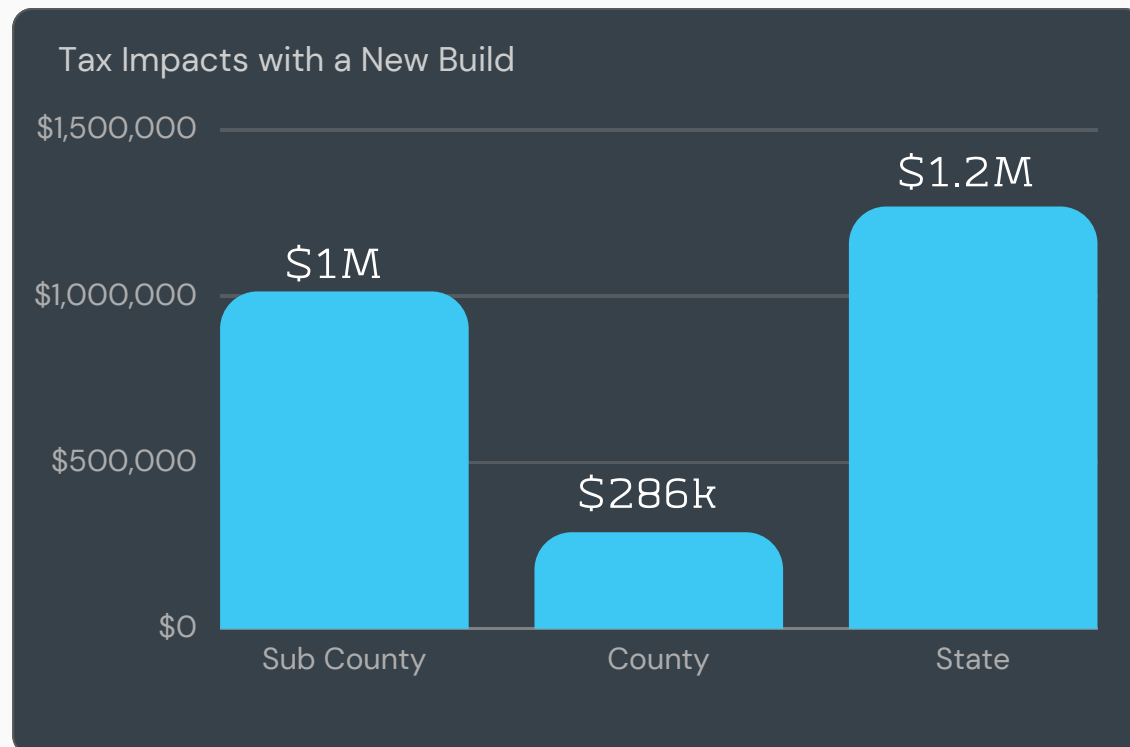
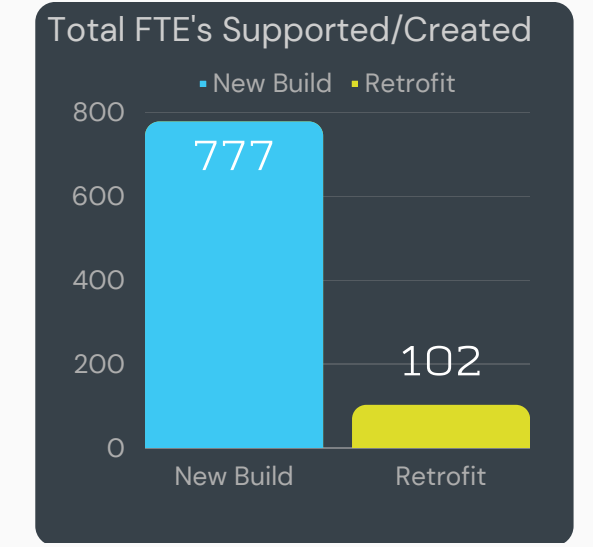
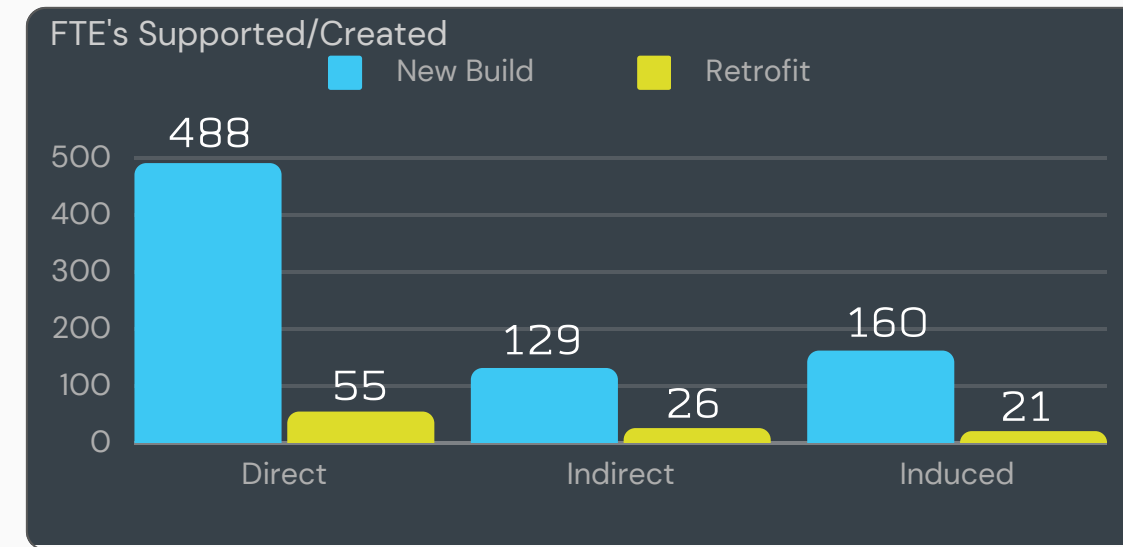
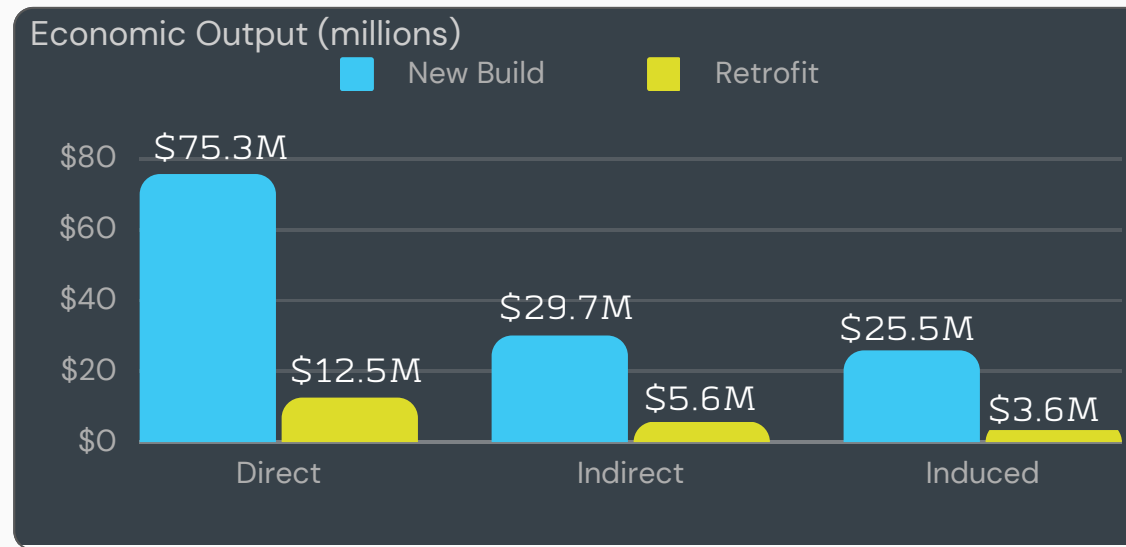
SCENARIO 2: HIGH PLAINS REGION



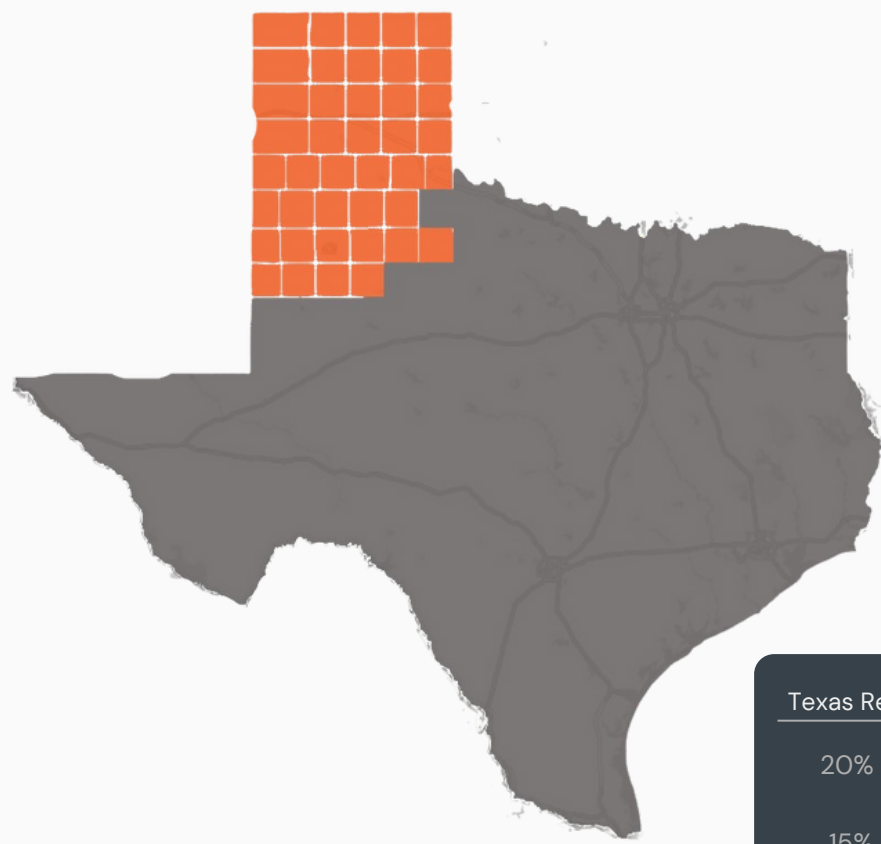
41 Counties in the region

Population
868,687

Median Income
\$52,813



SCENARIO 3: HIGH PLAINS REGION

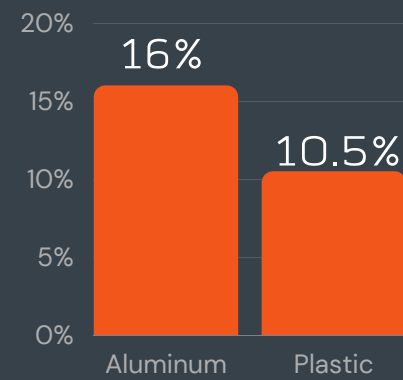


41 Counties in the region

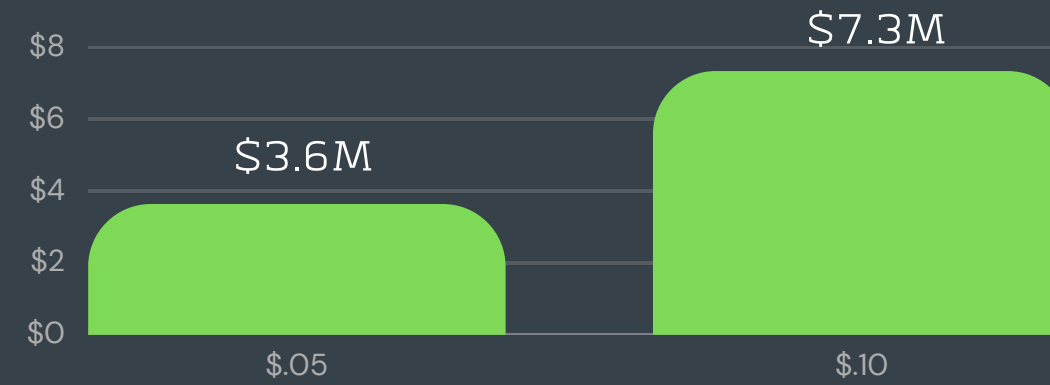
Population
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Median Income
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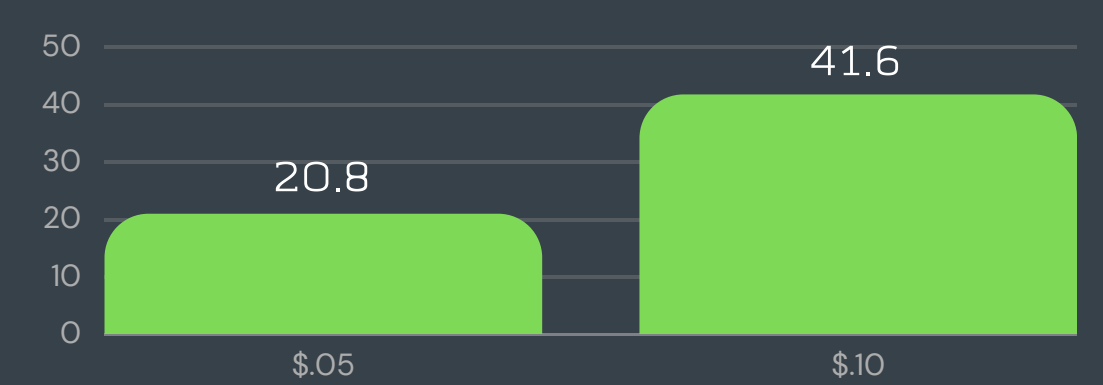
Texas Recycling Rates (2021)



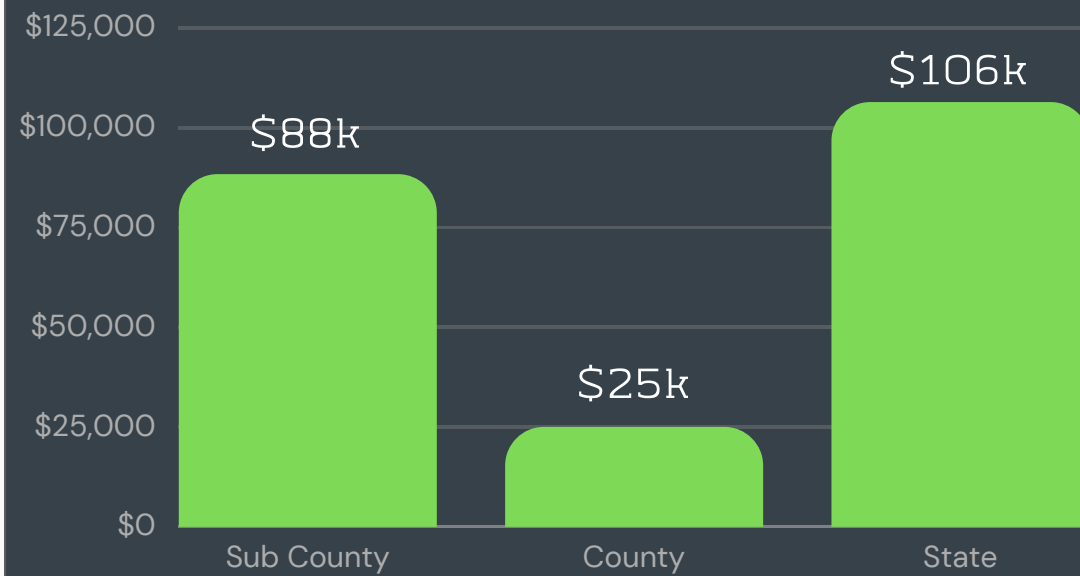
Additional Income with a Financial Incentive Bill (millions)



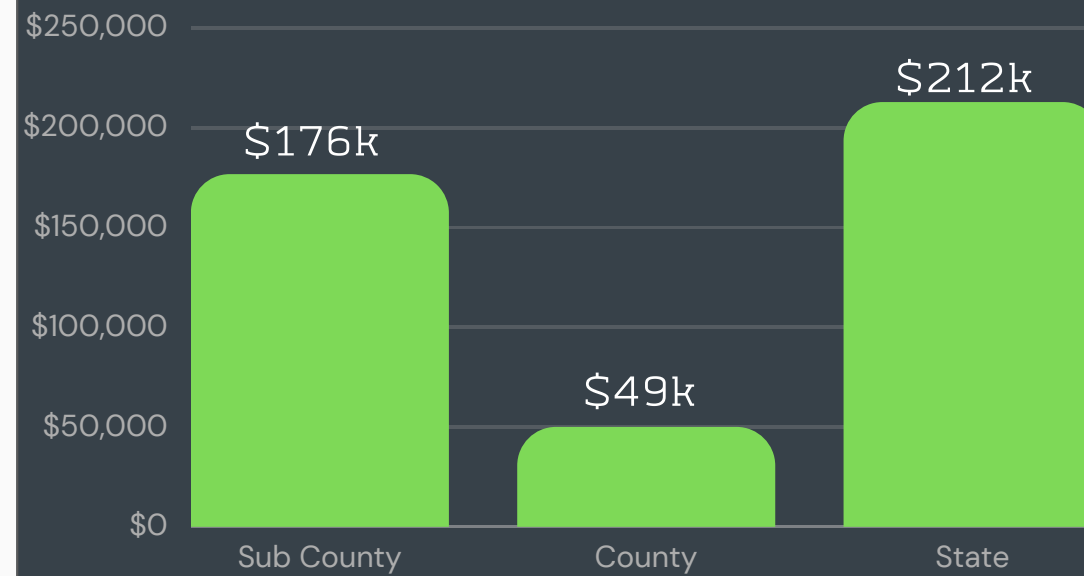
FTE's Supported/Created



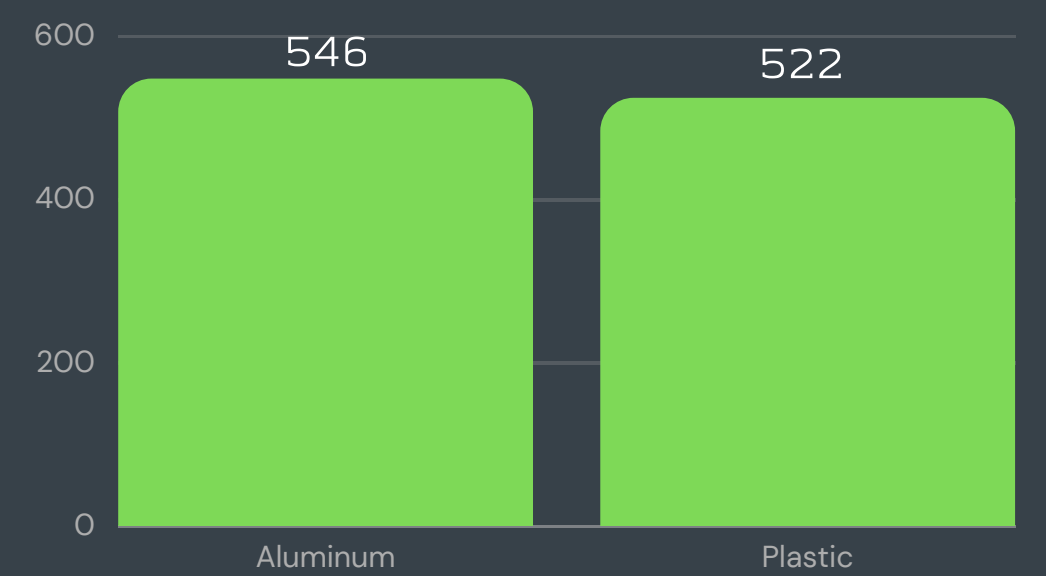
Tax Impacts with \$.05 Financial Incentive Bill



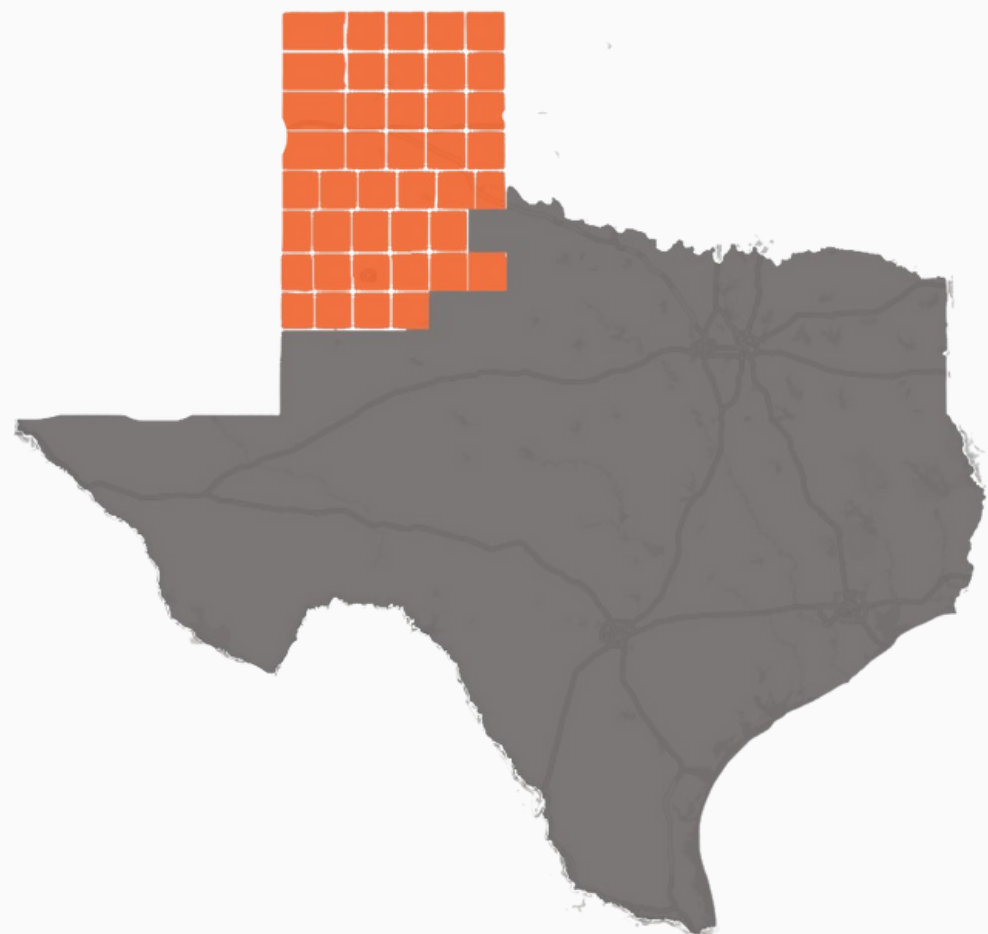
Tax Impacts with \$.10 Financial Incentive Bill



Tonnage Recycled



SUMMARY: HIGH PLAINS REGION



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41 Counties in the region

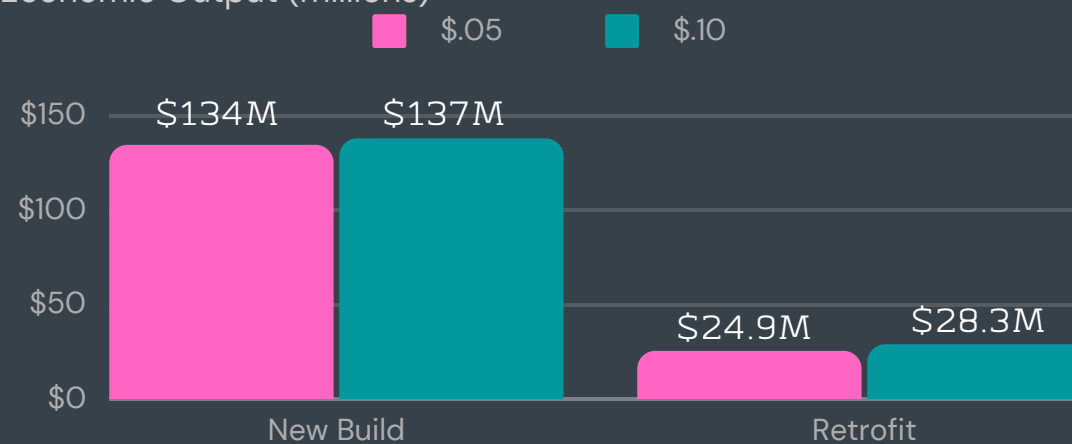
Population

868,687

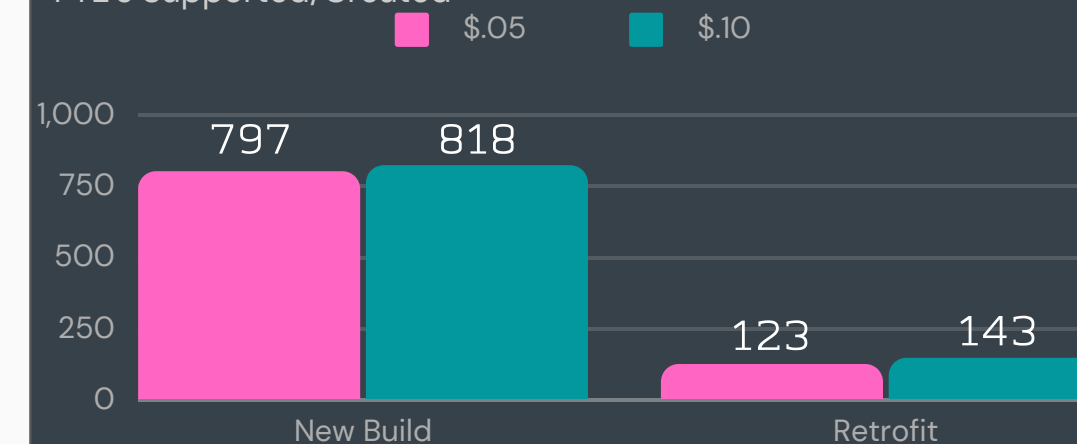
Median Income

\$52,813

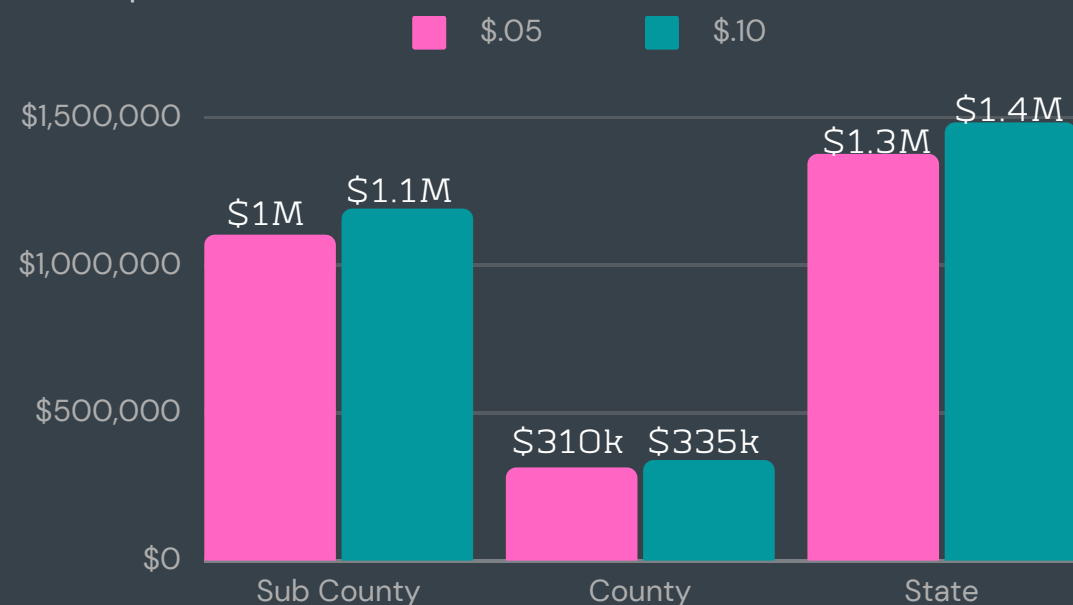
Economic Output (millions)



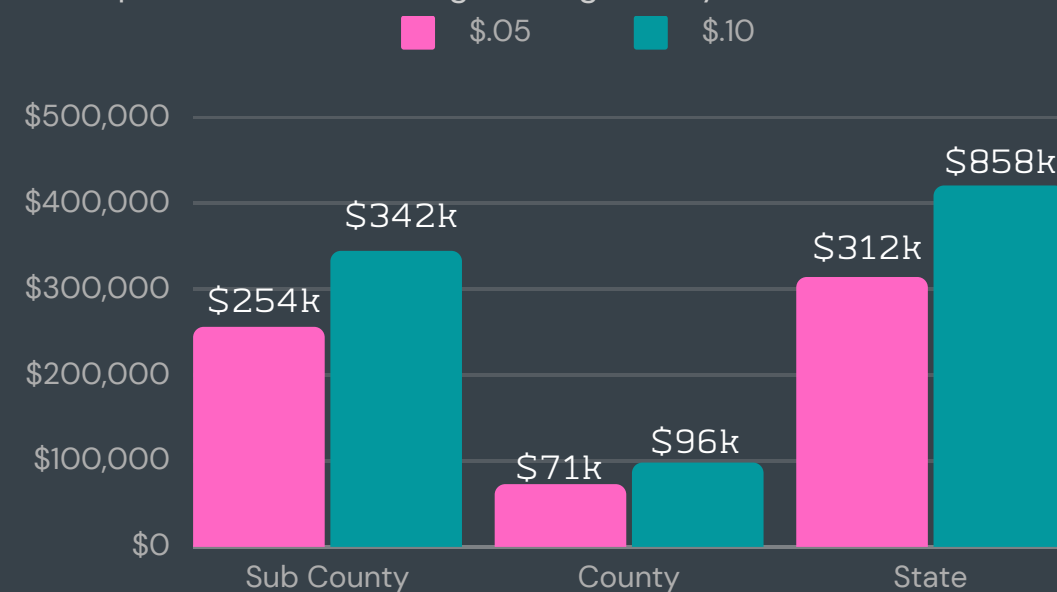
FTE's Supported/Created



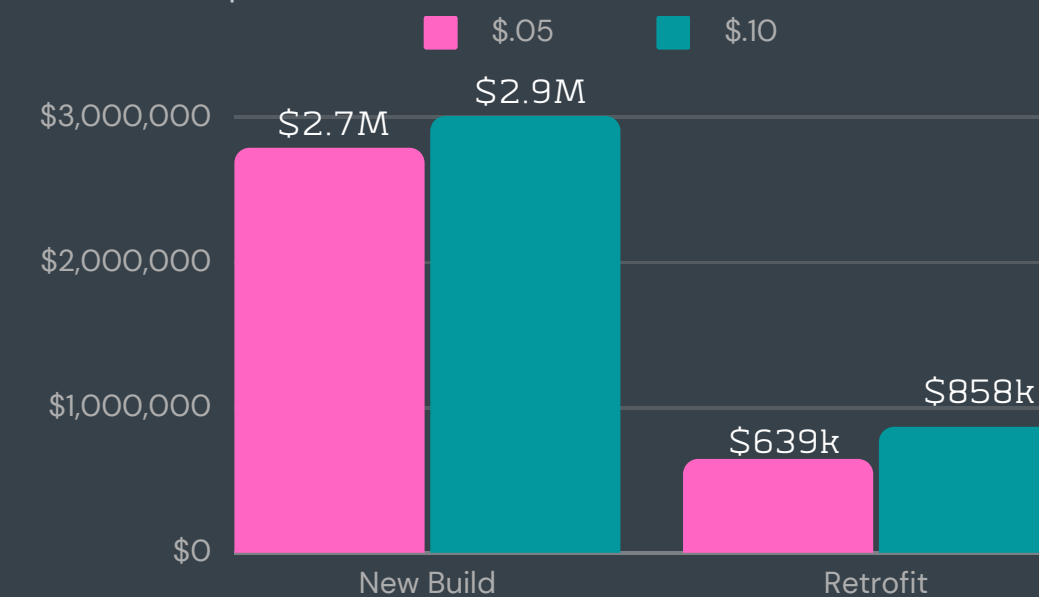
Tax Impacts with a New Build



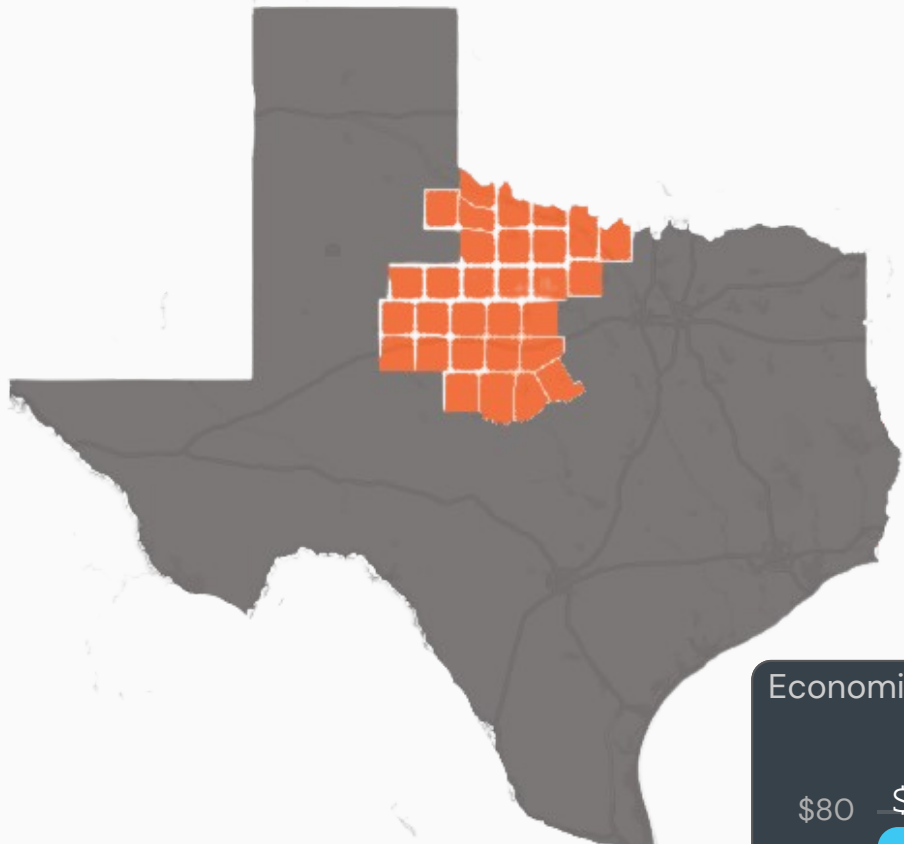
Tax Impacts with Retrofitting Existing Facility



Total Tax Impacts



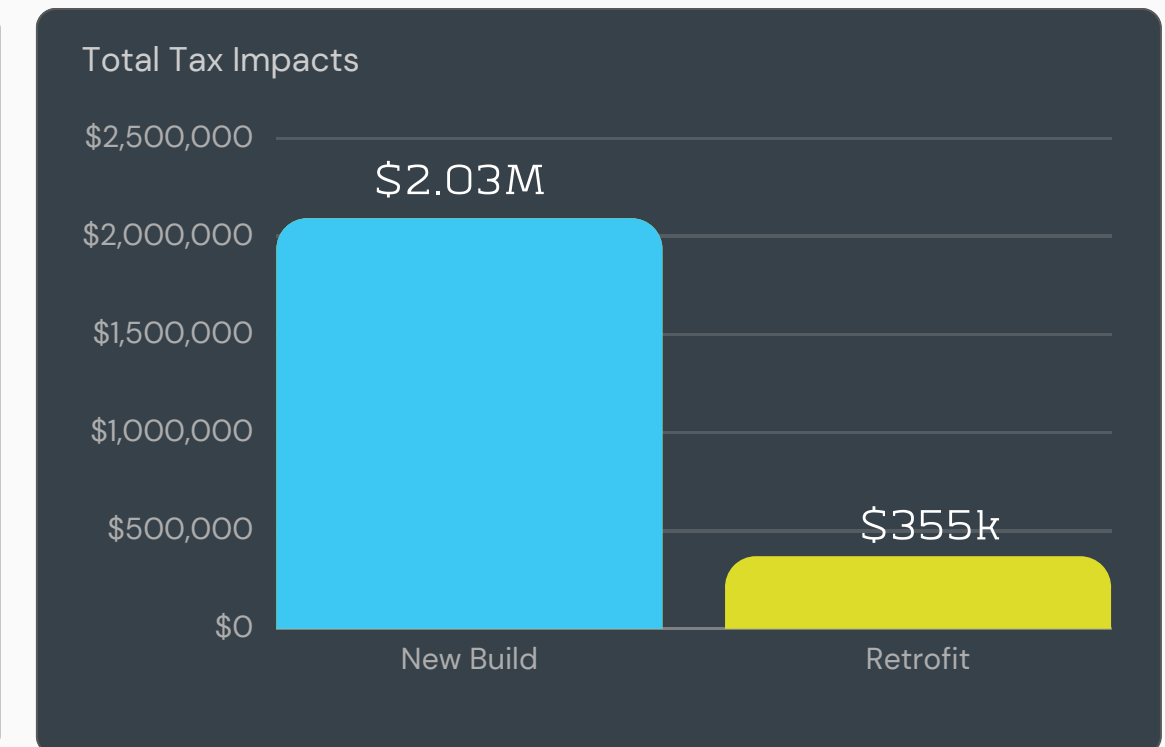
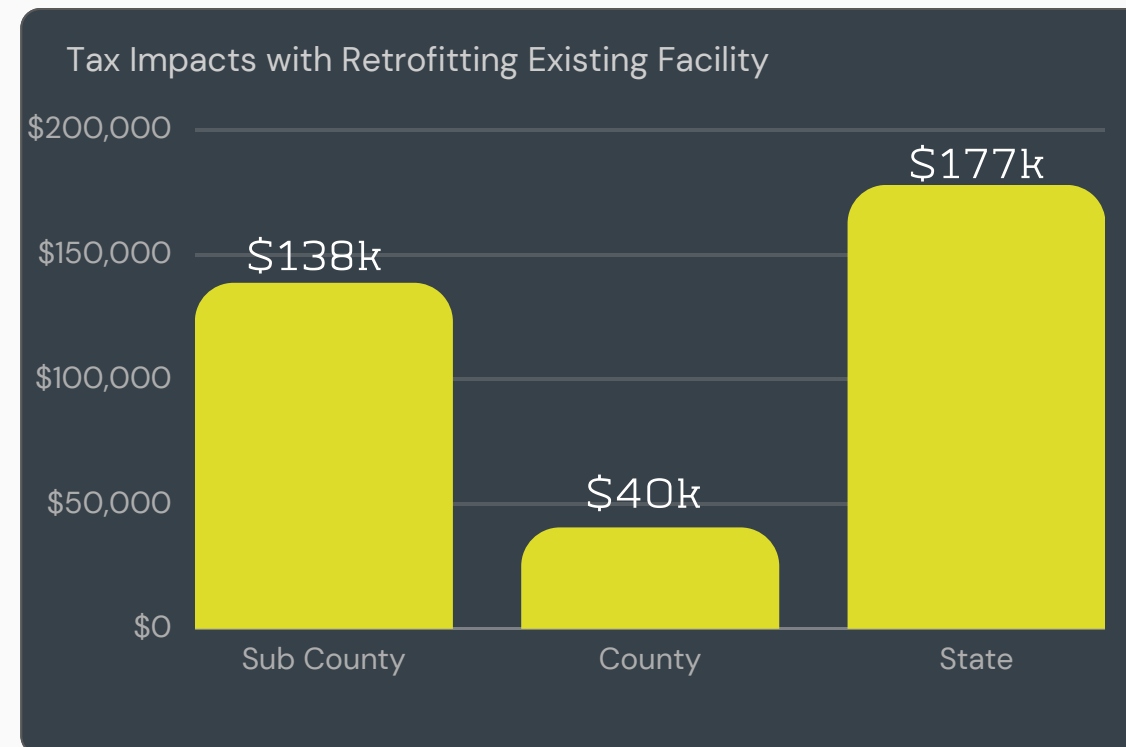
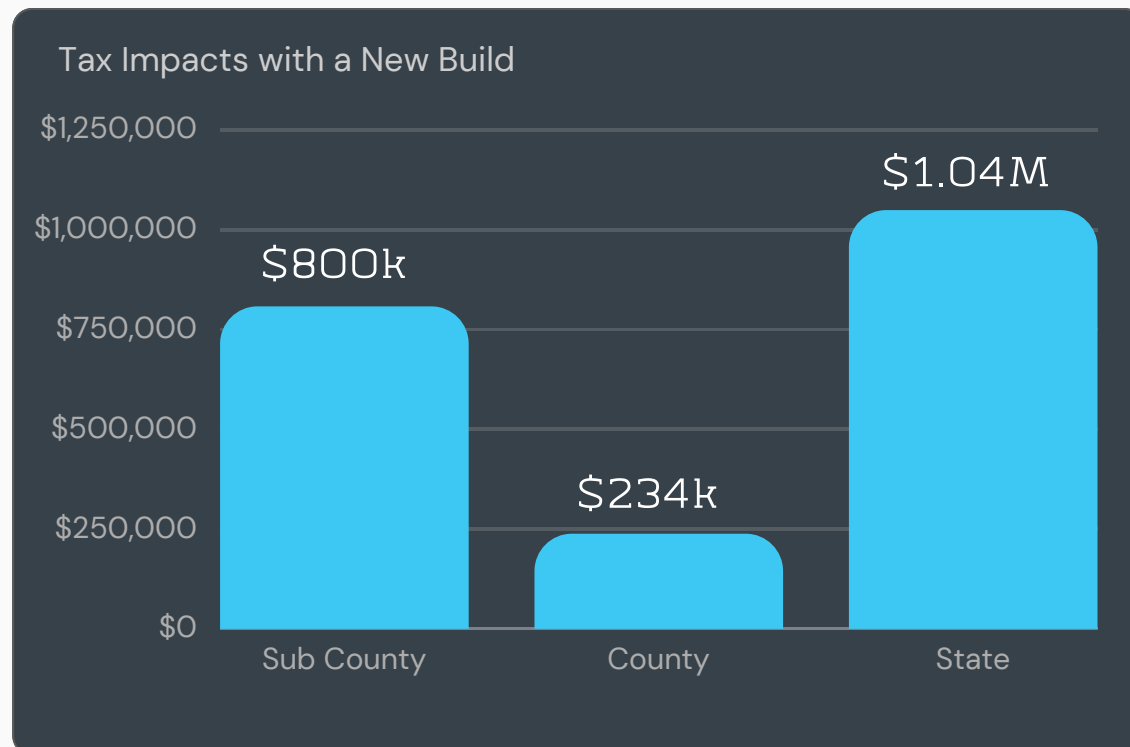
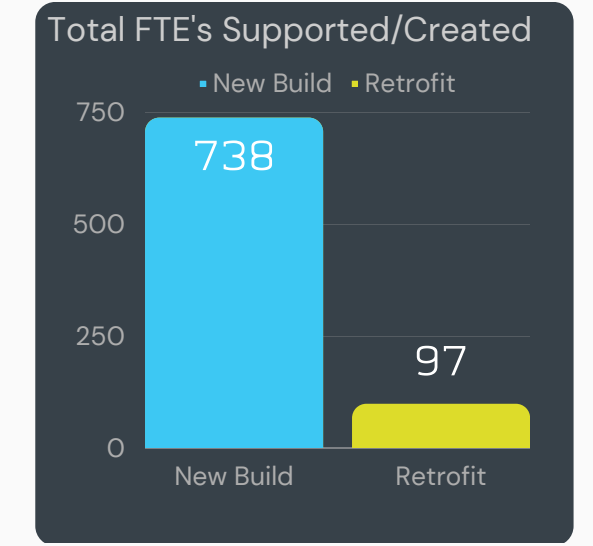
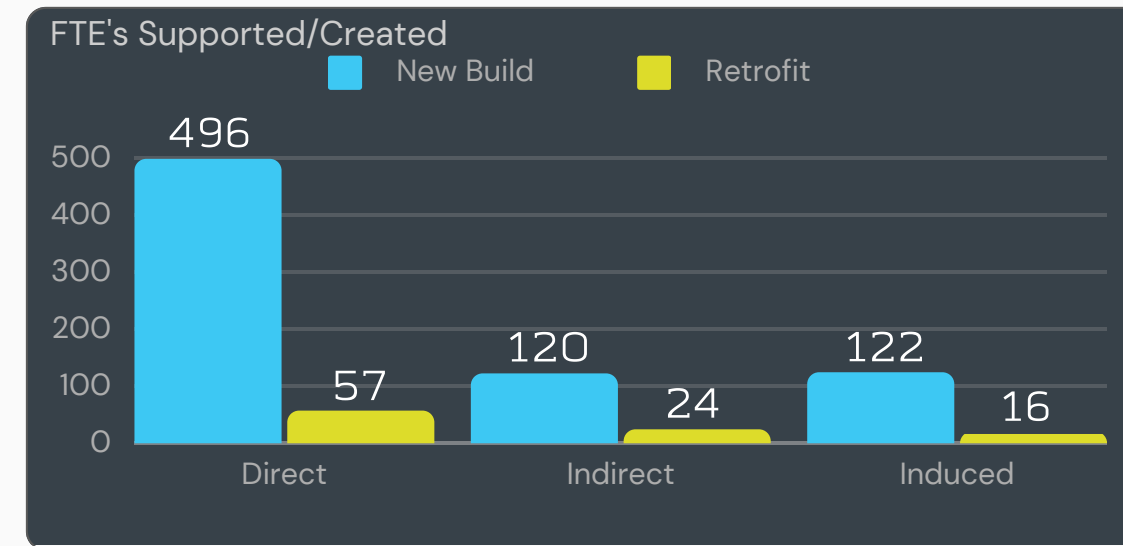
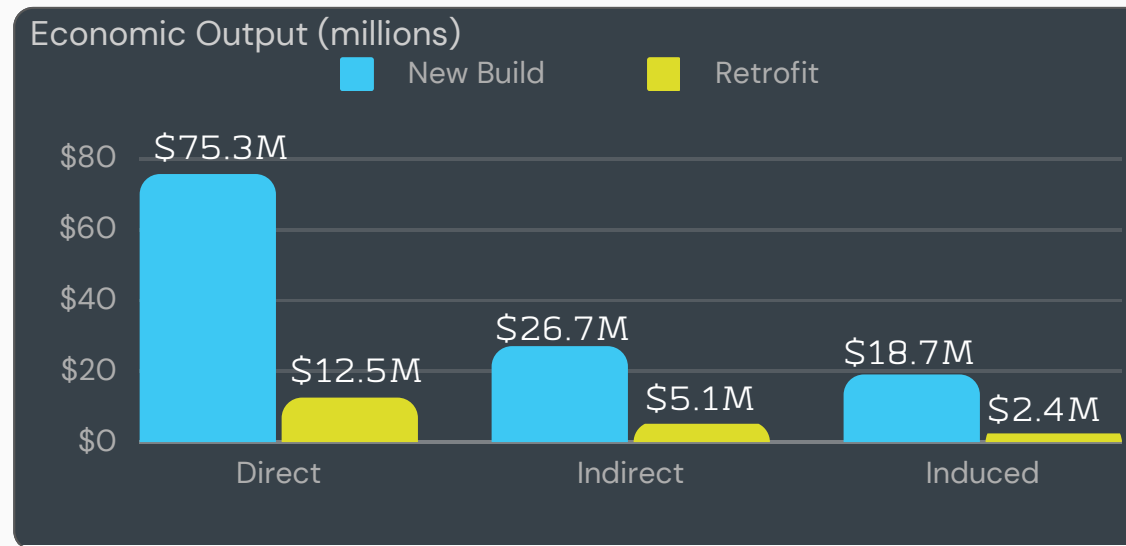
SCENARIO 2: NORTHWEST REGION



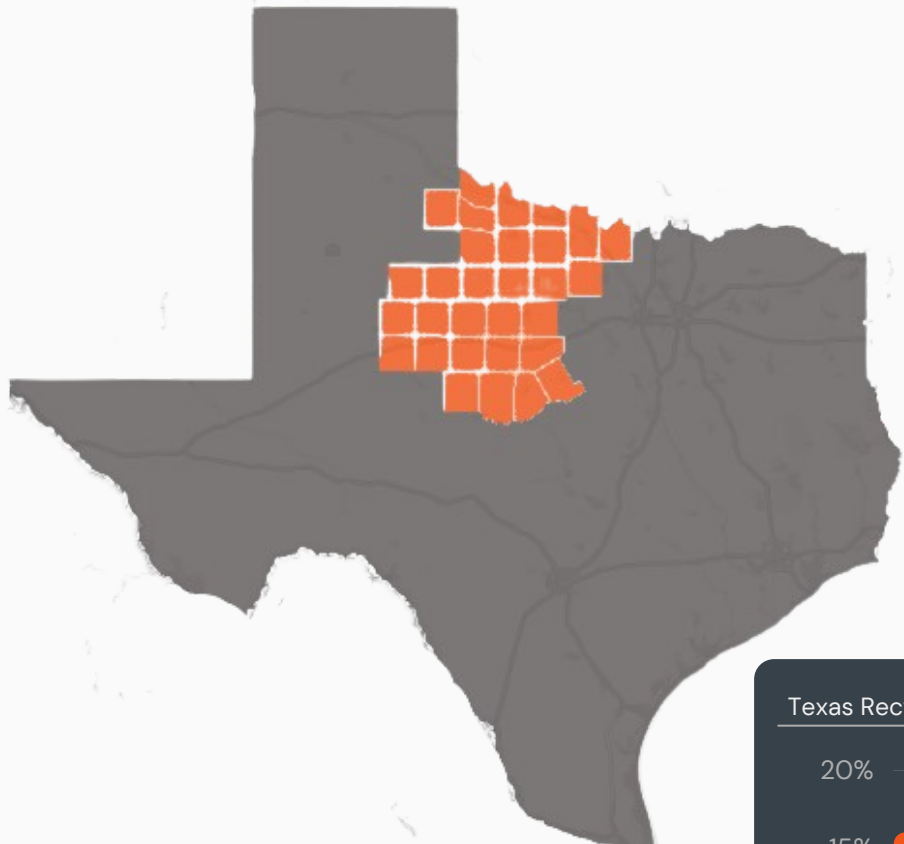
30 Counties in the region

Population
551,960

Median Income
\$49,759



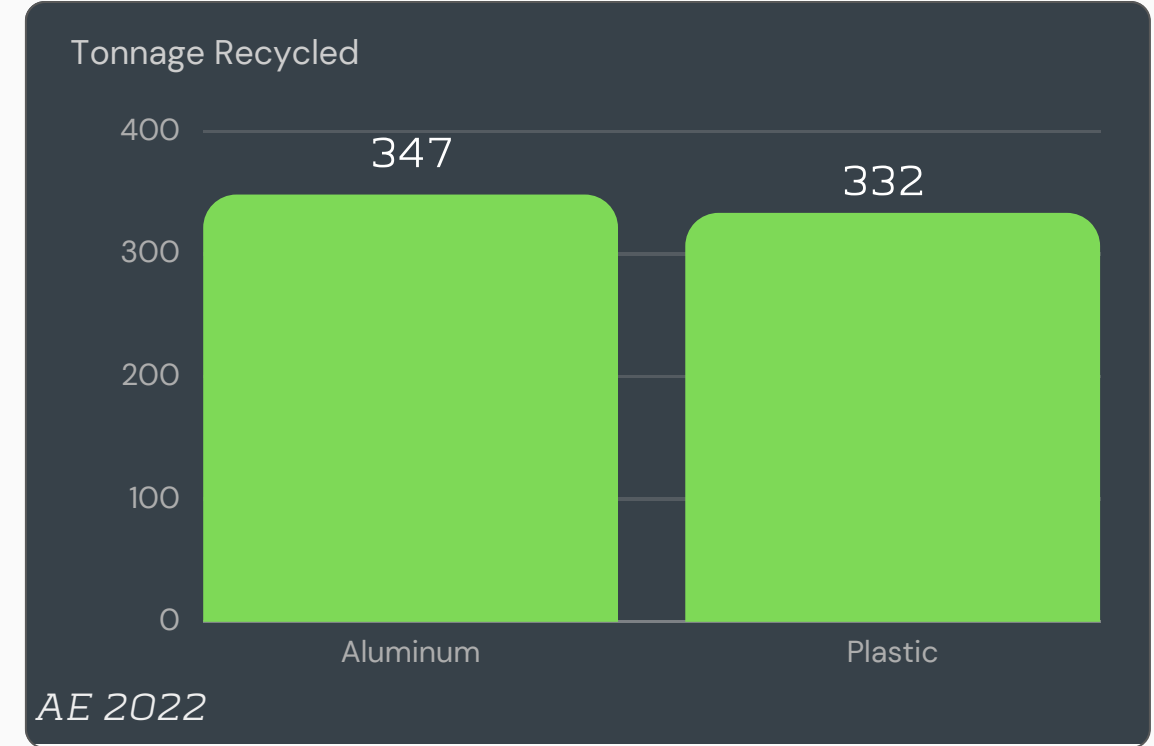
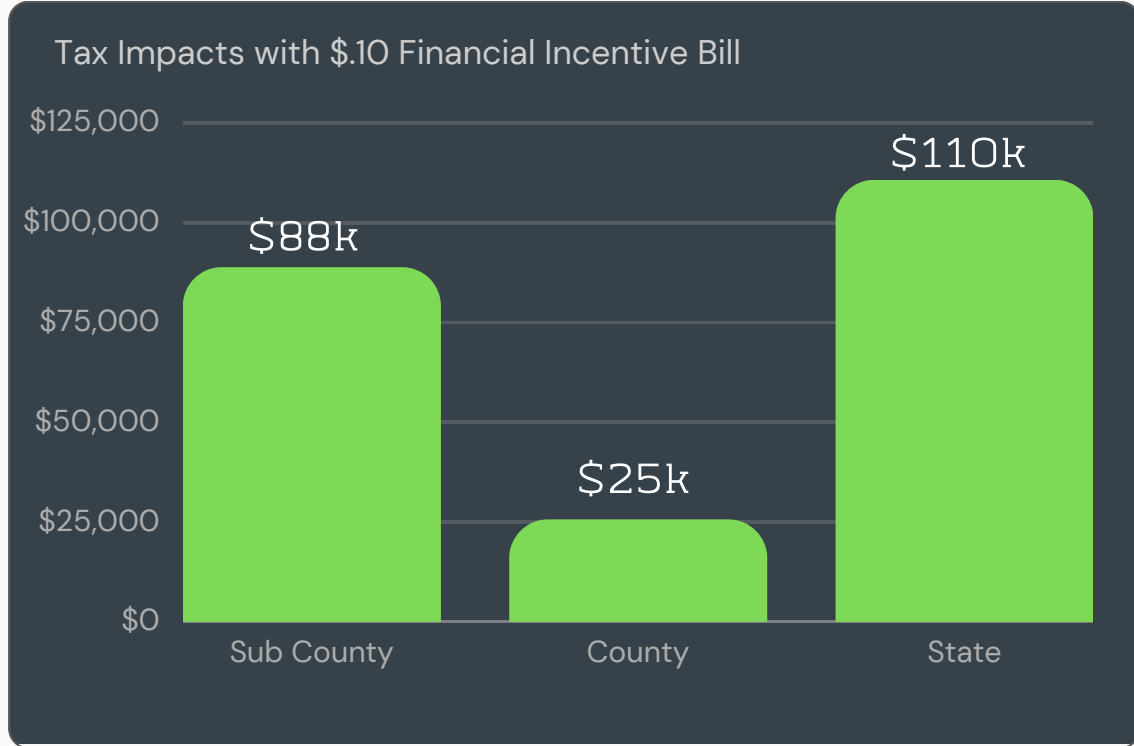
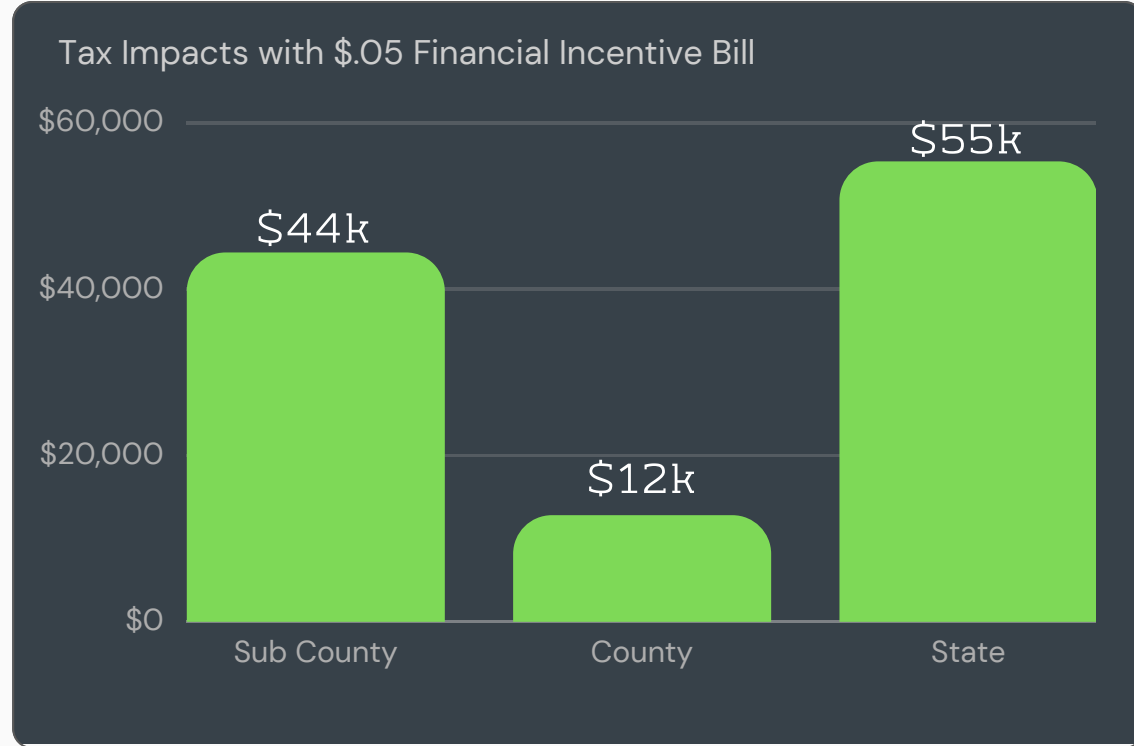
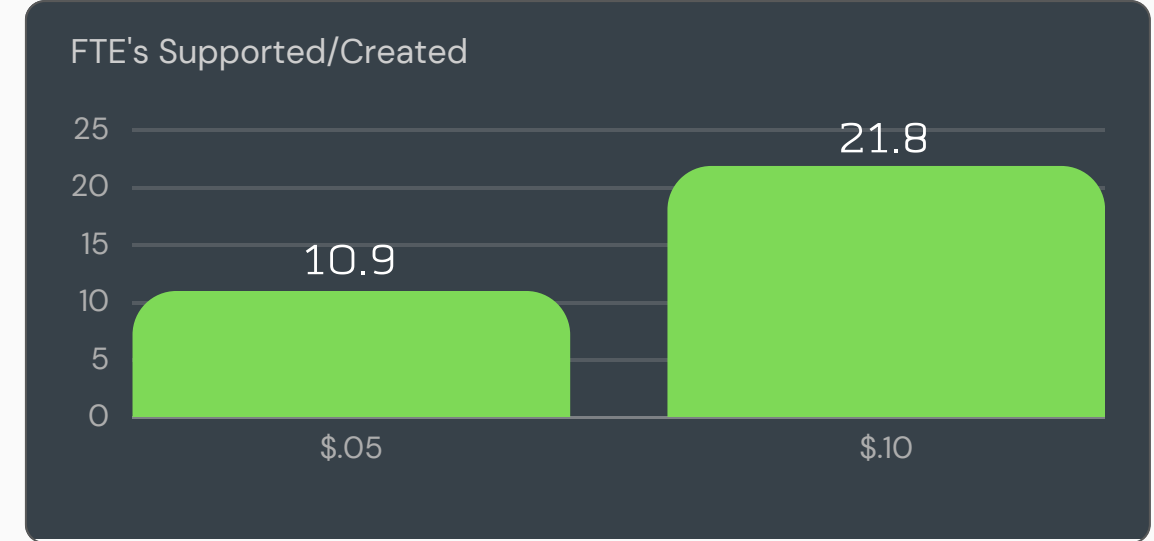
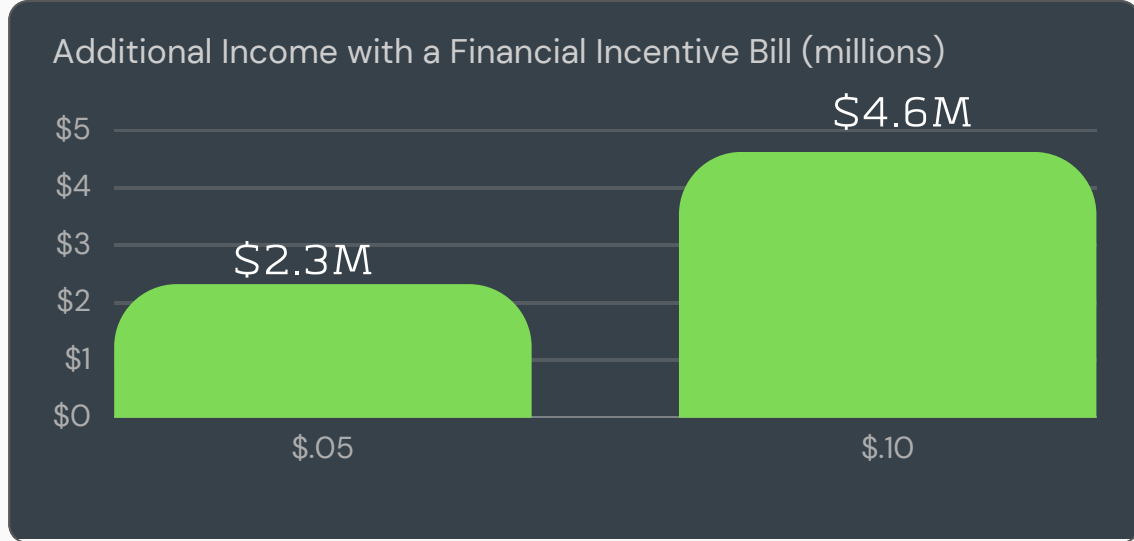
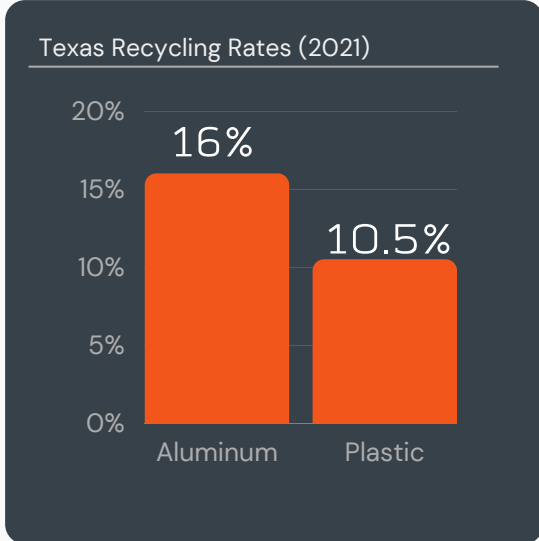
SCENARIO 3: NORTHWEST REGION



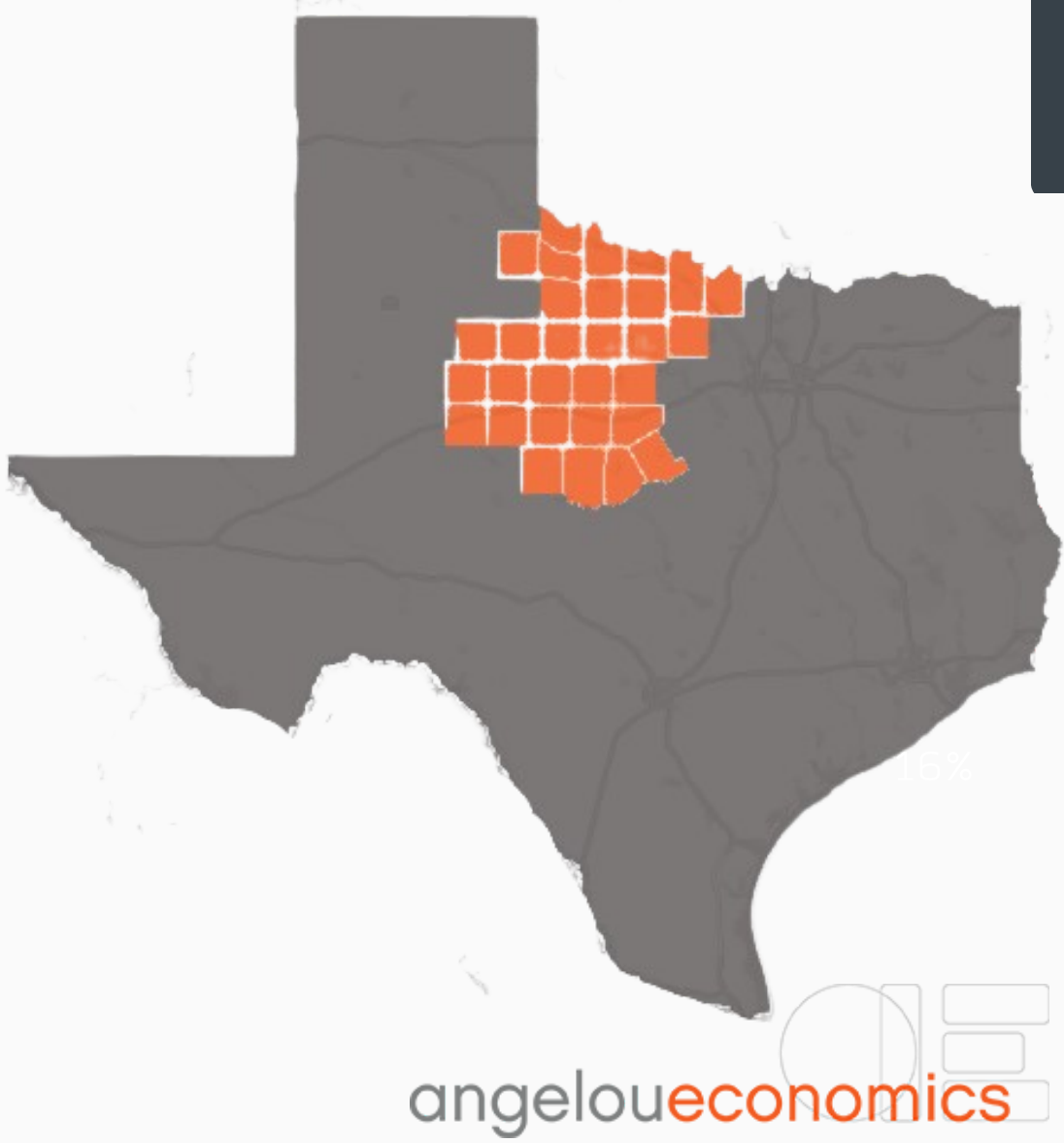
30 Counties in the region

Population
551,960

Median Income
\$49,759



SUMMARY: NORTHWEST REGION



30 Counties in the region

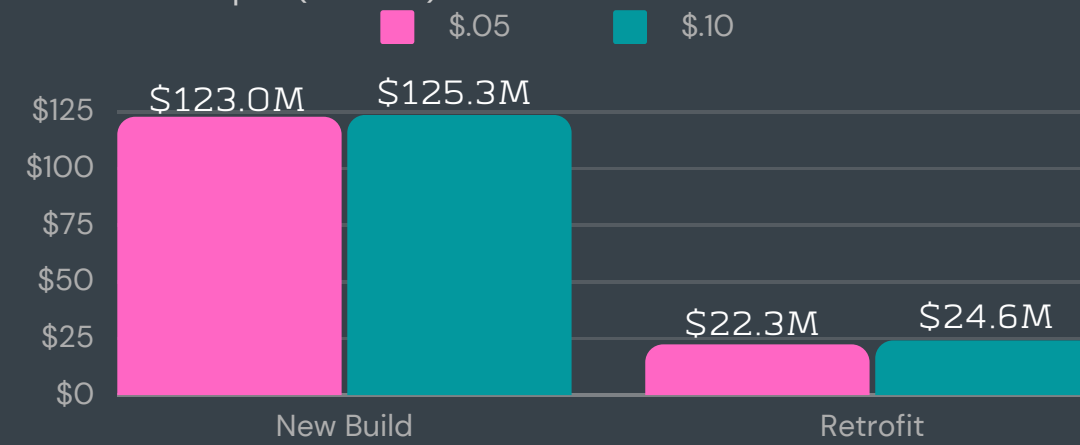
Population

551,960

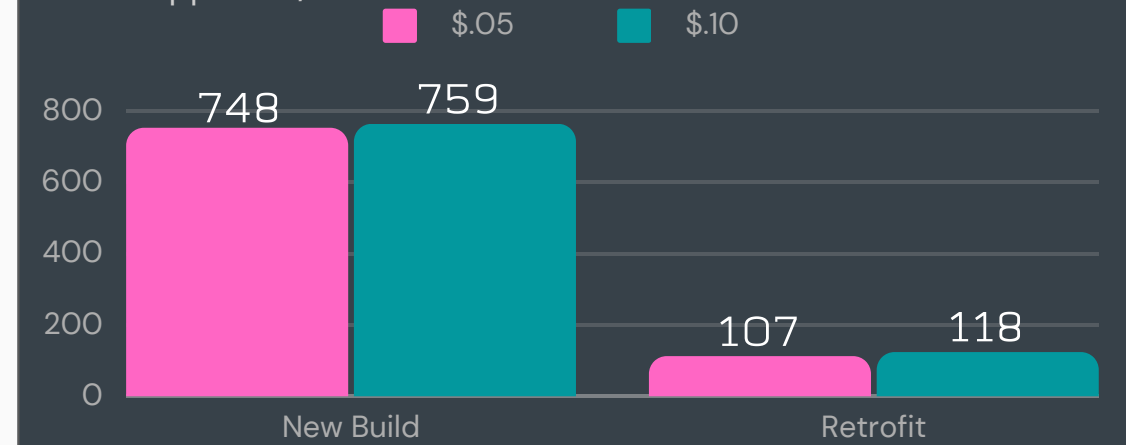
Median Income

\$49,759

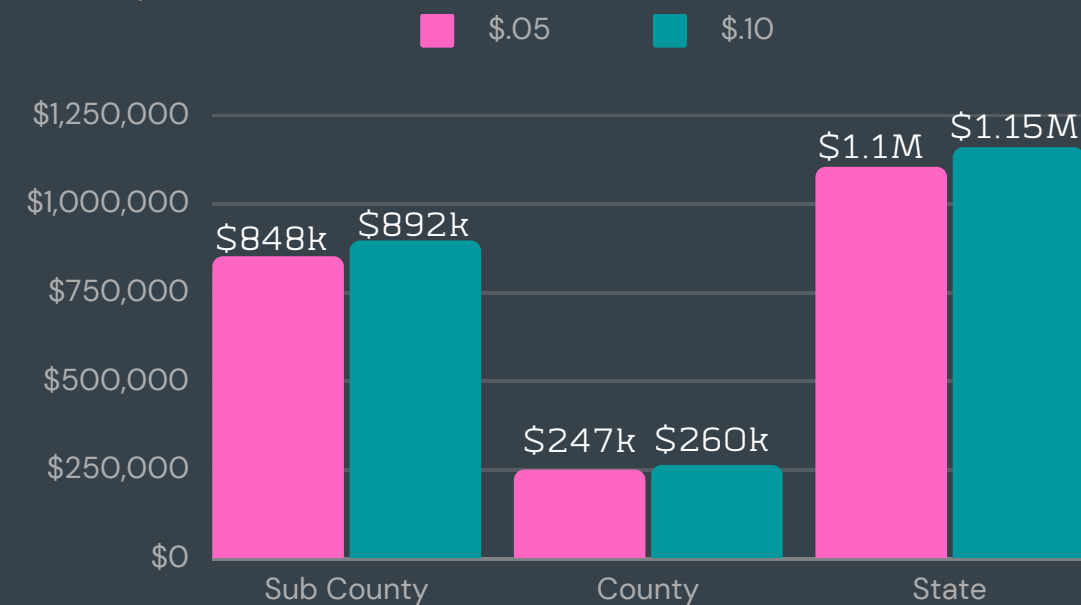
Economic Output (millions)



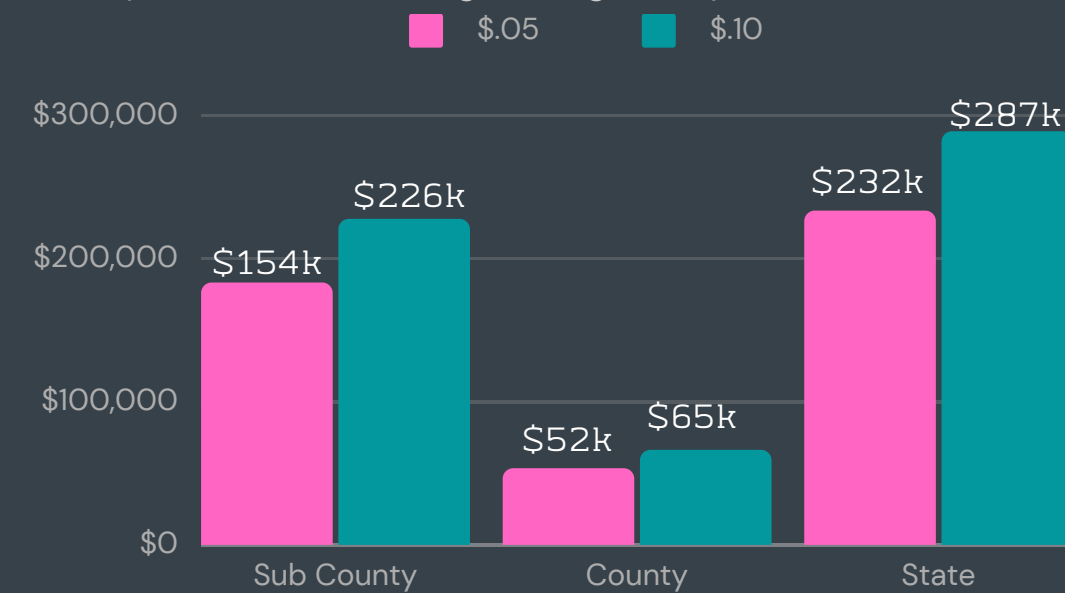
FTE's Supported/Created



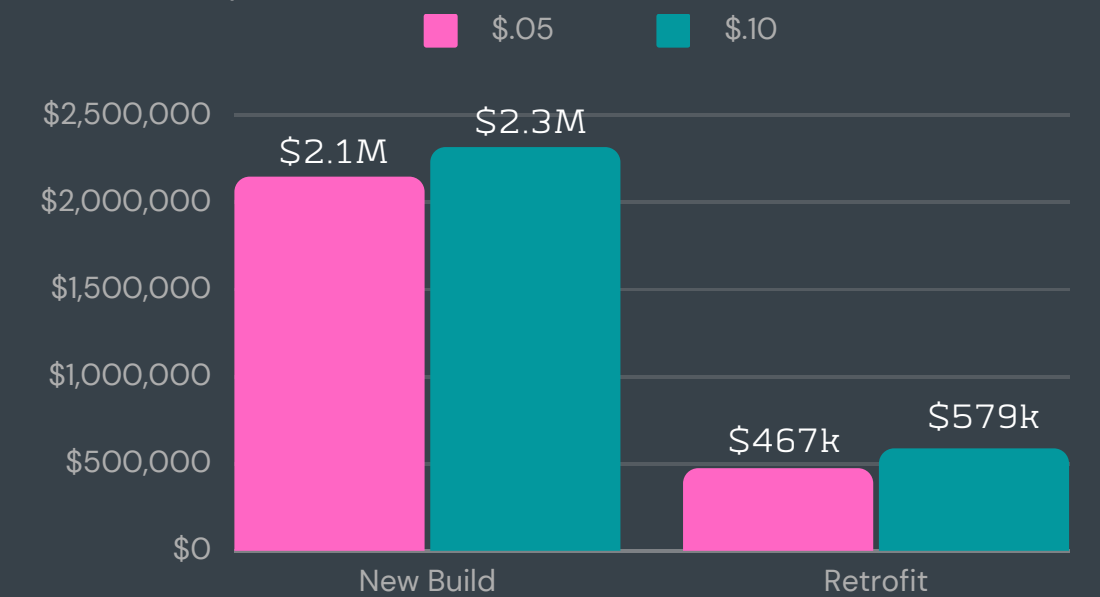
Tax Impacts with a New Build



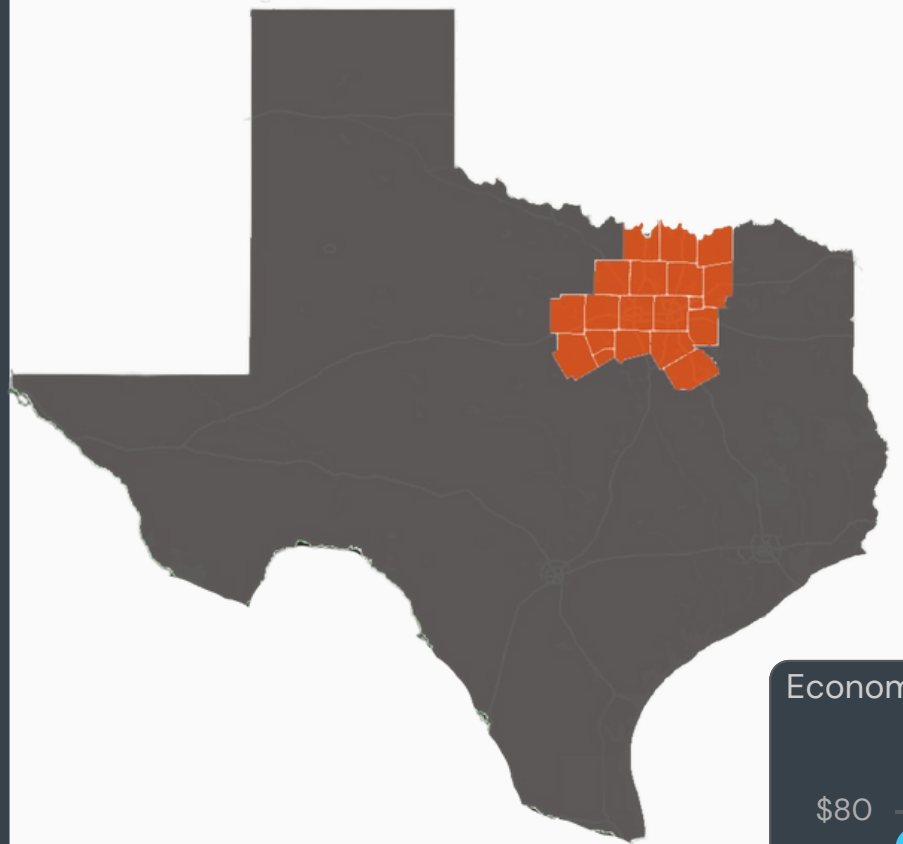
Tax Impacts with Retrofitting Existing Facility



Total Tax Impacts



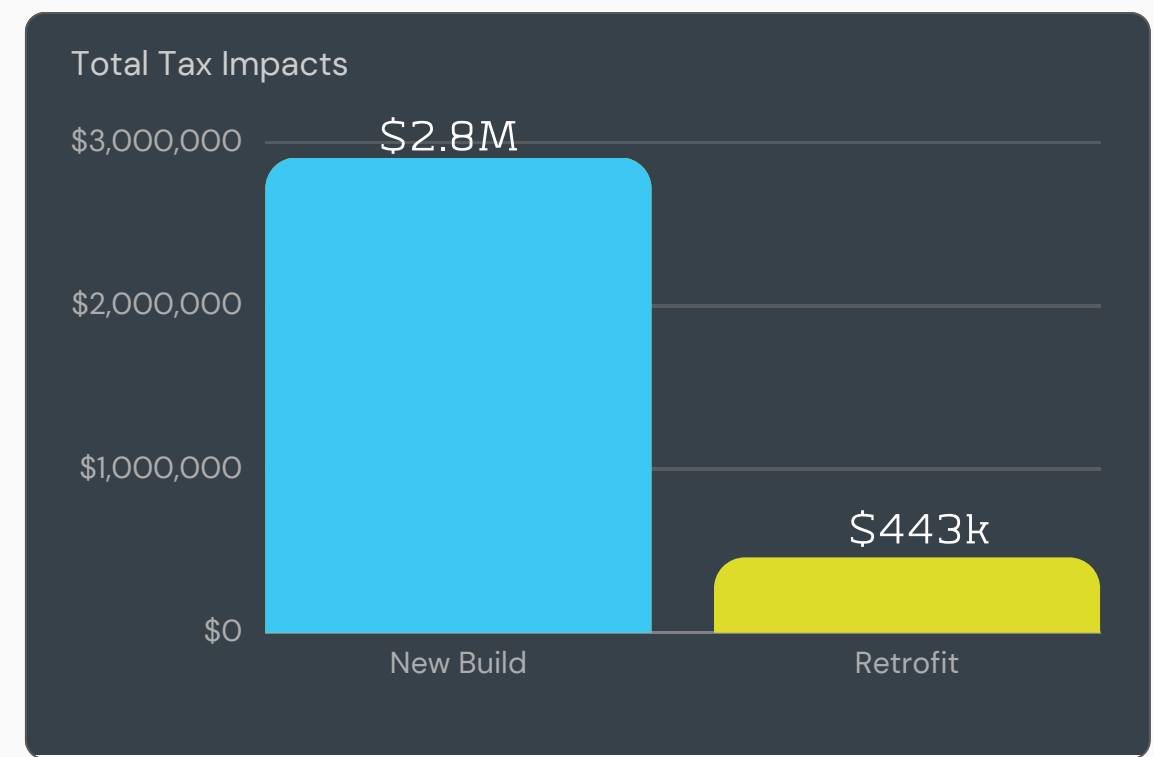
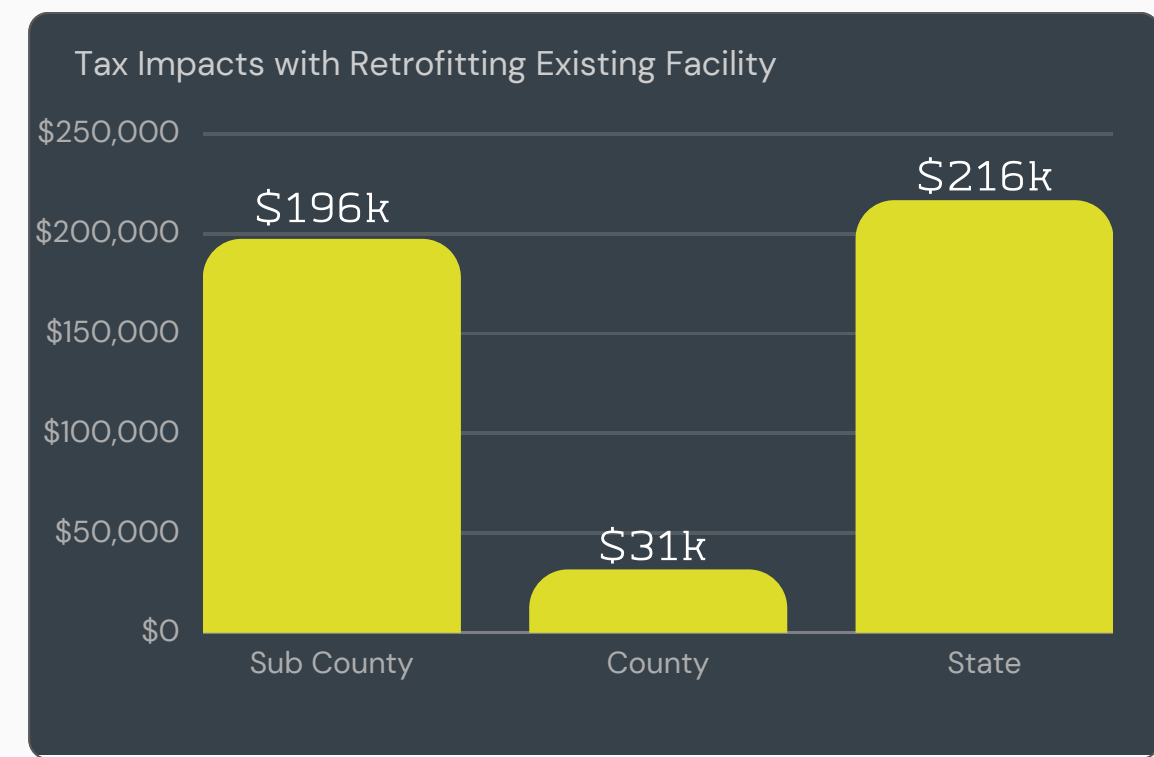
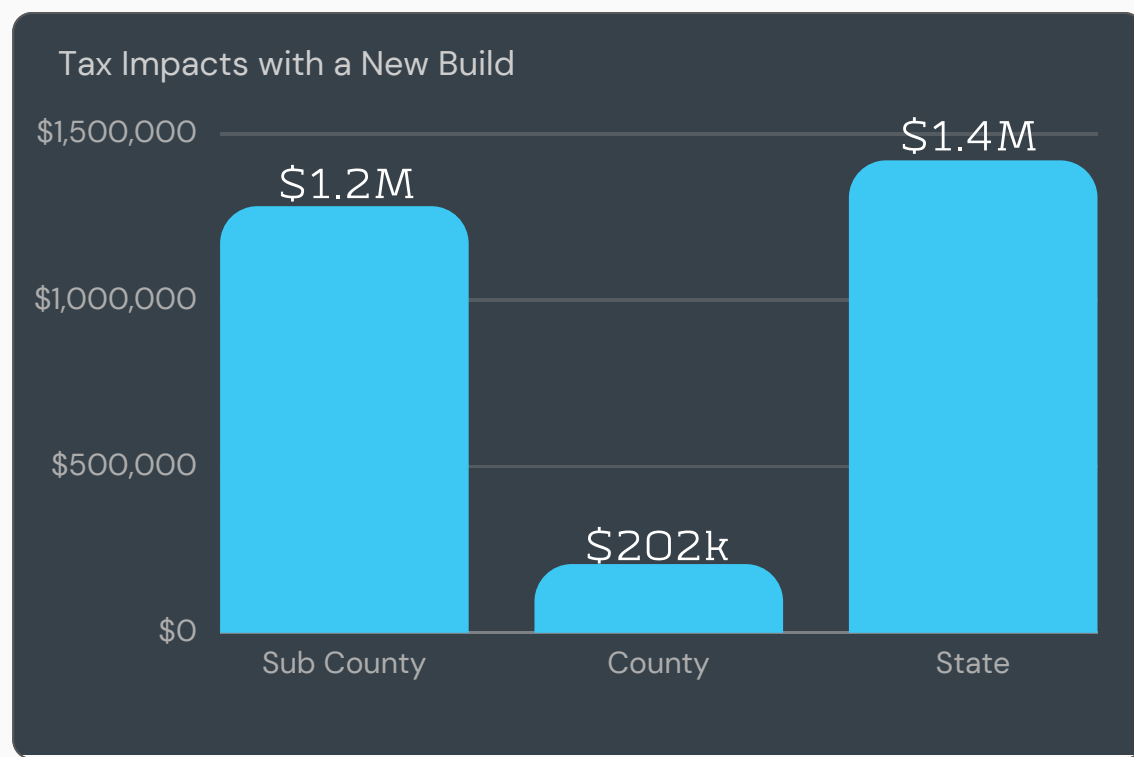
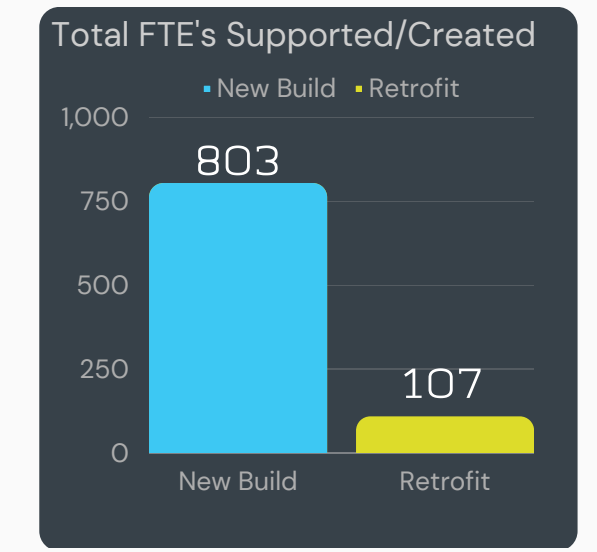
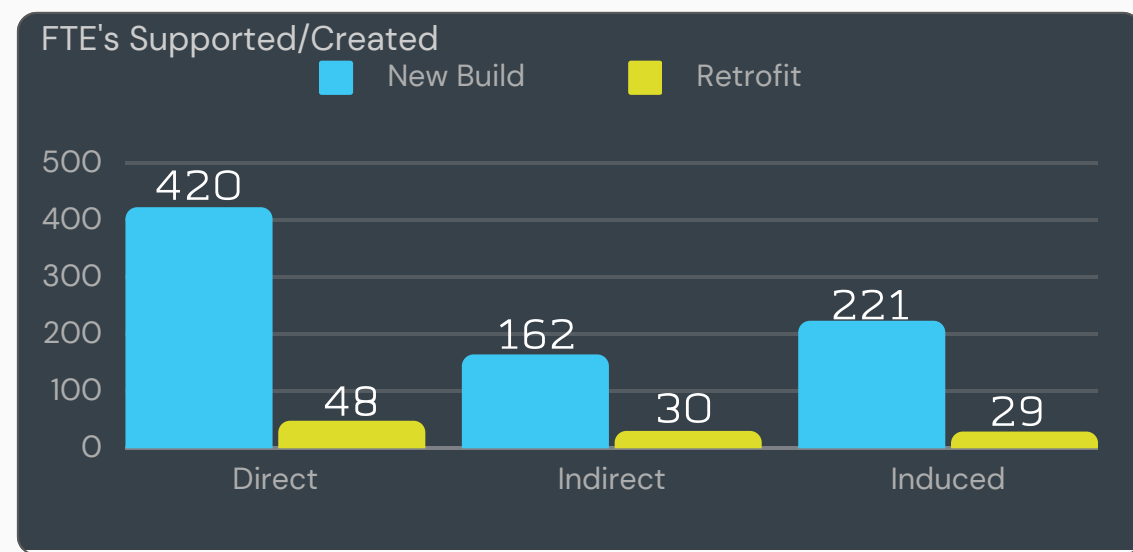
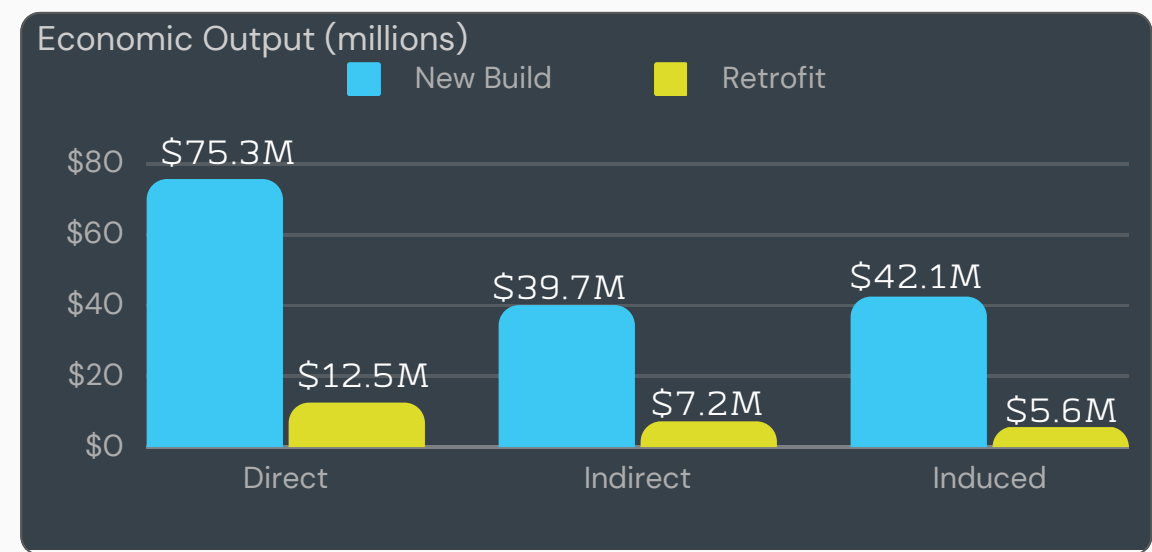
SCENARIO 2: METROPLEX REGION



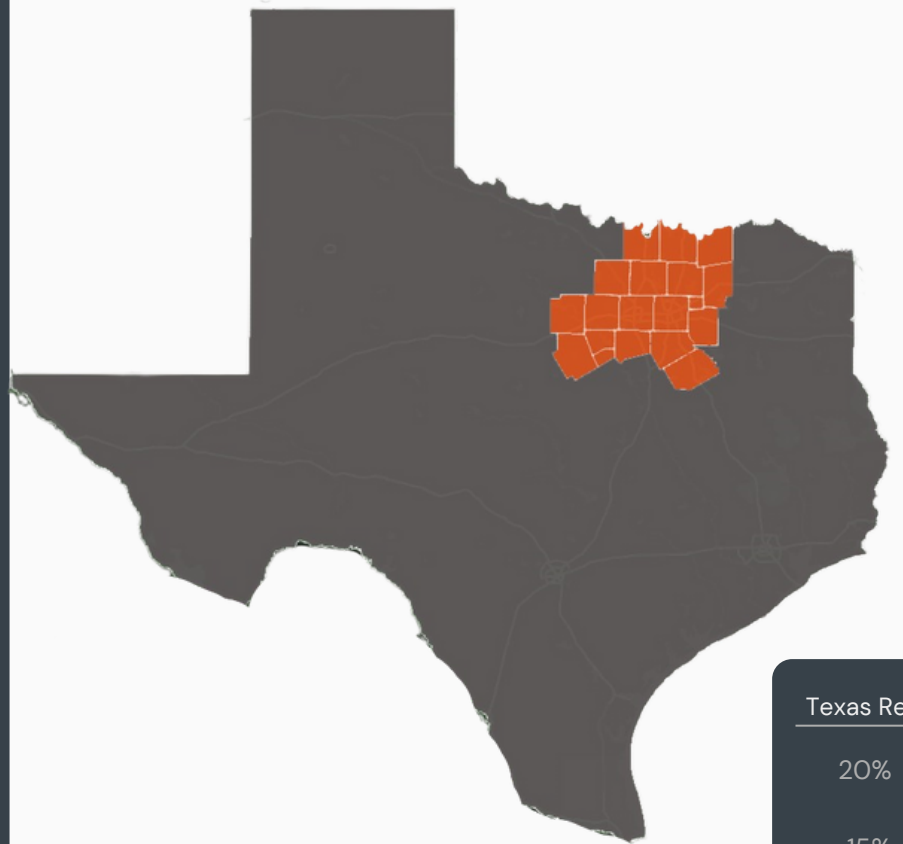
19 Counties in the region

Population
8,177,110

Median Income
\$70,583



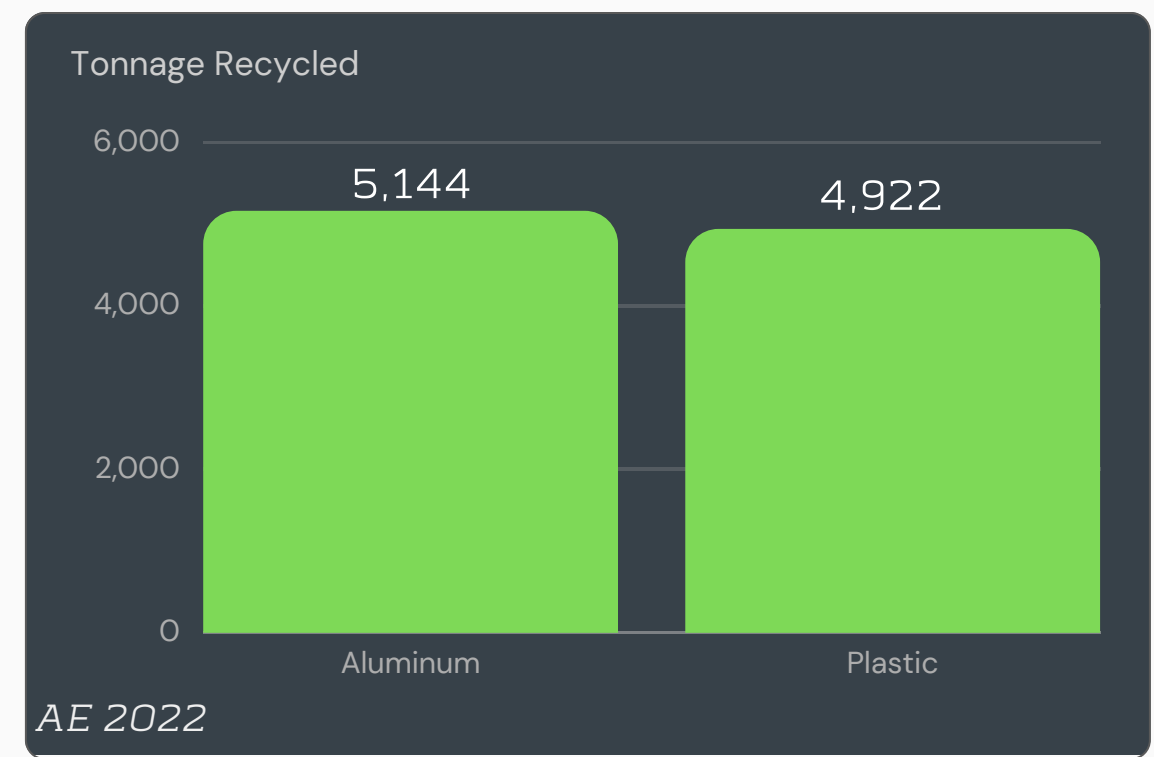
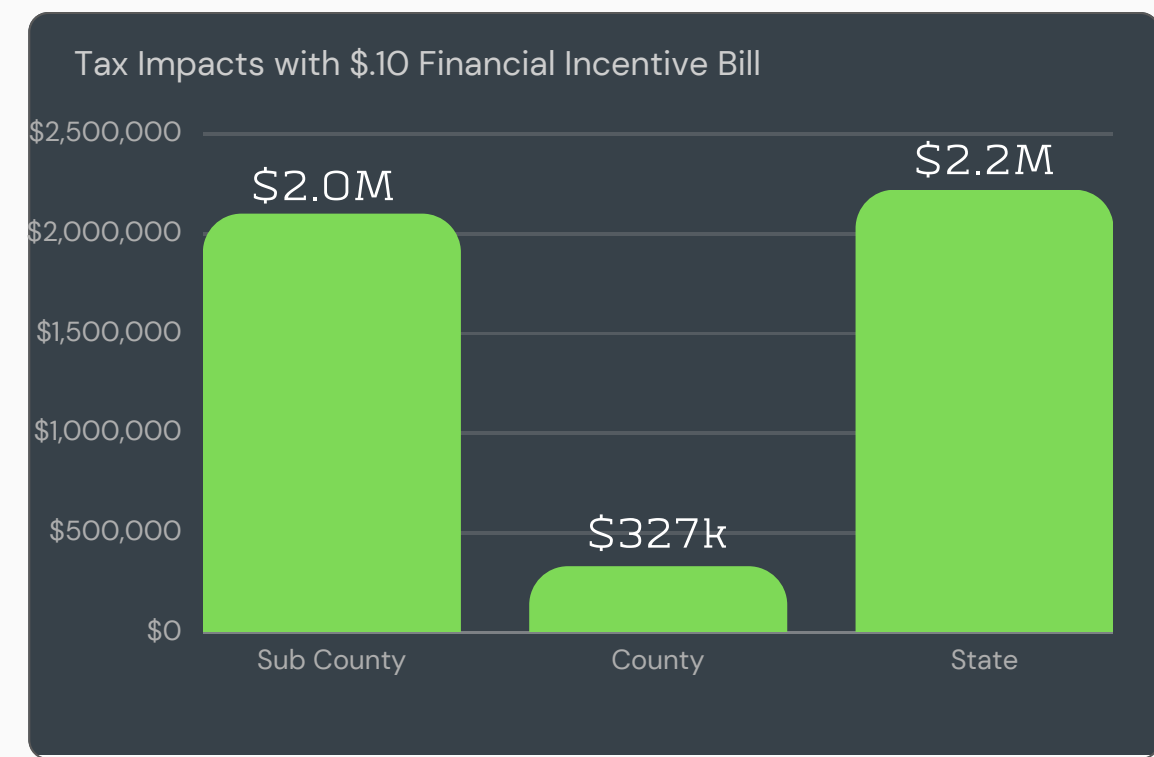
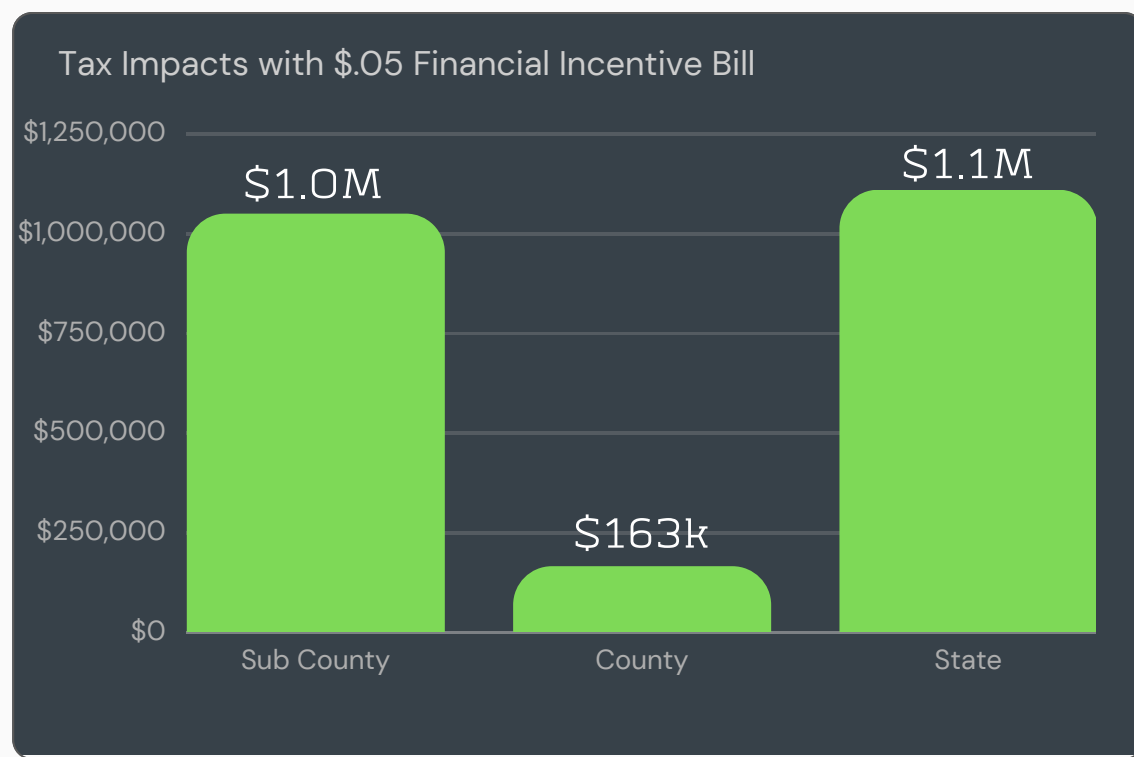
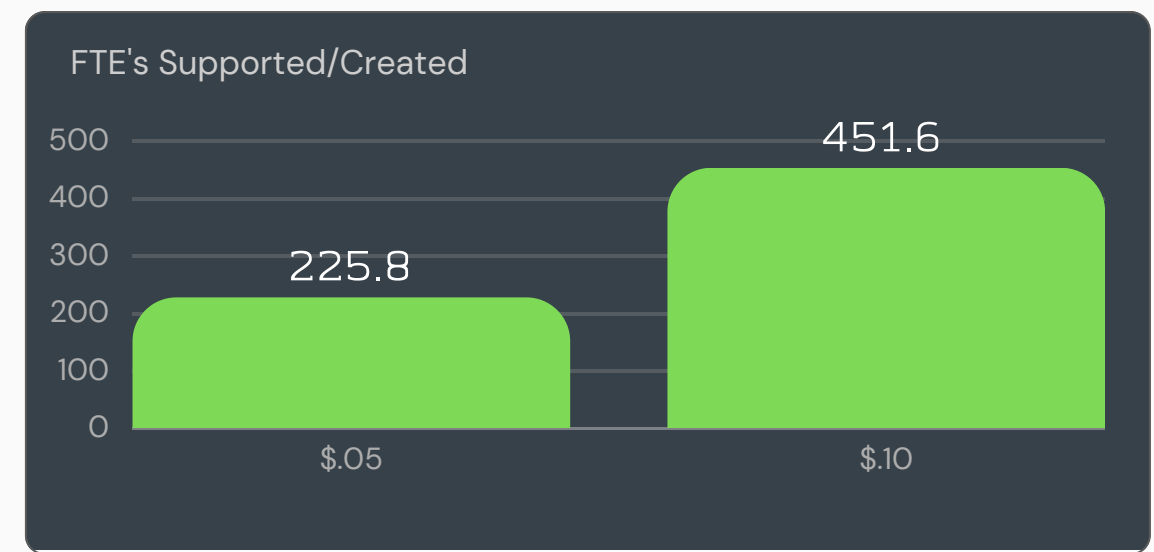
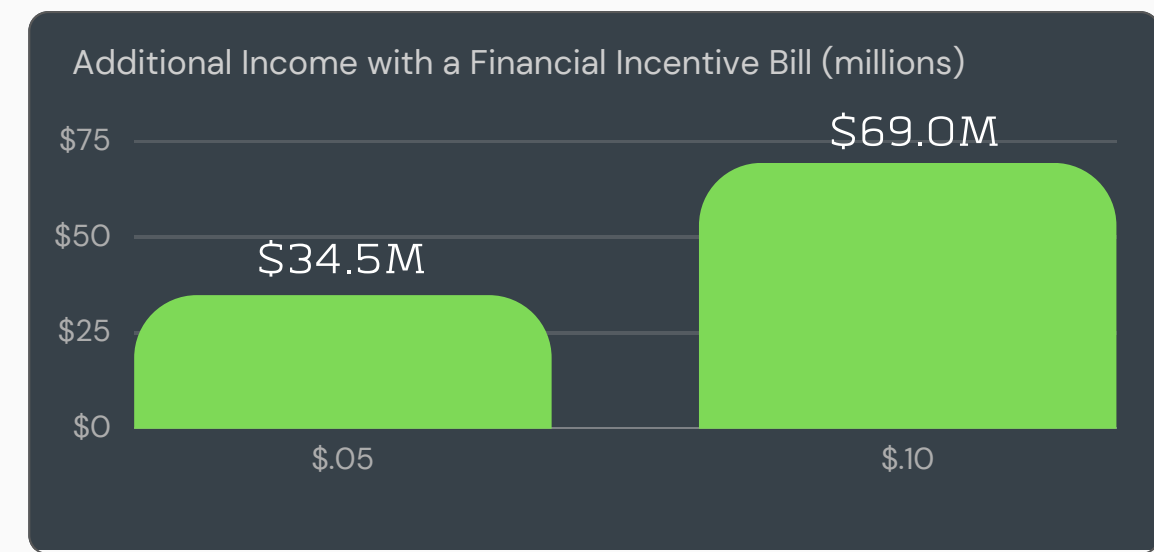
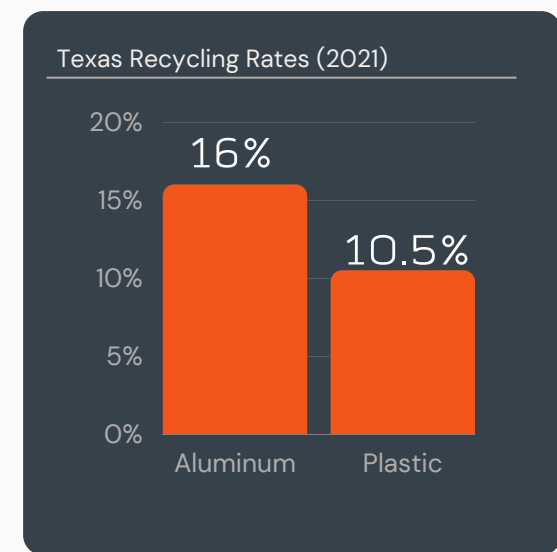
SCENARIO 3: METROPLEX REGION



19 Counties in the region

Population
8,177,110

Median Income
\$70,583



SUMMARY: METROPLEX REGION



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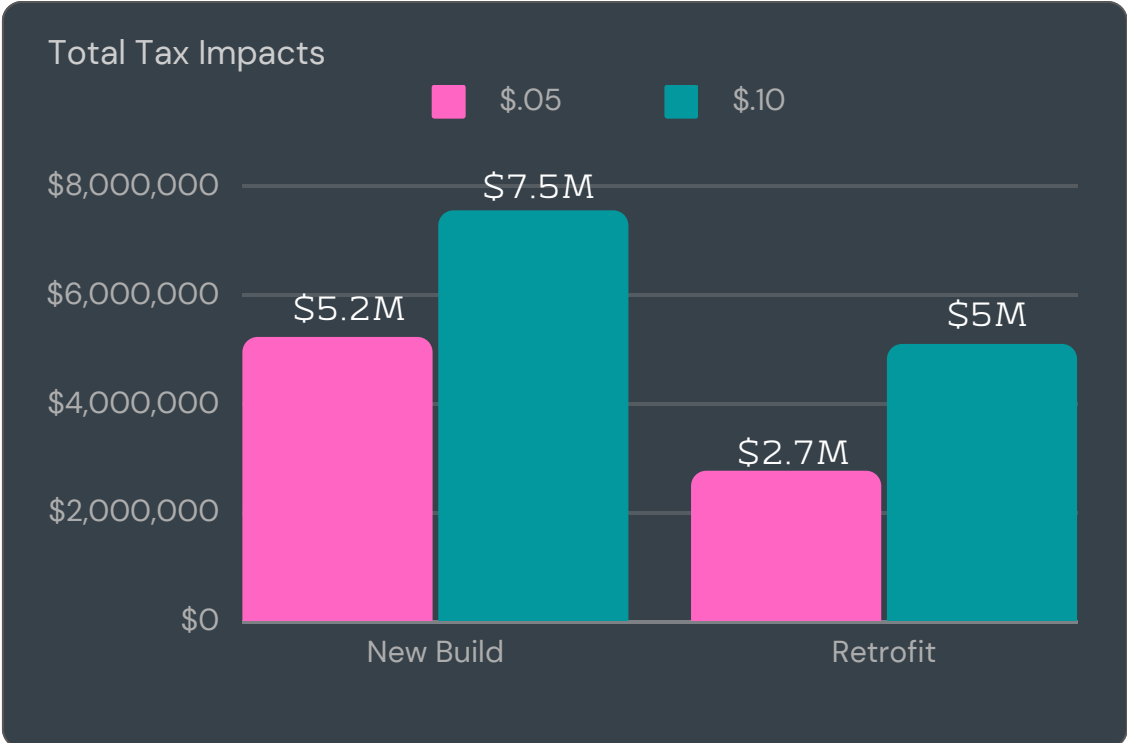
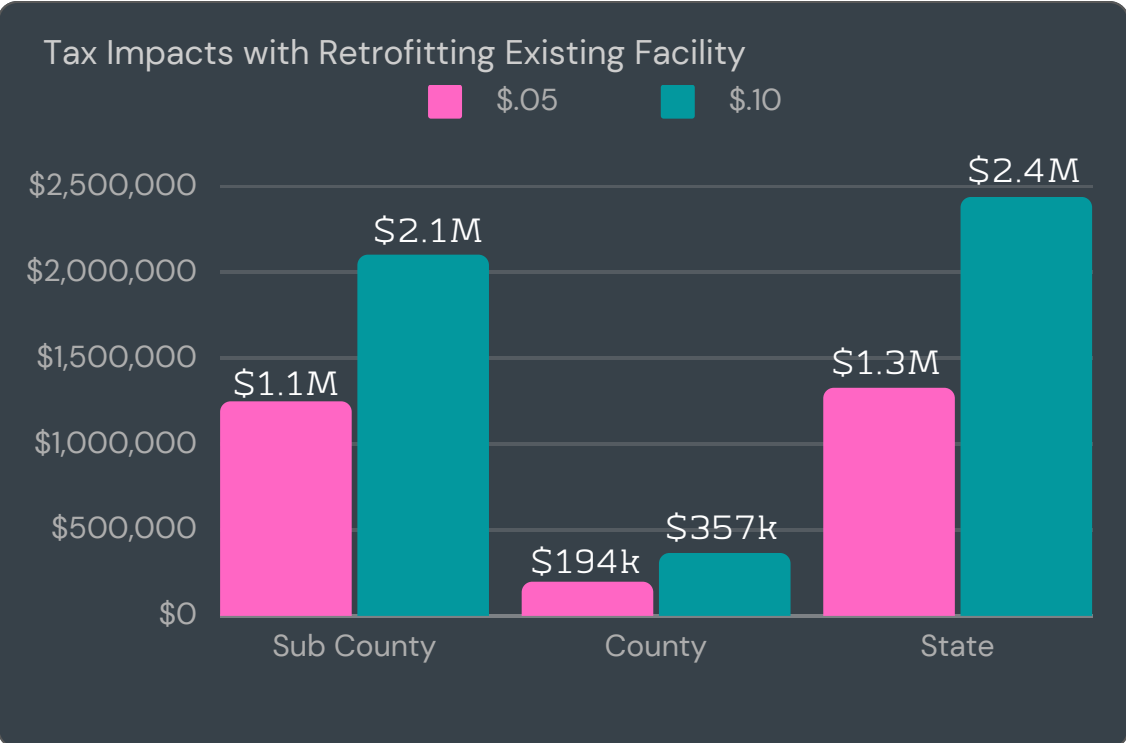
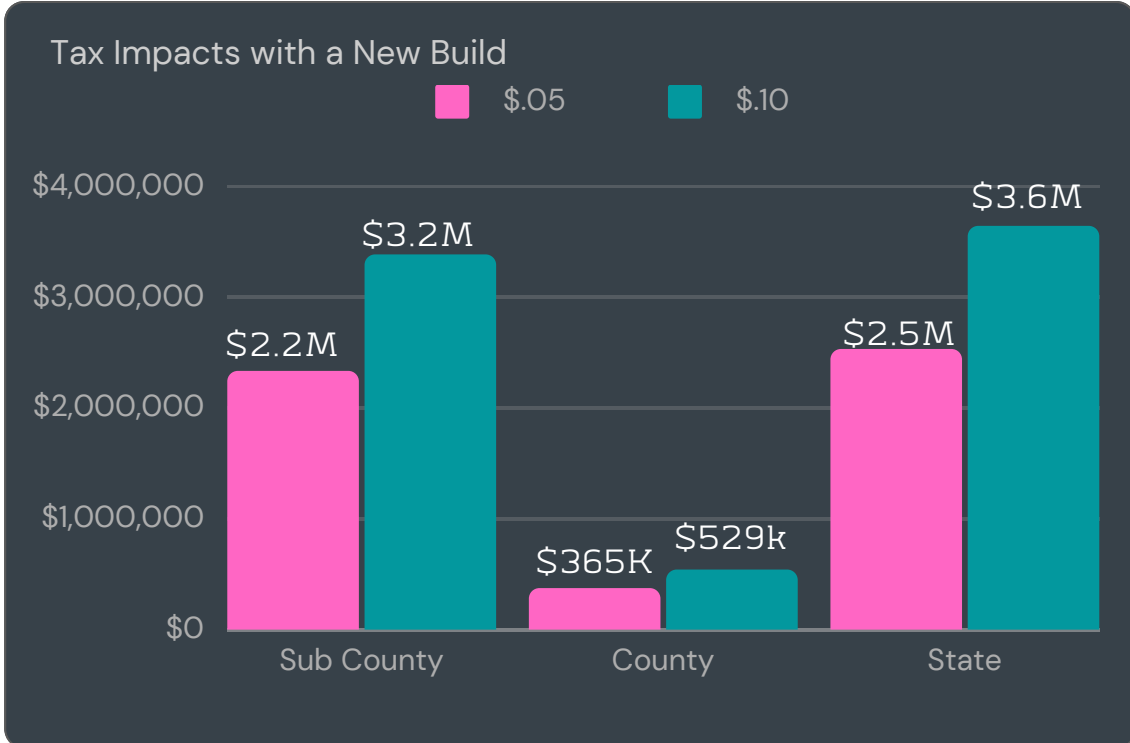
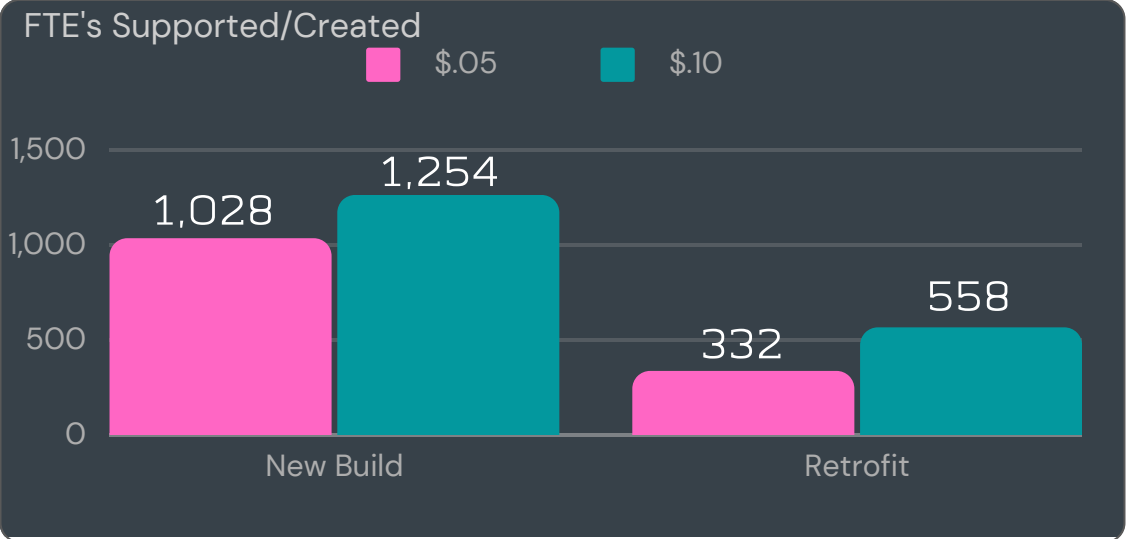
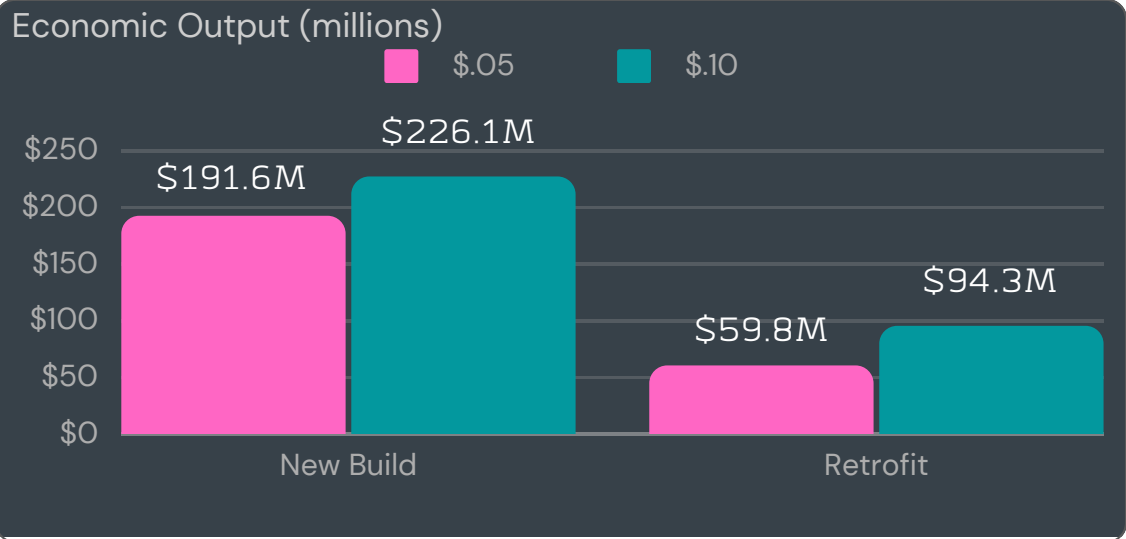
19 Counties in the region

Population

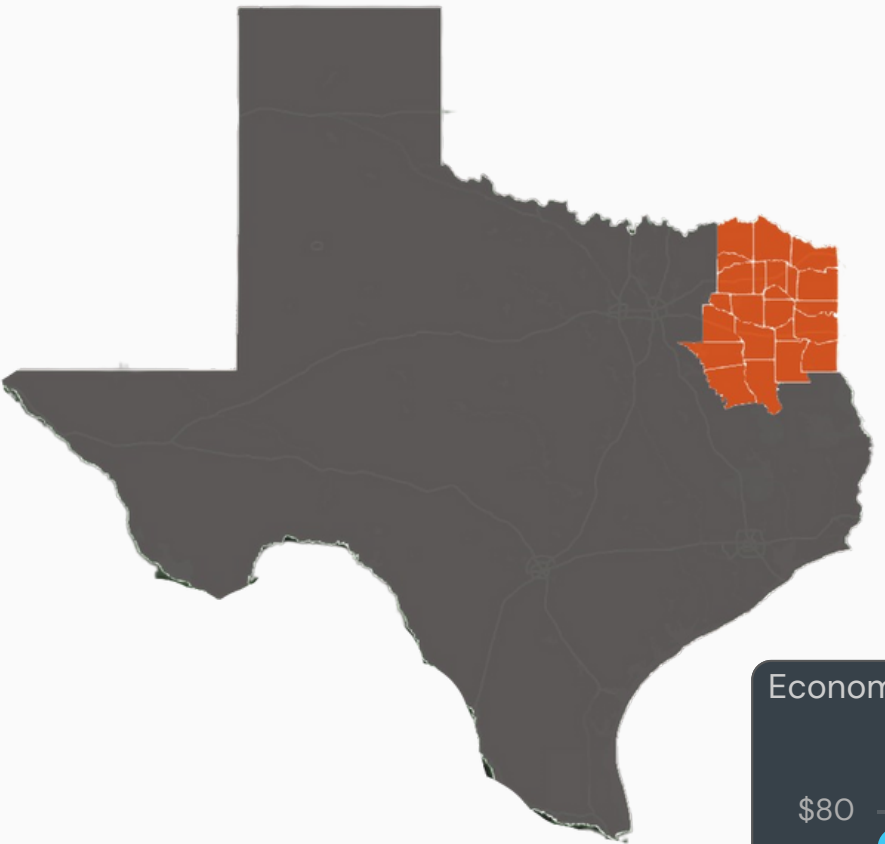
8,177,110

Median Income

\$70,583



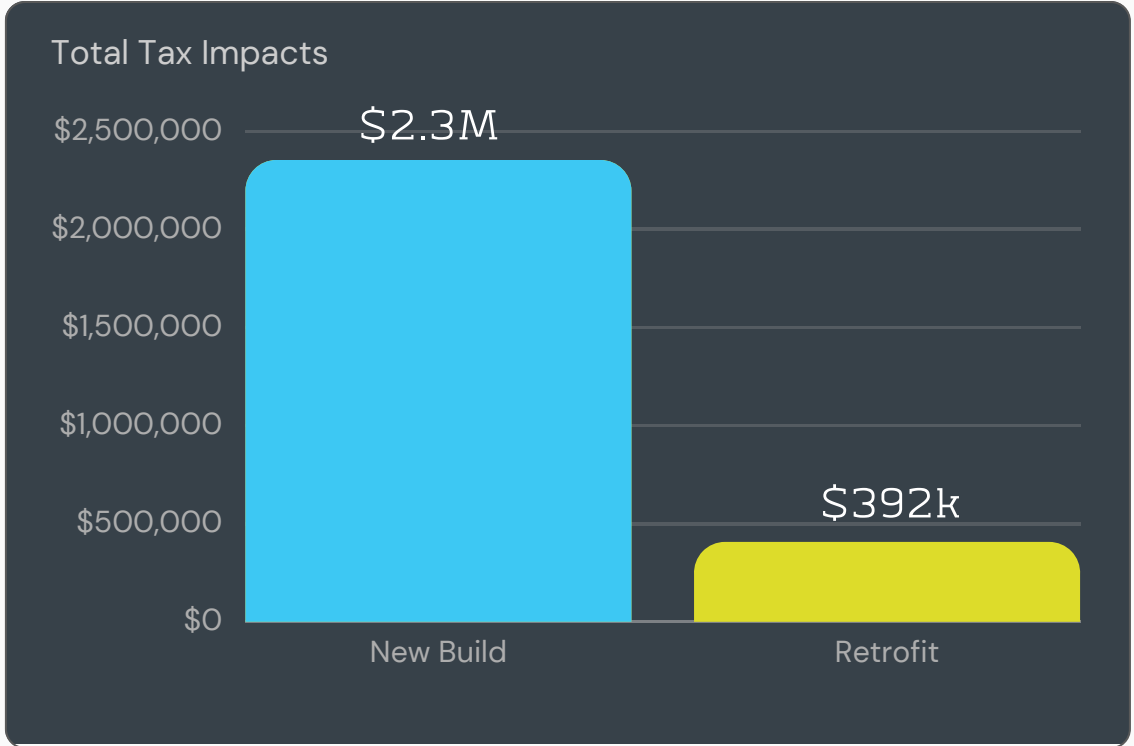
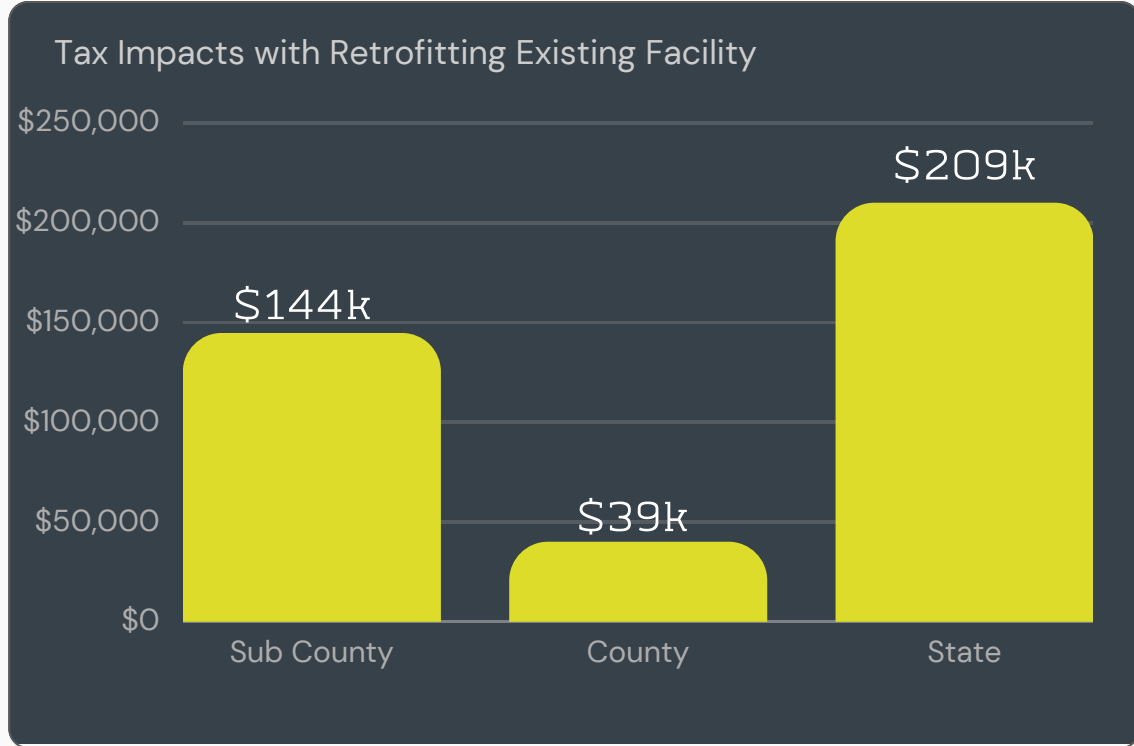
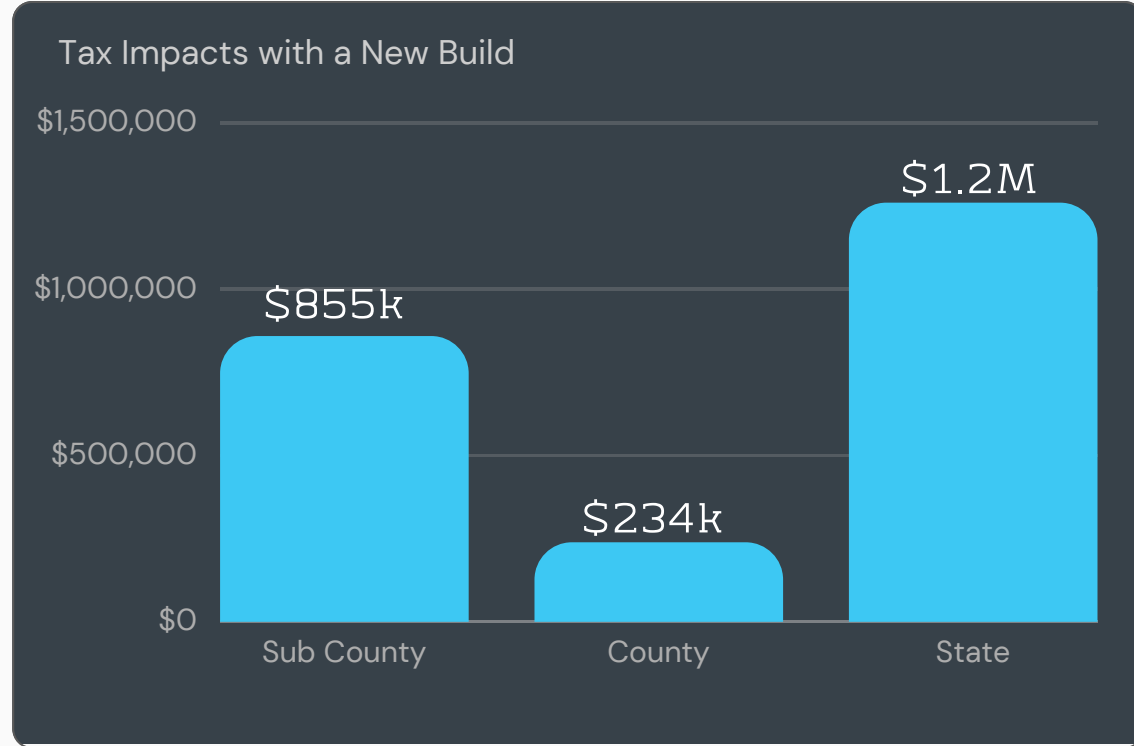
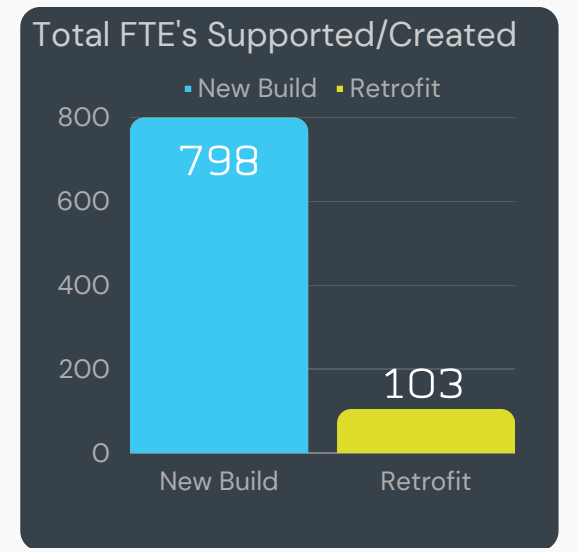
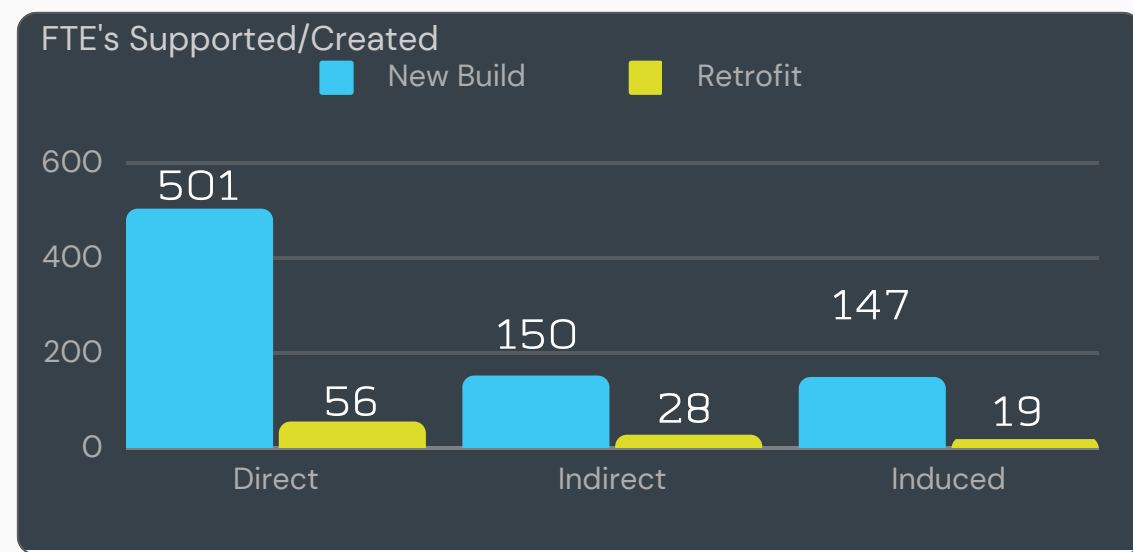
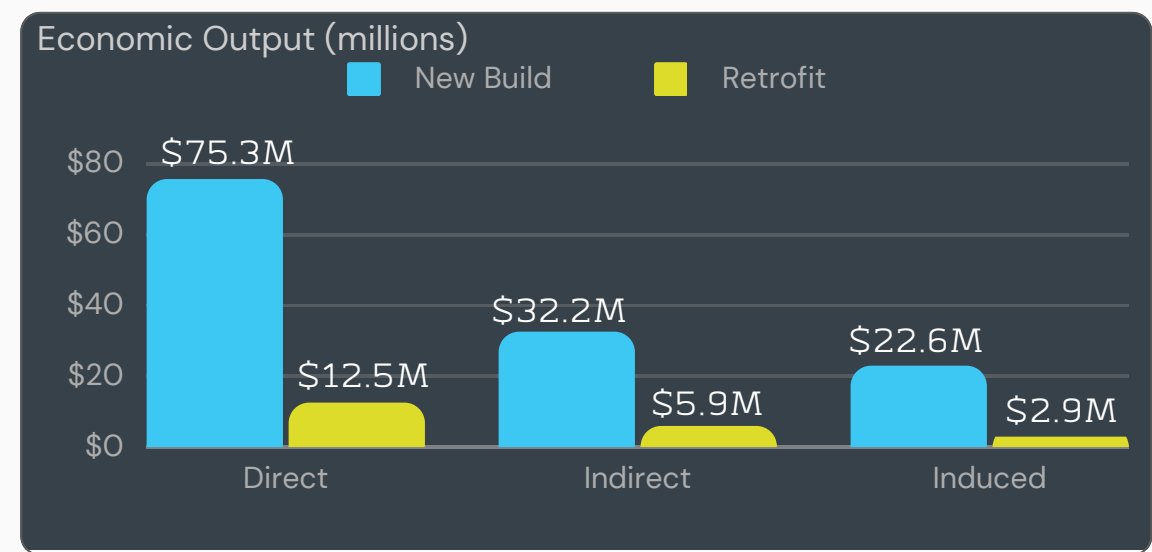
SCENARIO 2: UPPER EAST REGION



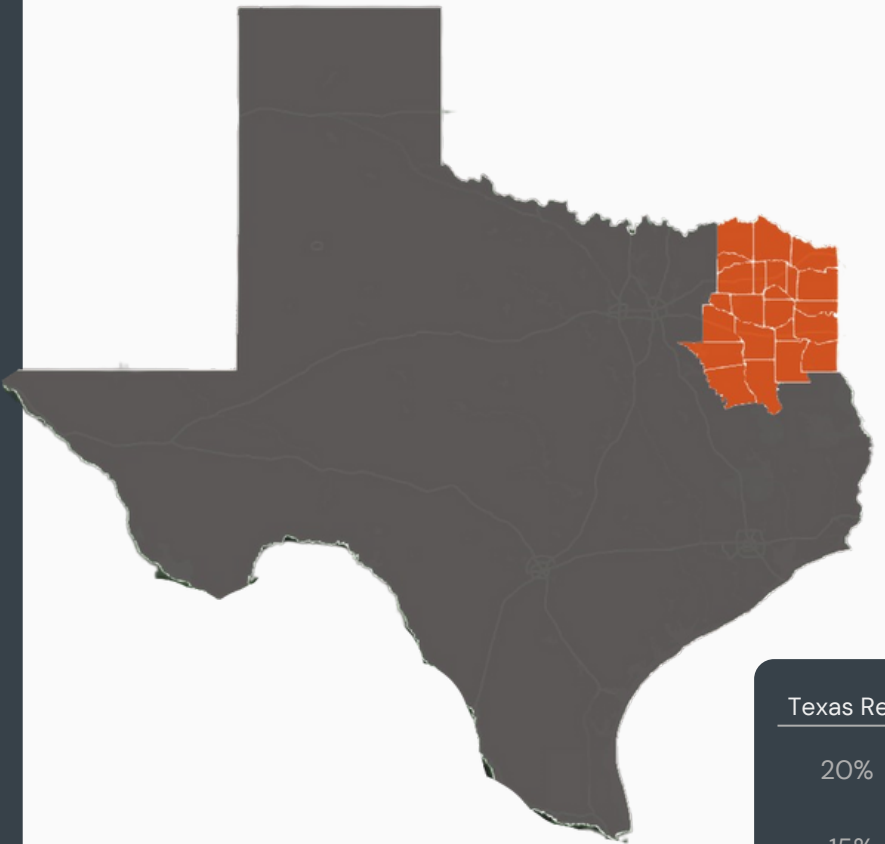
23 Counties in the region

Population
1,161,889

Median Income
\$50,685



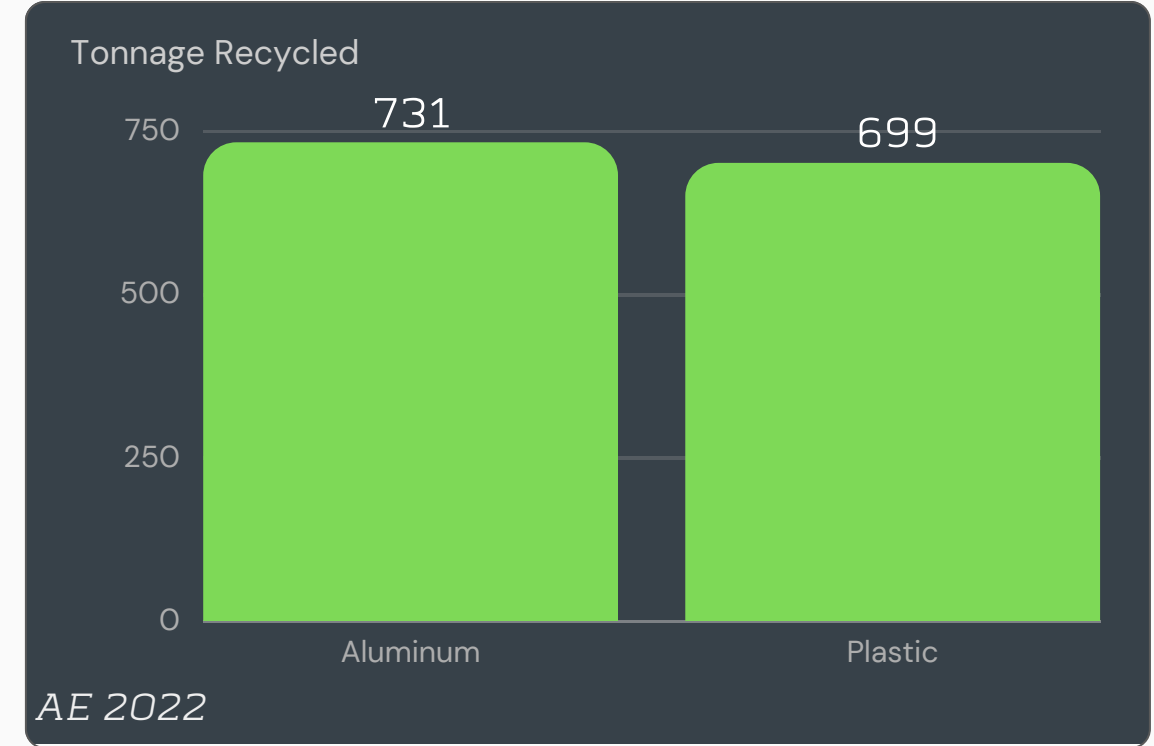
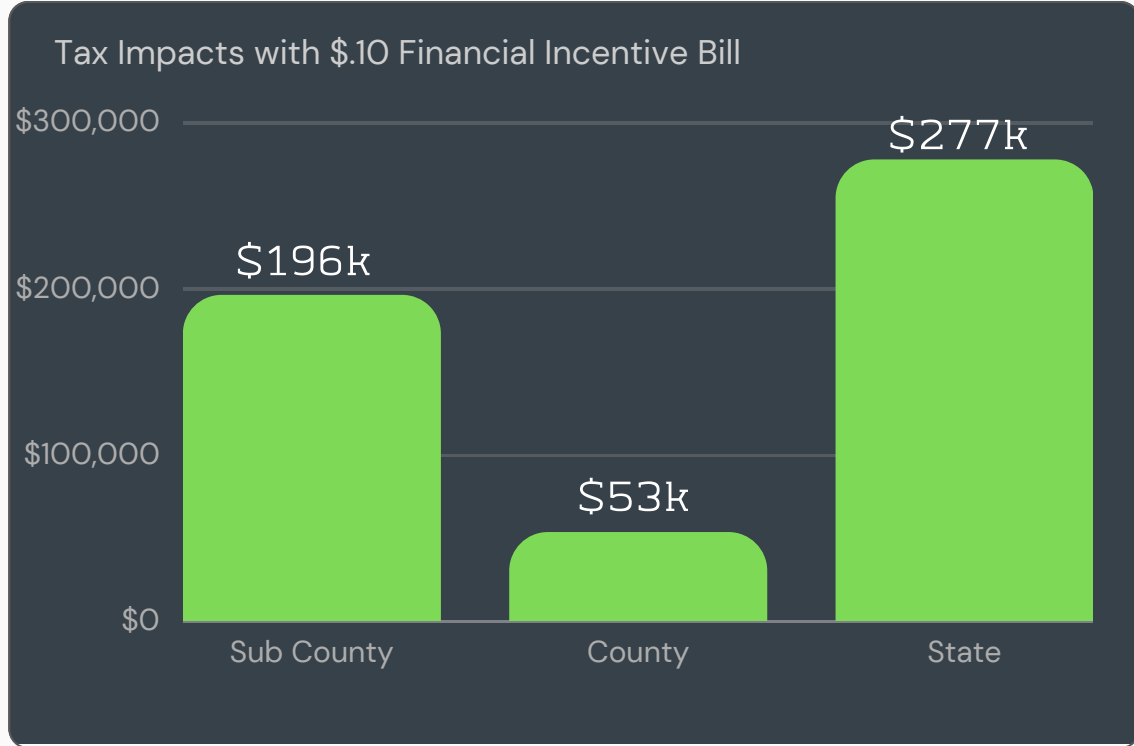
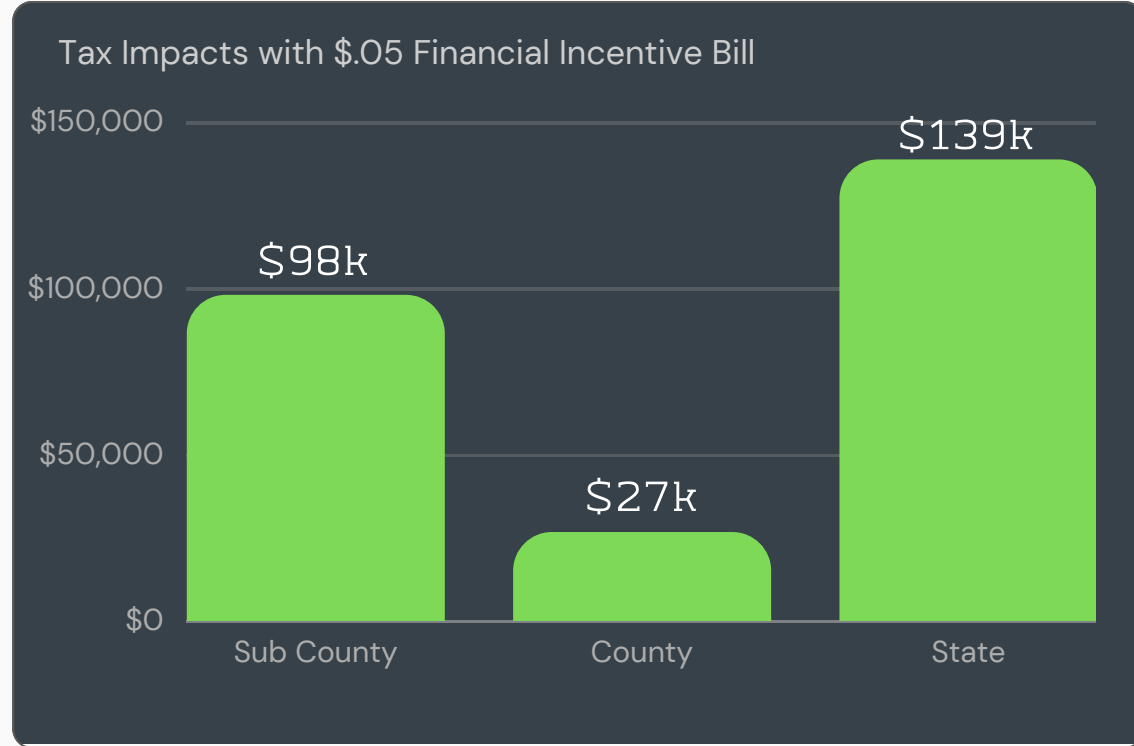
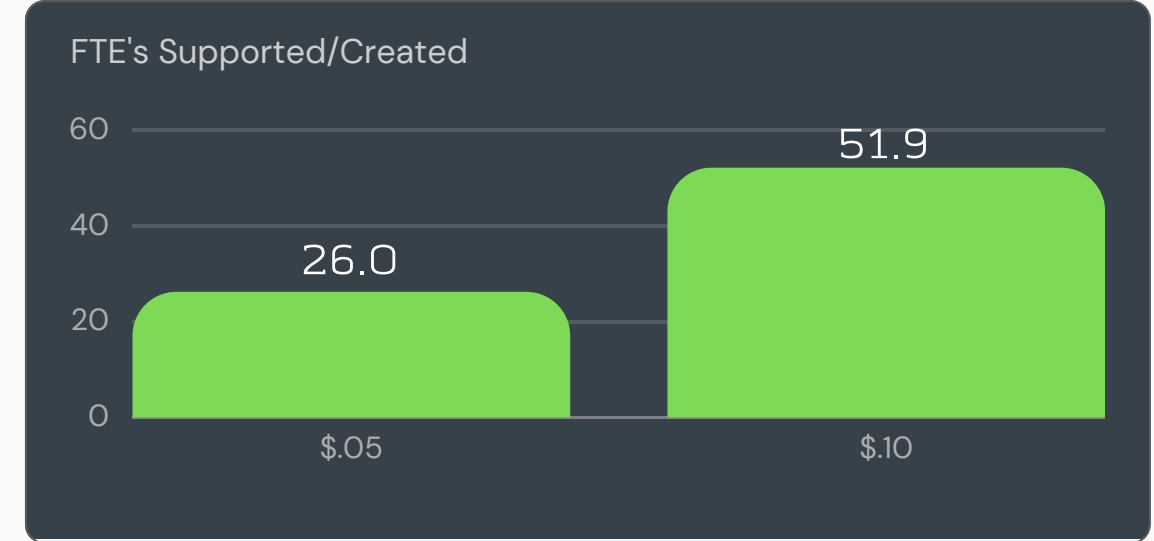
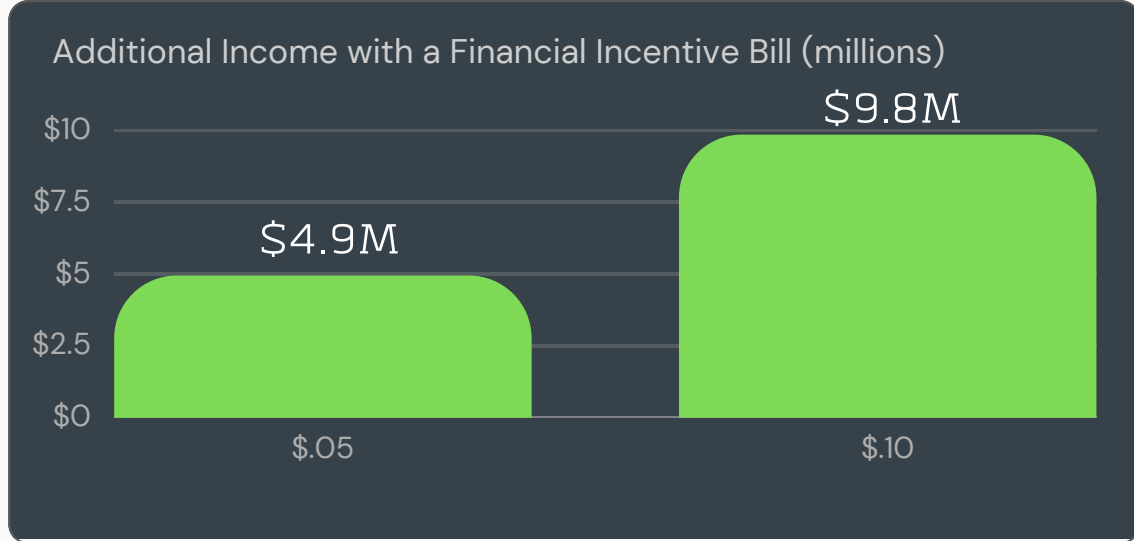
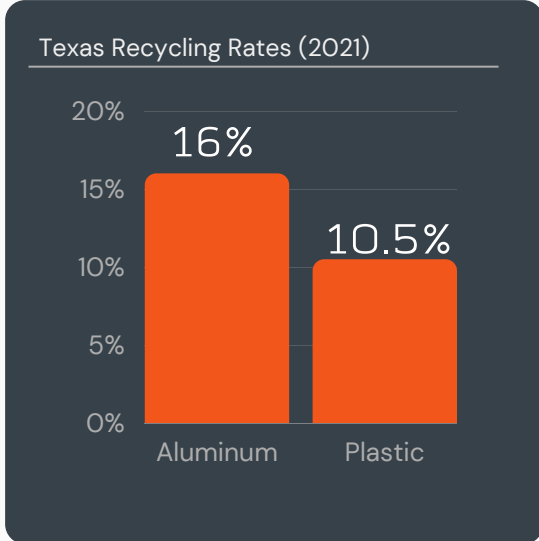
SCENARIO 3: UPPER EAST REGION



23 Counties in the region

Population
1,161,889

Median Income
\$50,685



SUMMARY: UPPER EAST REGION



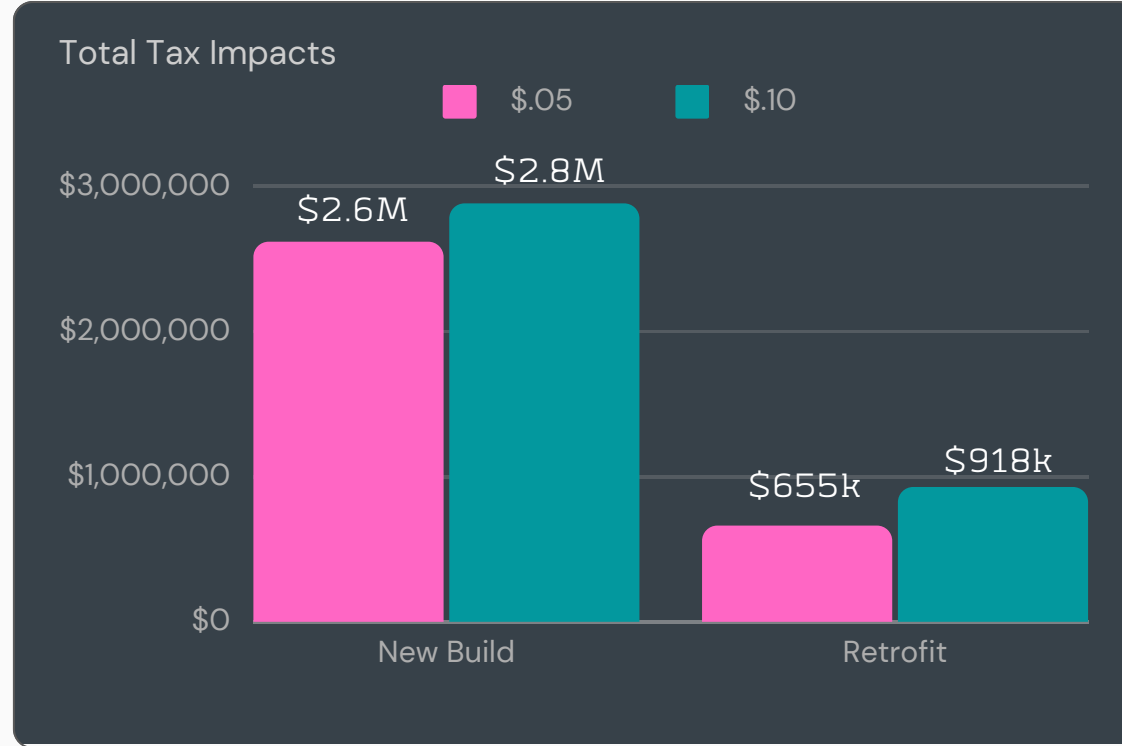
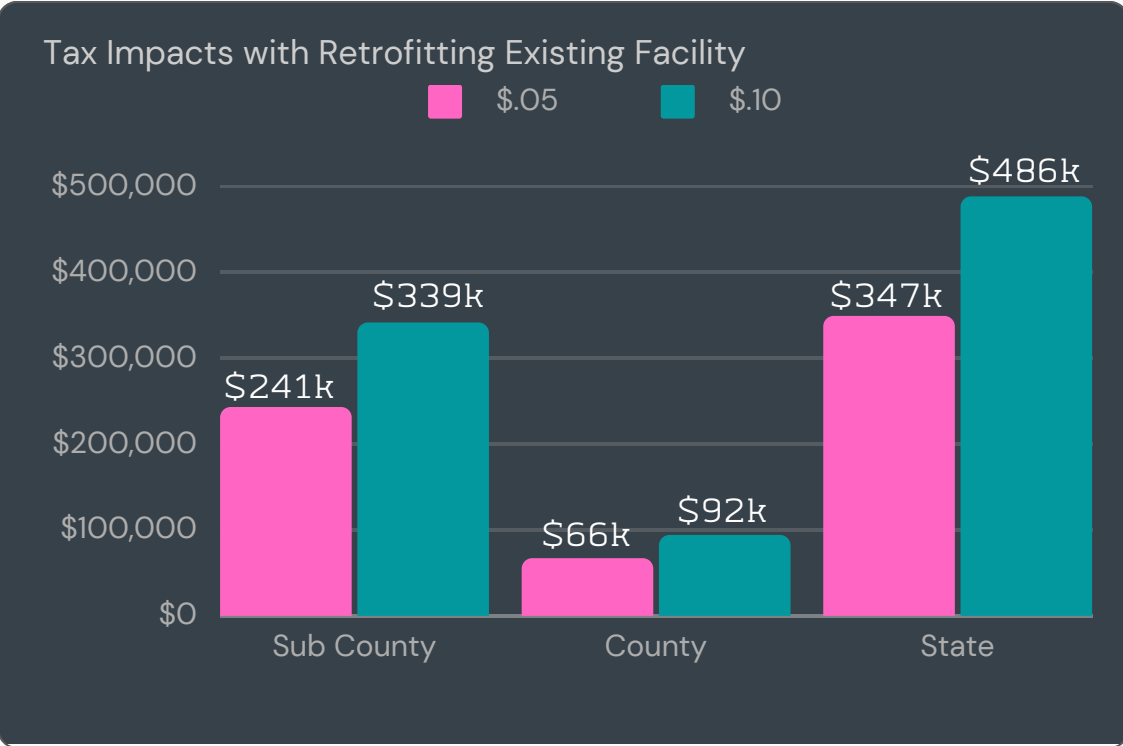
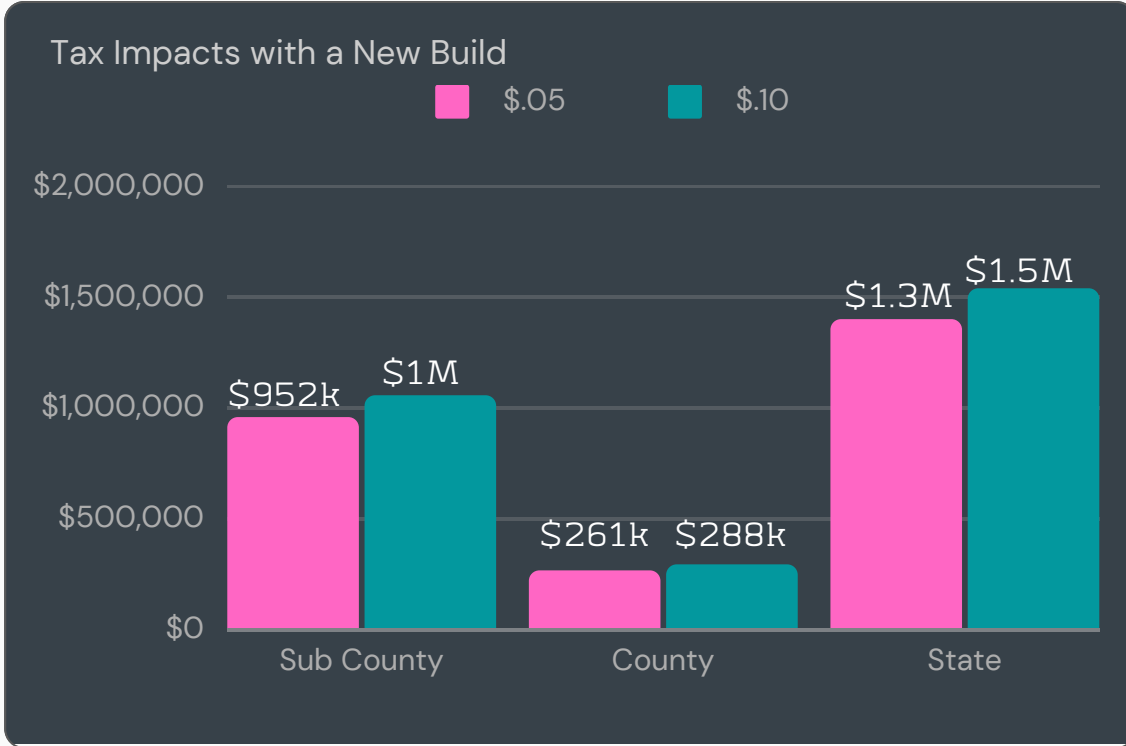
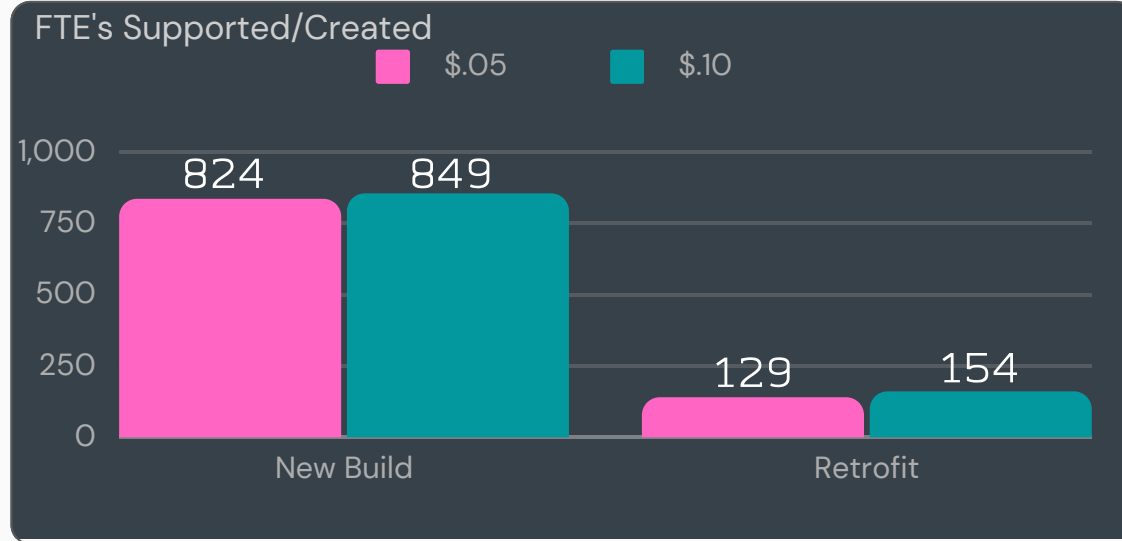
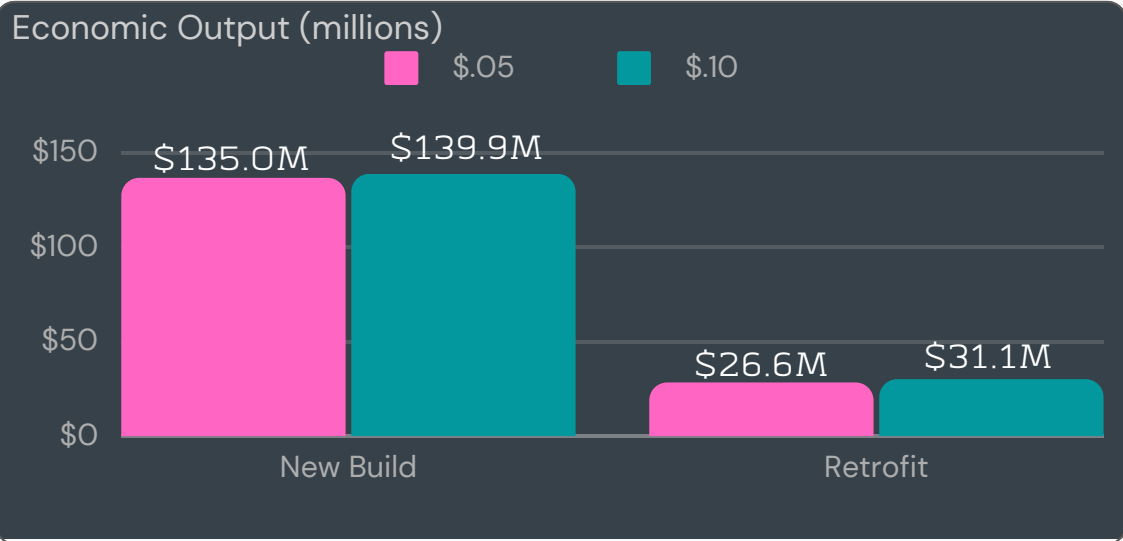
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16%

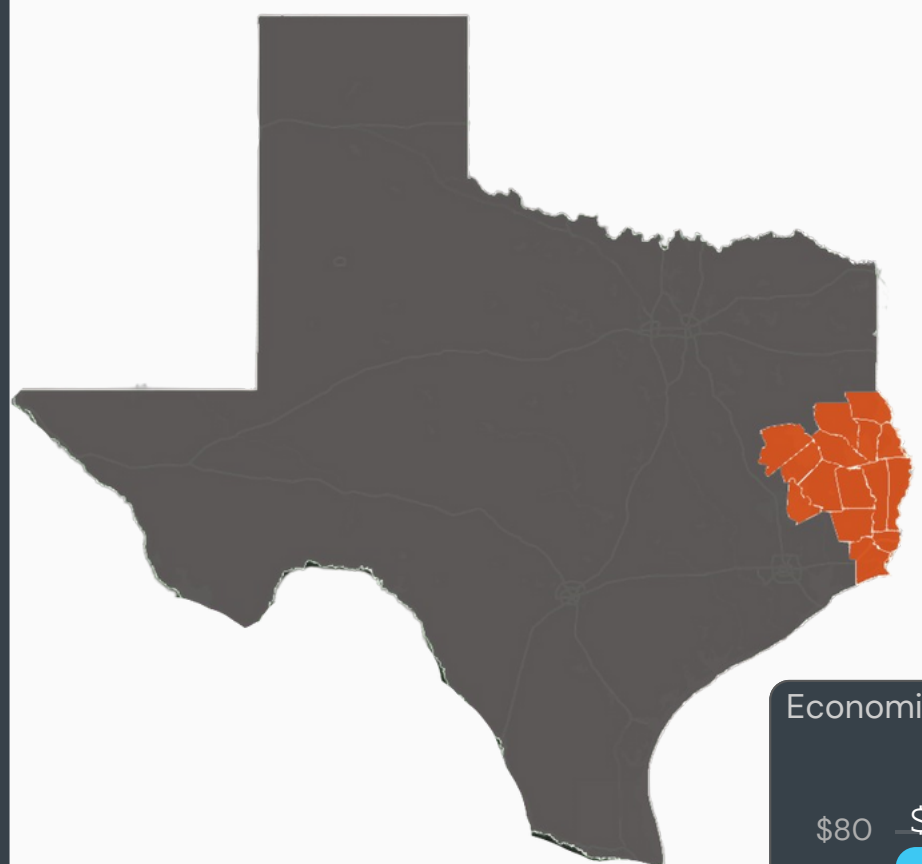
23 Counties in the region

Population
1,161,889

Median Income
\$50,685



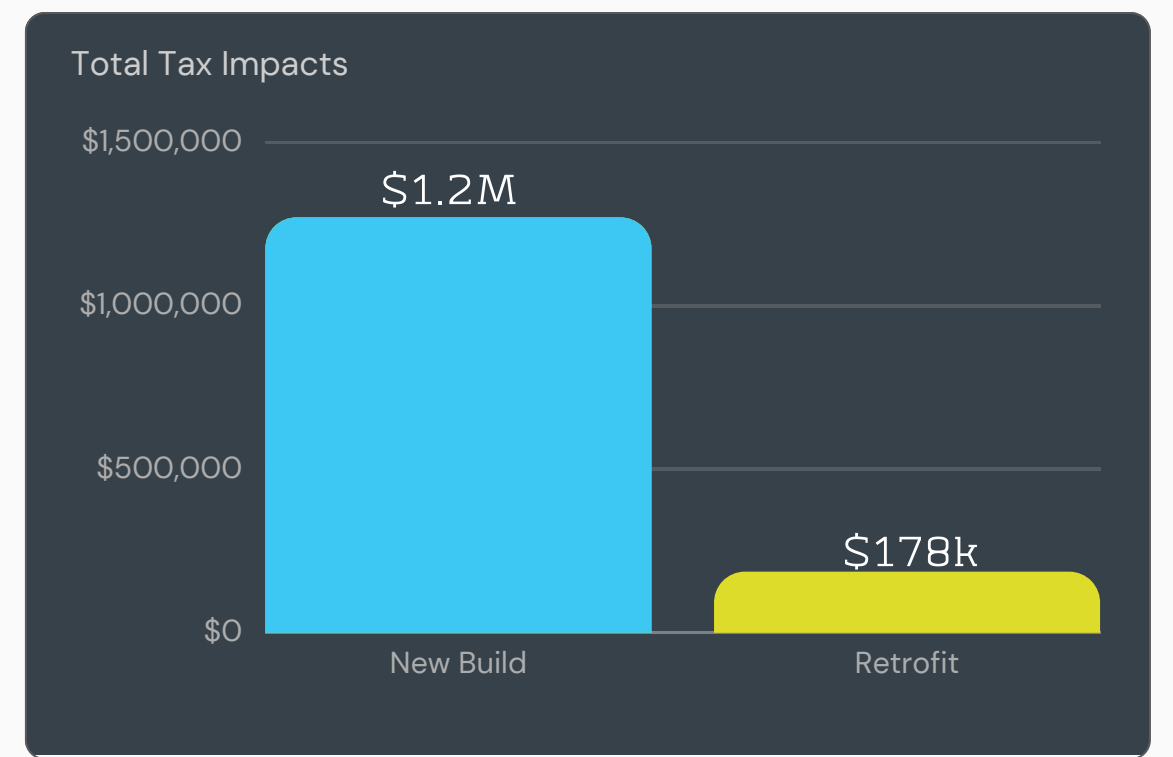
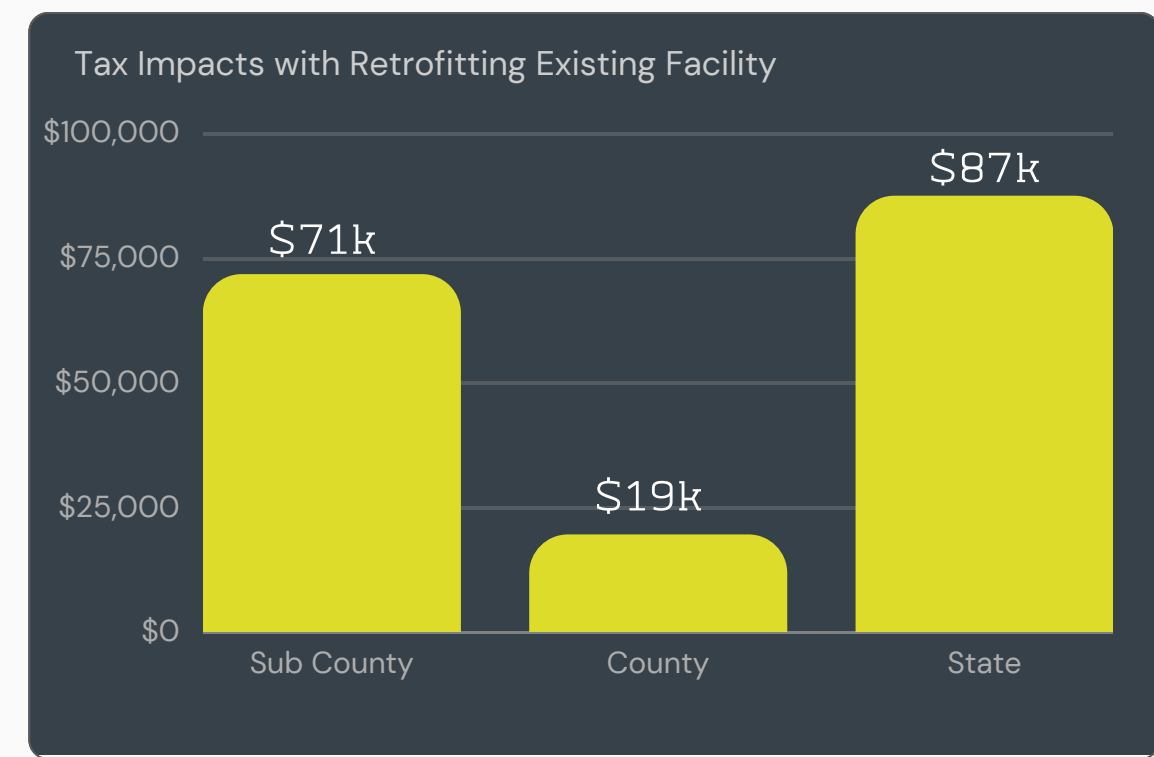
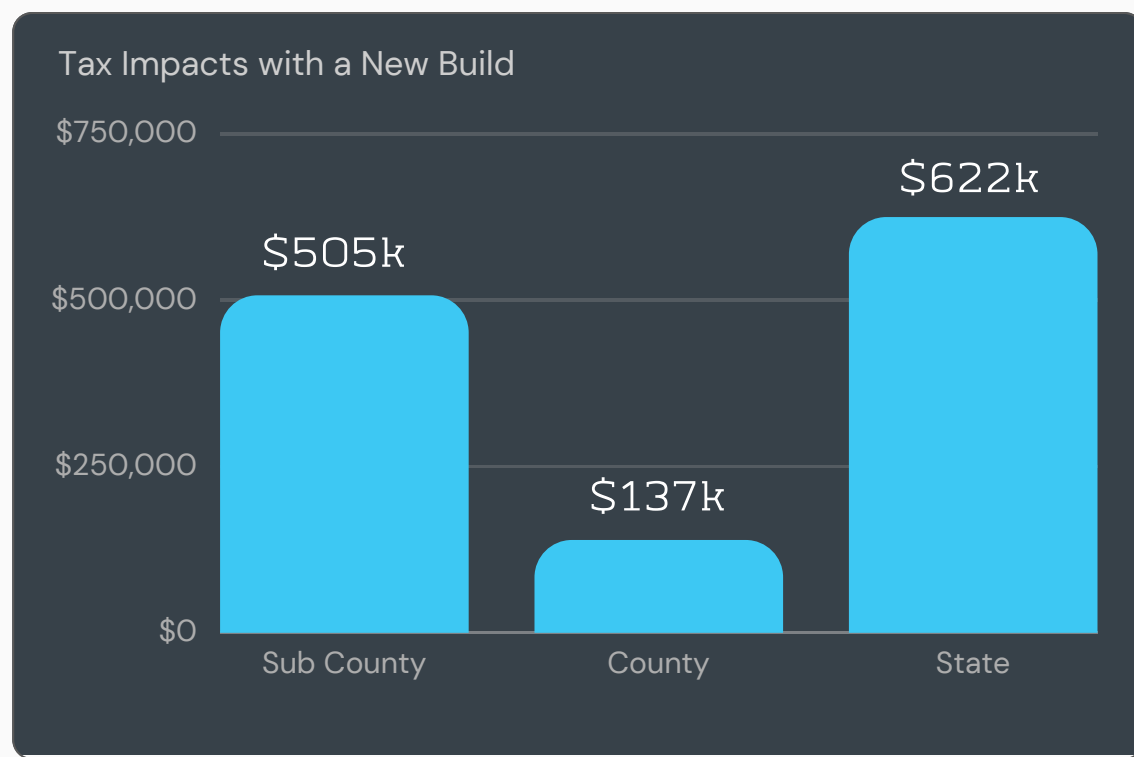
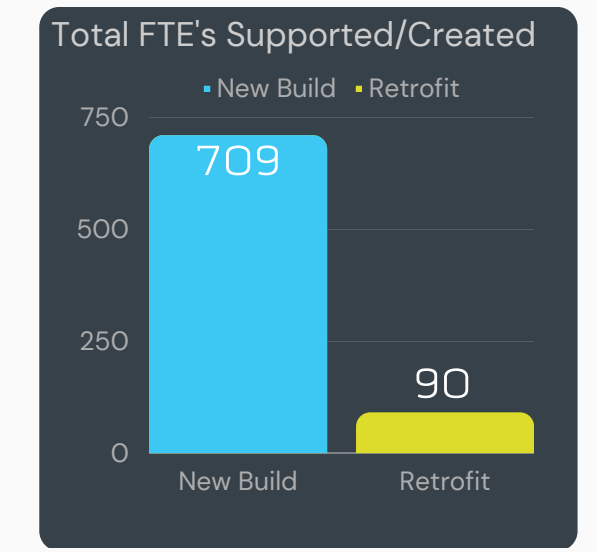
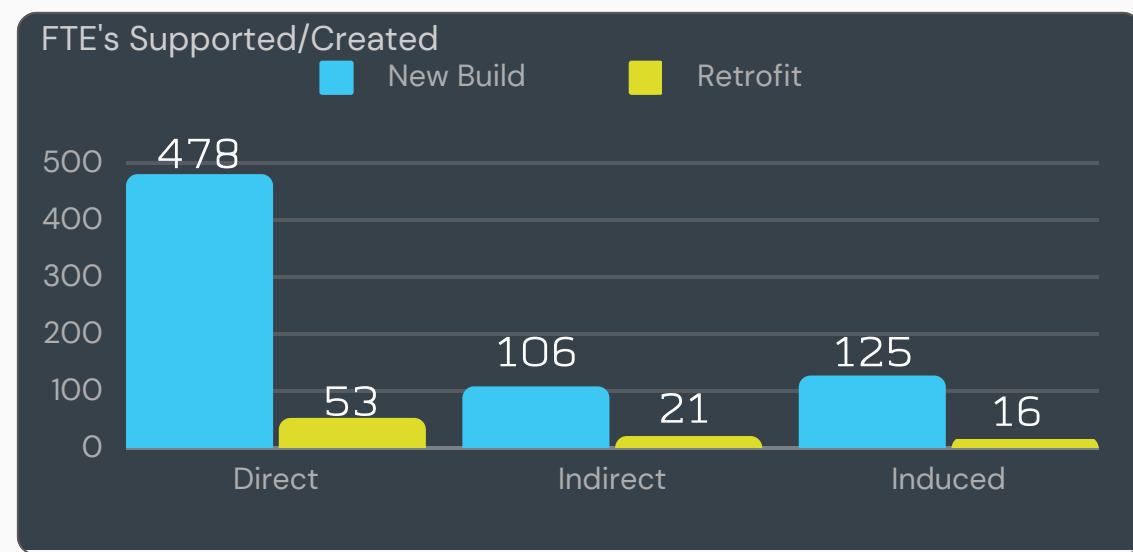
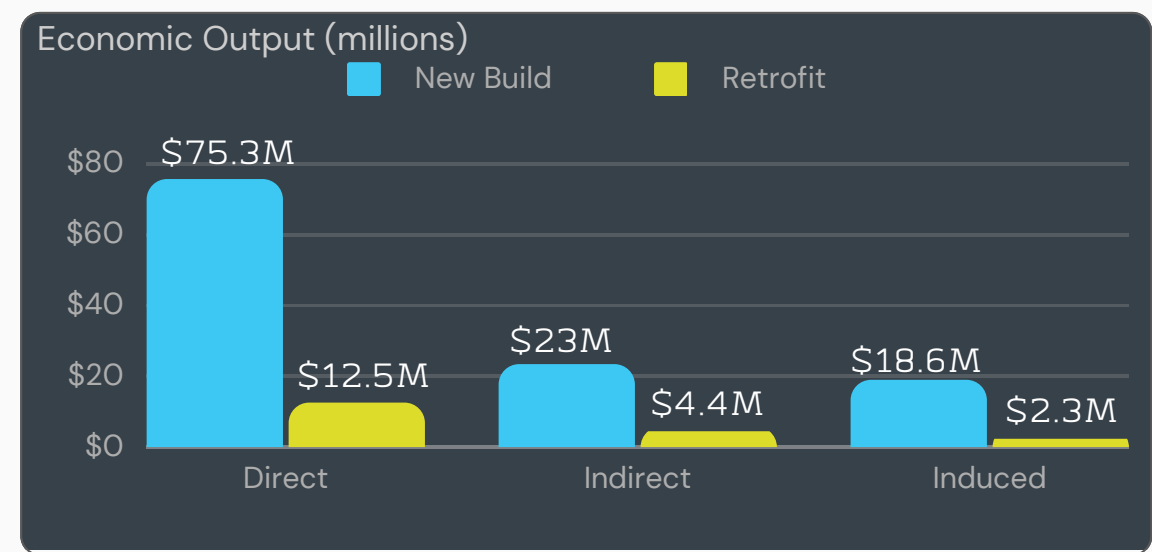
SCENARIO 2: SOUTHEAST REGION



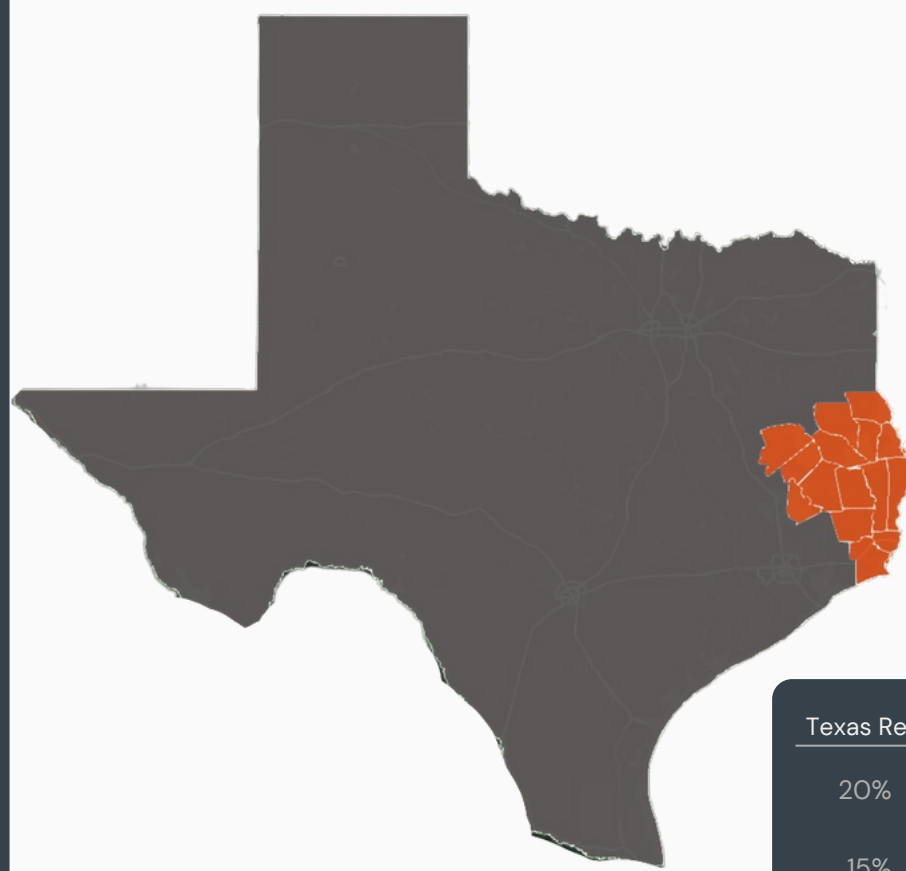
15 Counties in the region

Population
769,631

Median Income
\$49,781



SCENARIO 3: SOUTHEAST REGION

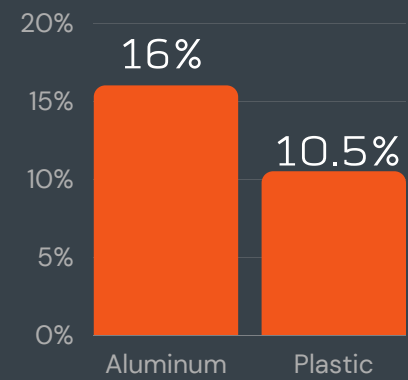


15 Counties in the region

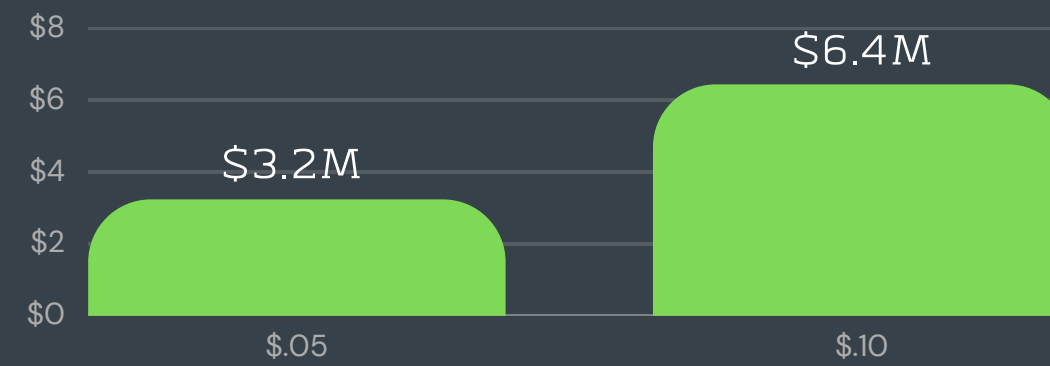
Population
769,631

Median Income
\$49,781

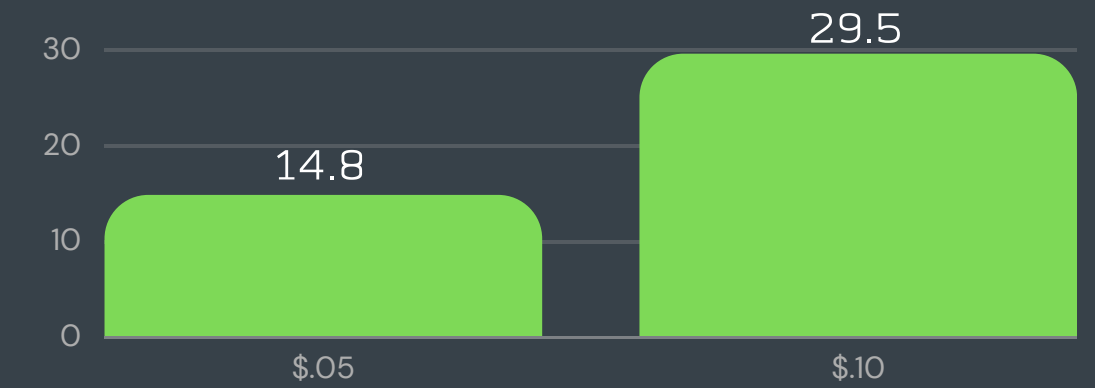
Texas Recycling Rates (2021)



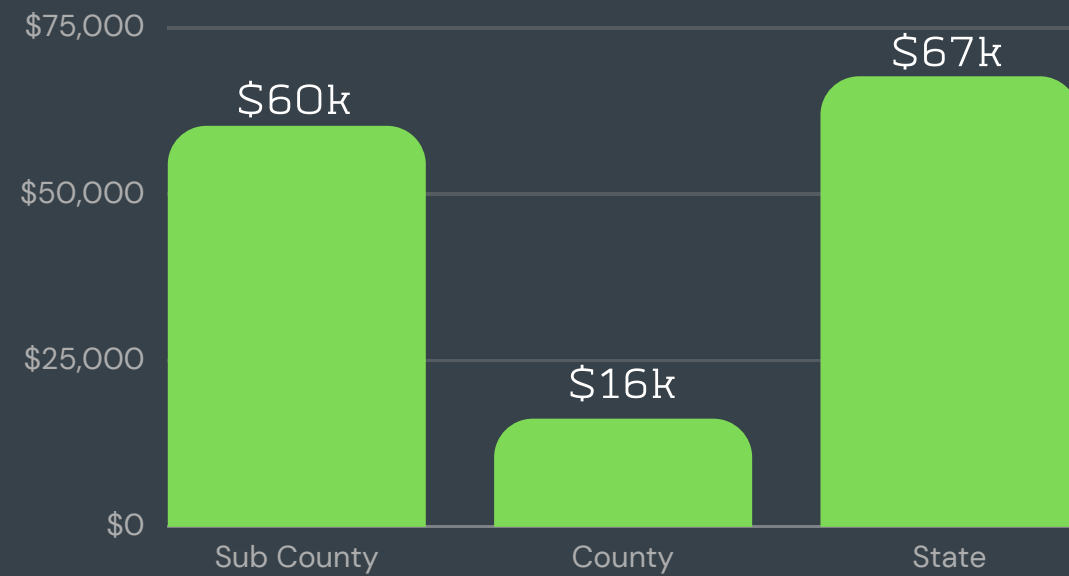
Additional Income with a Financial Incentive Bill (millions)



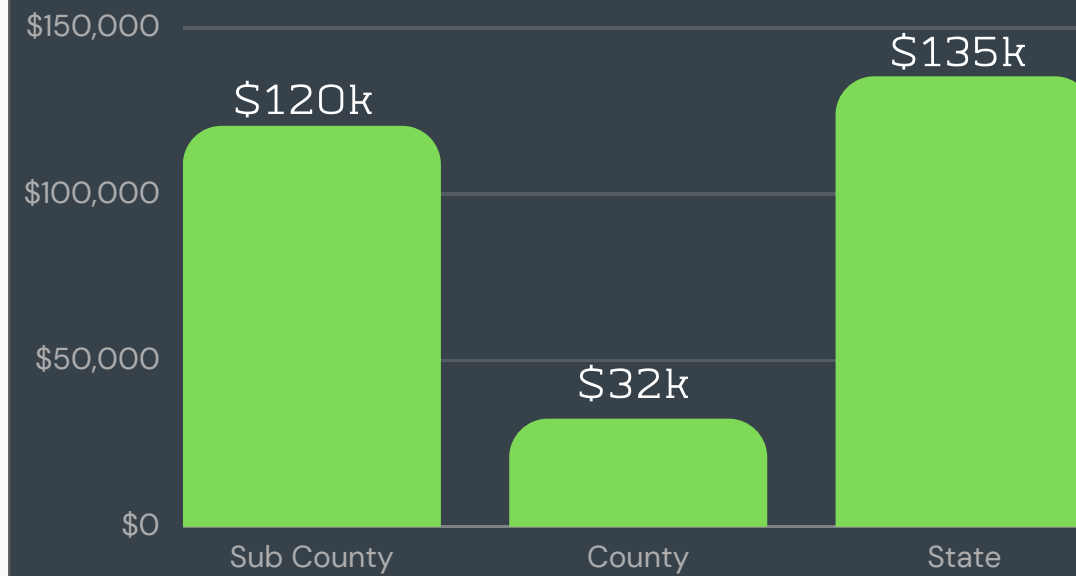
FTE's Supported/Created



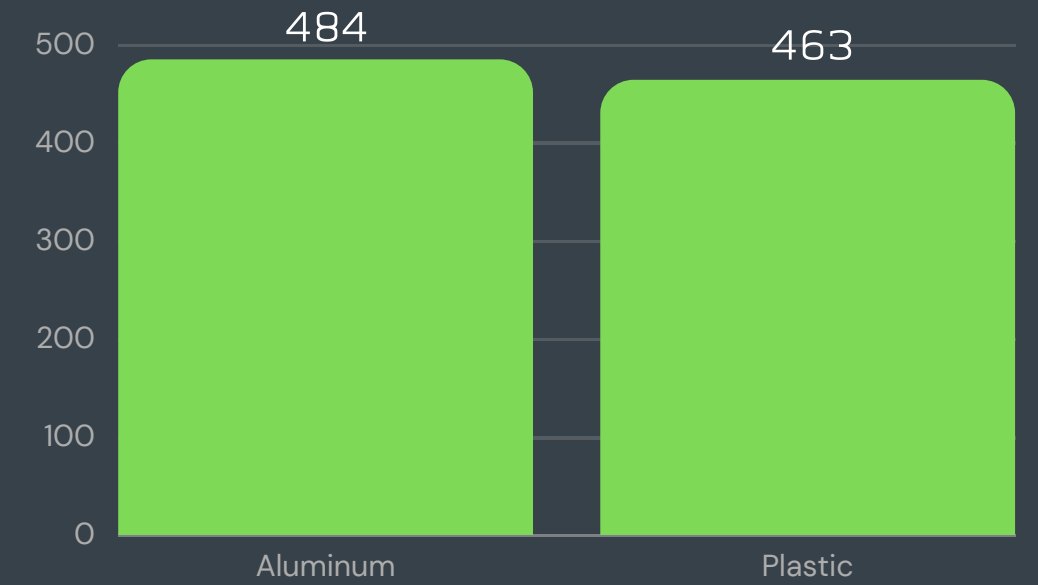
Tax Impacts with \$.05 Financial Incentive Bill



Tax Impacts with \$.10 Financial Incentive Bill



Tonnage Recycled



SUMMARY: SOUTHEAST REGION



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15 Counties in the region

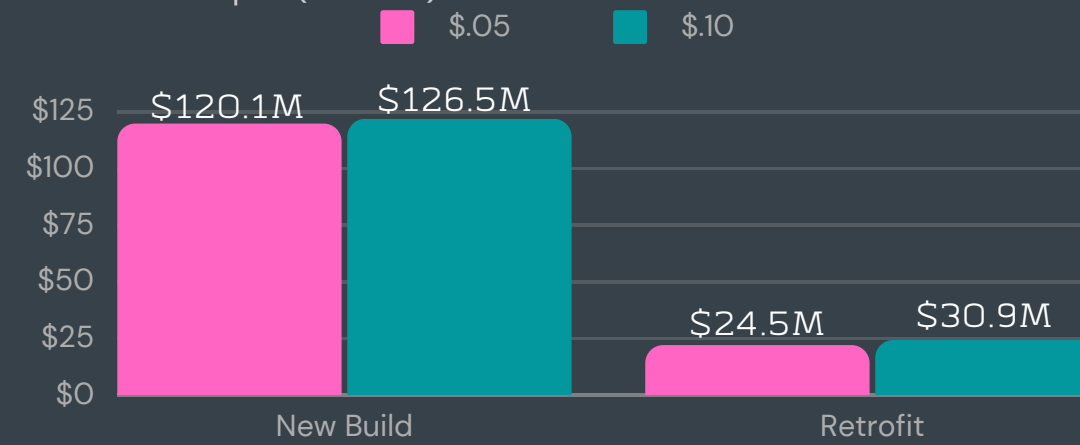
Population

769,631

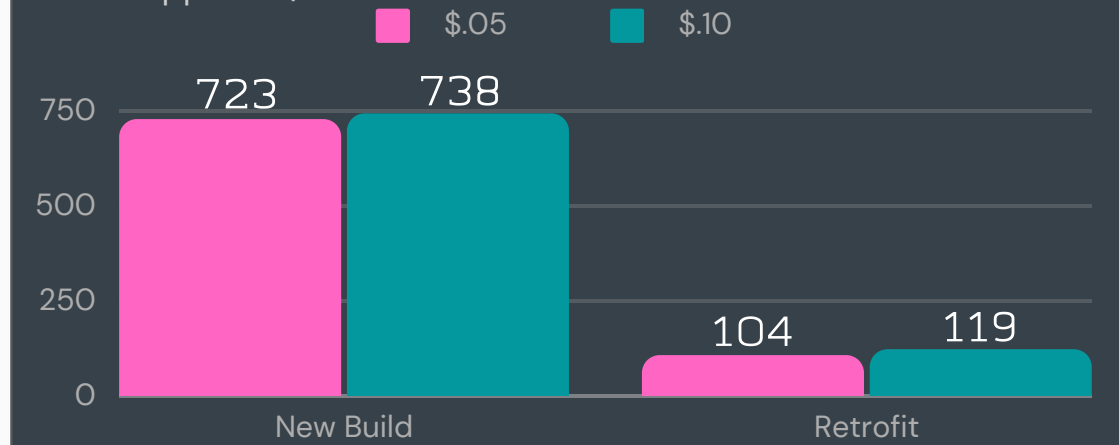
Median Income

\$49,781

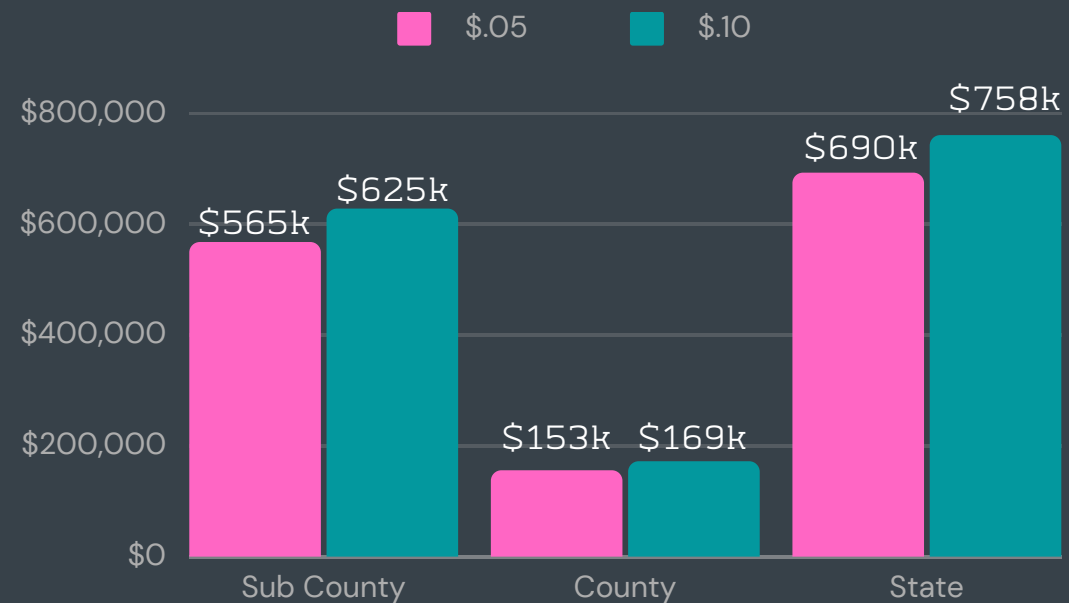
Economic Output (millions)



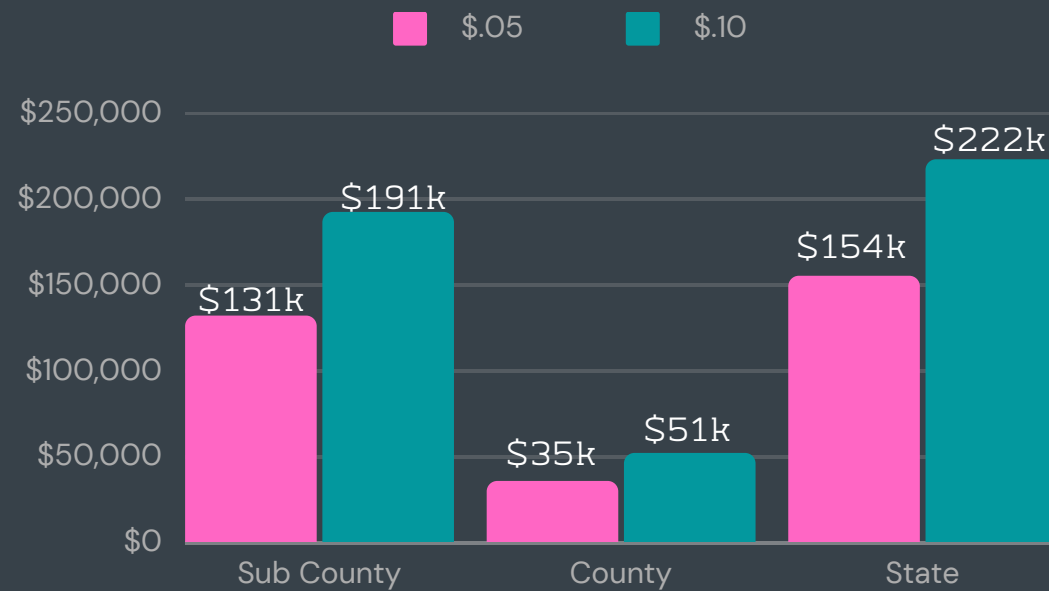
FTE's Supported/Created



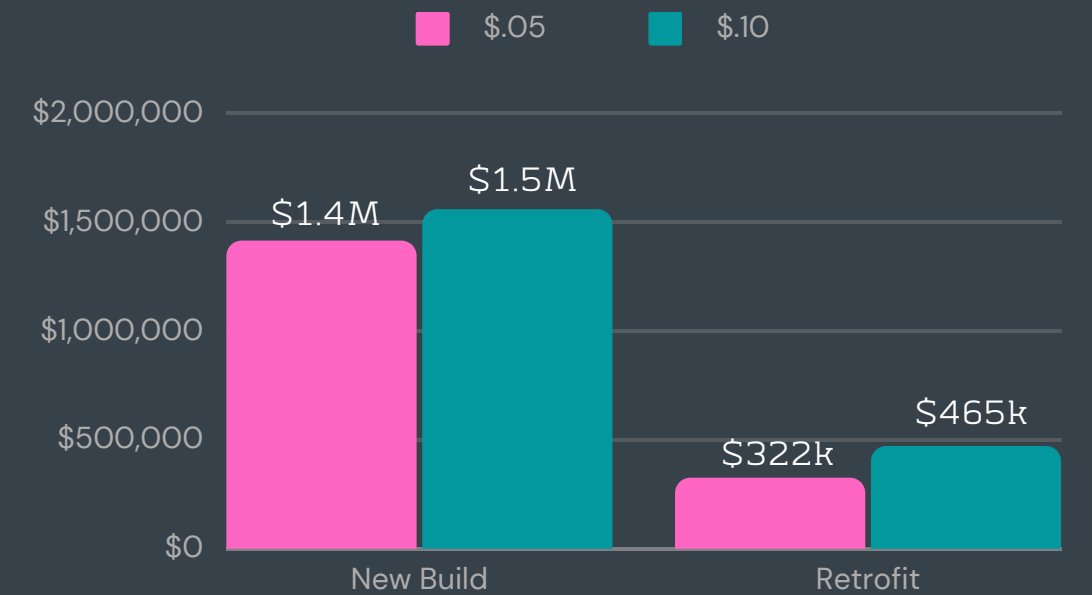
Tax Impacts with a New Build



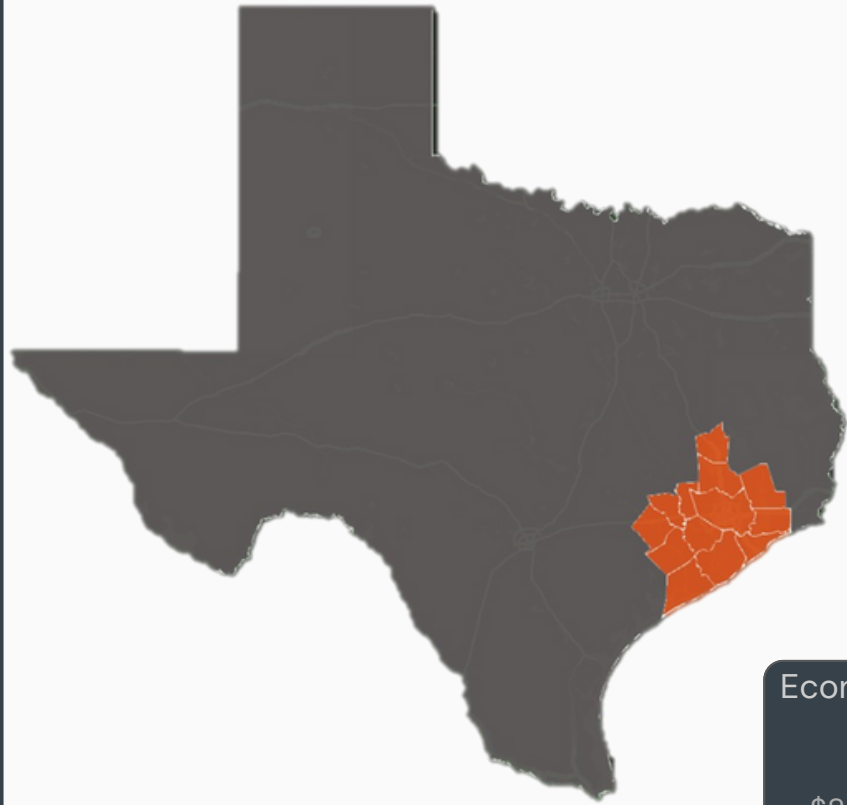
Tax Impacts with Retrofitting Existing Facility



Total Tax Impacts



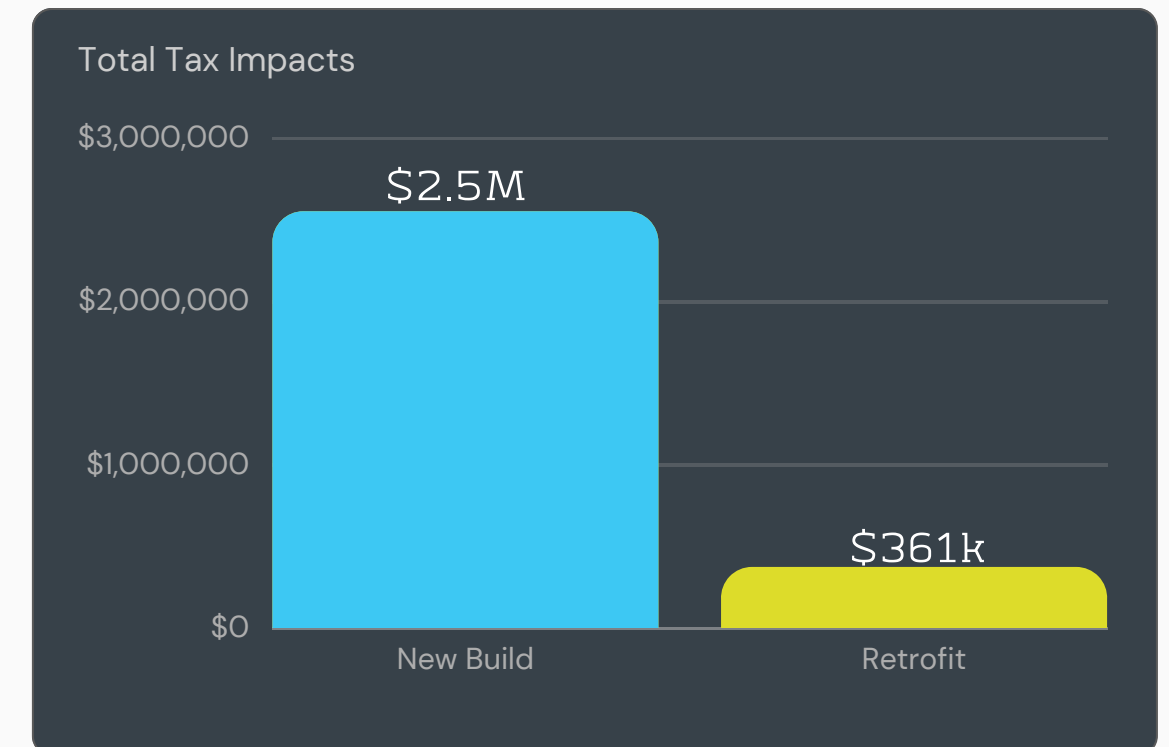
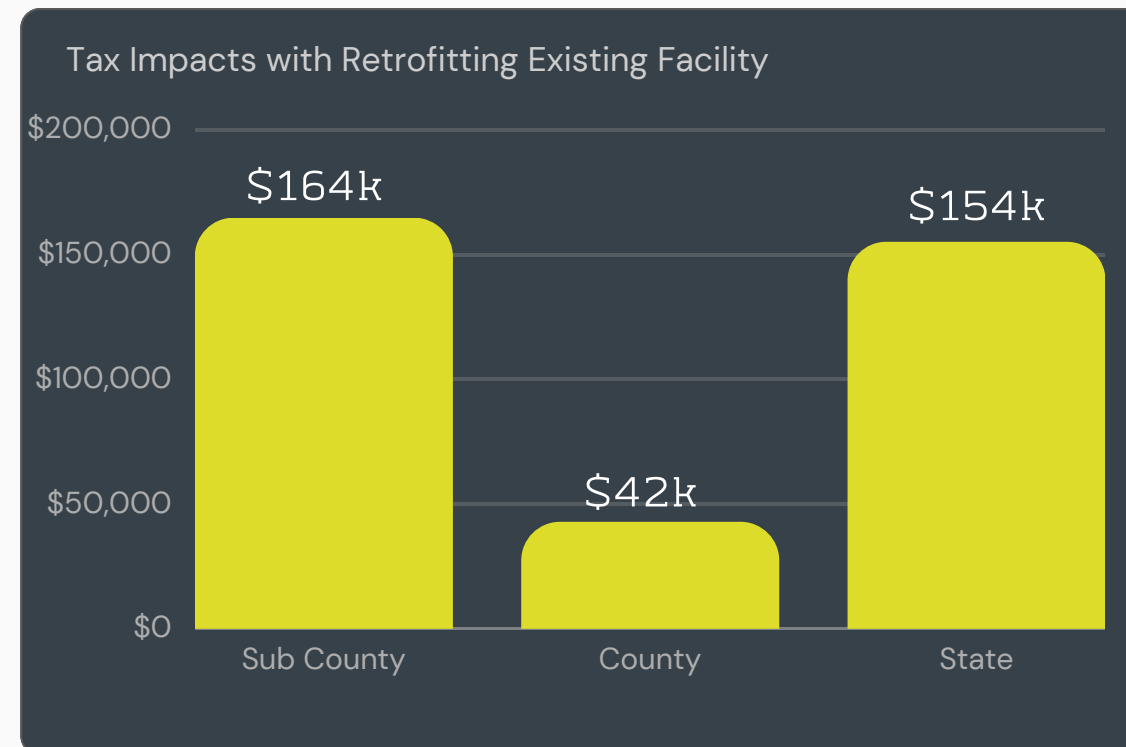
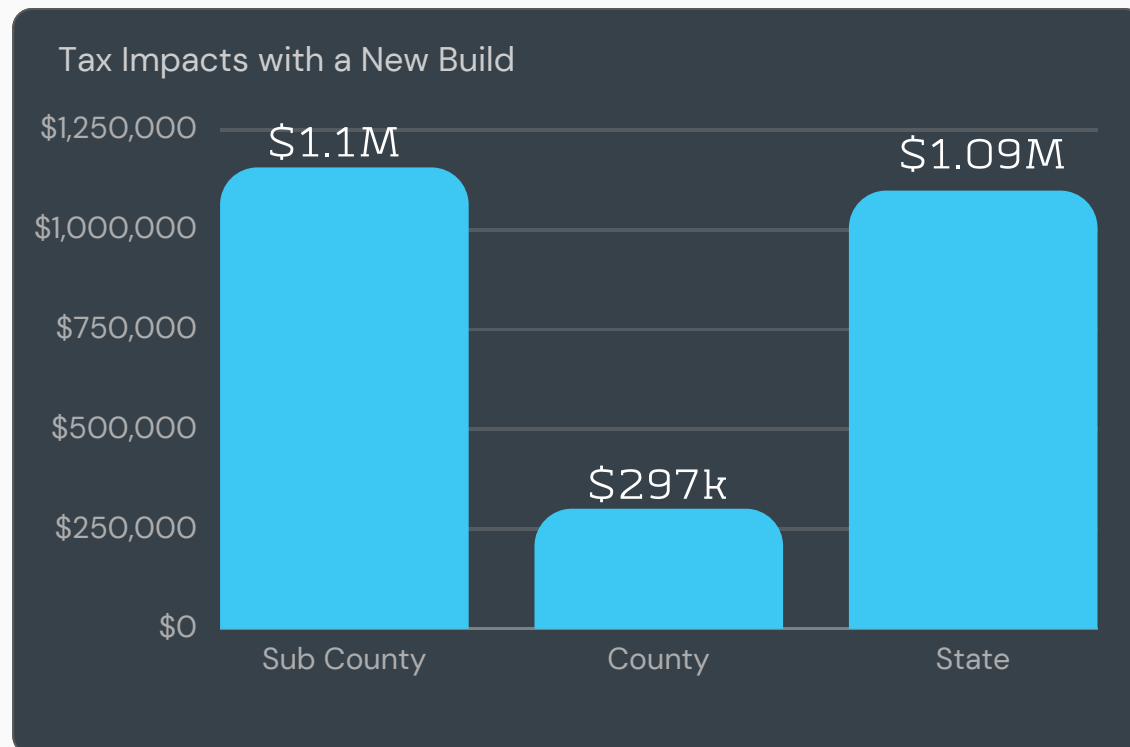
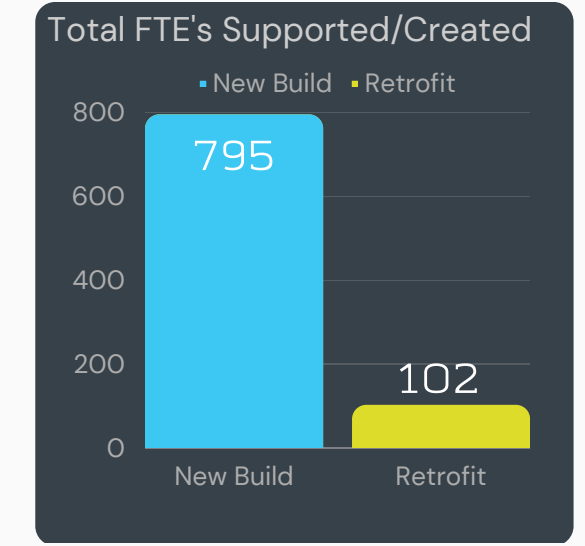
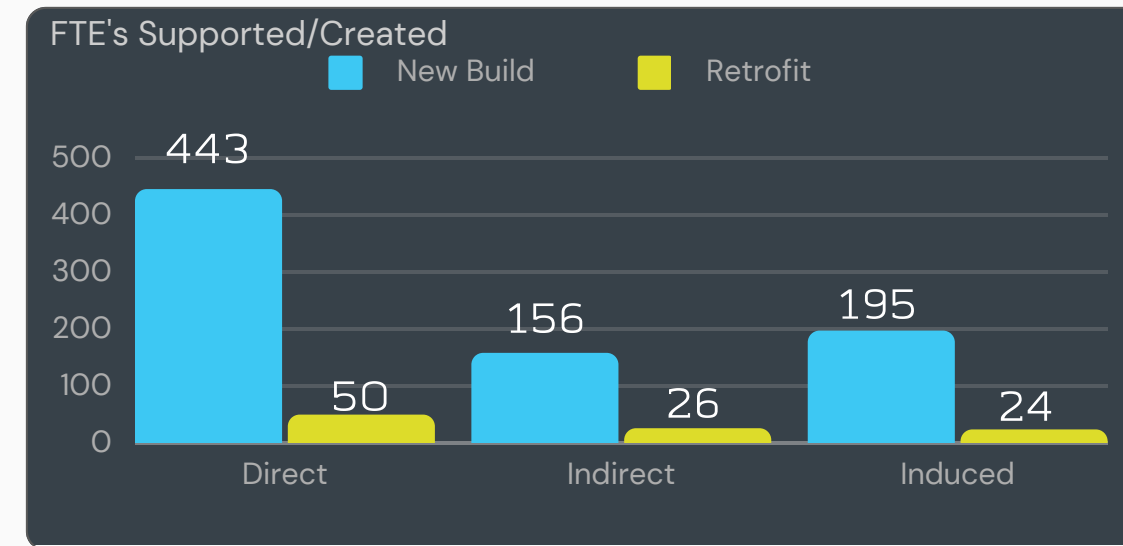
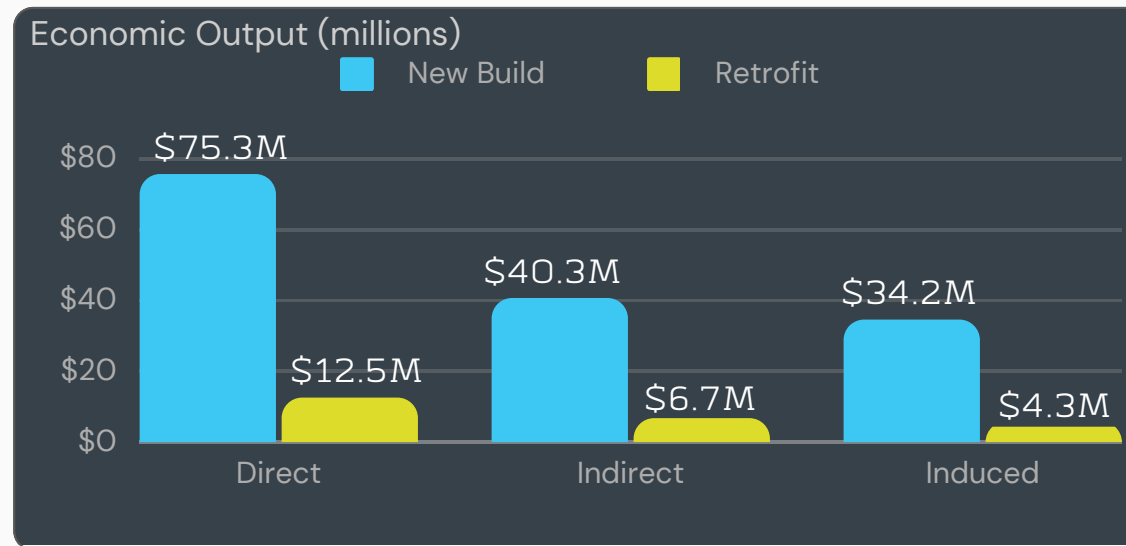
SCENARIO 2: GULF COAST REGION



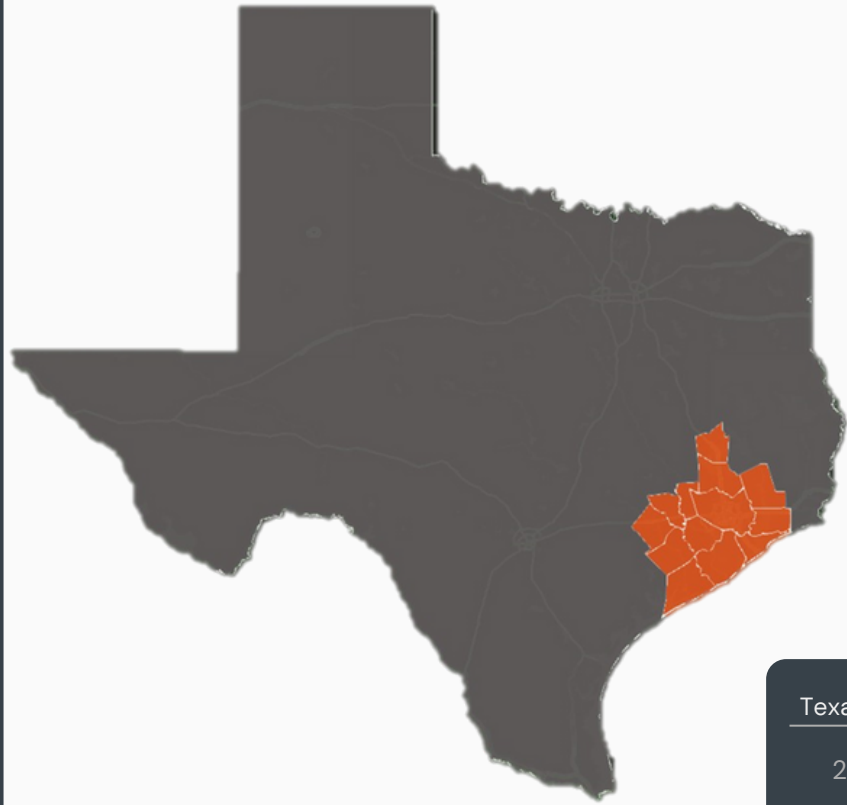
13 Counties in the region

Population
7,383,513

Median Income
\$68,140



SCENARIO 3: GULF COAST REGION

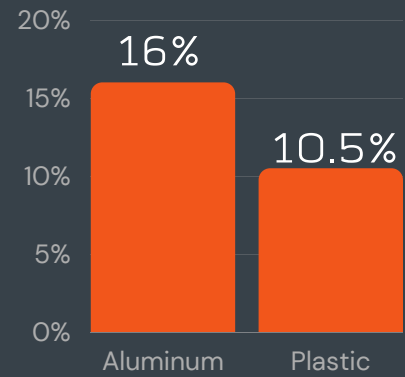


13 Counties in the region

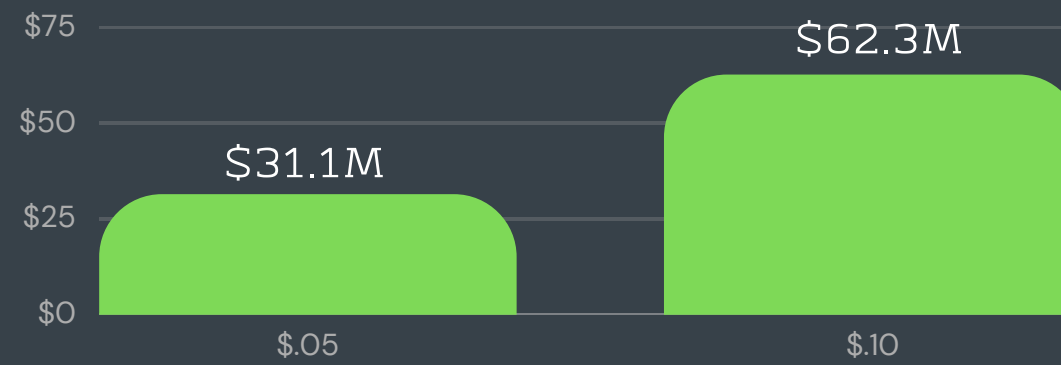
Population
7,383,513

Median Income
\$68,140

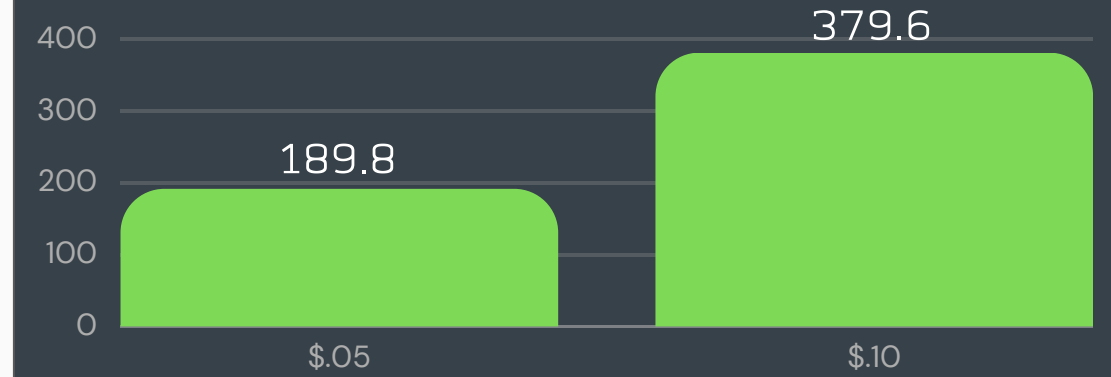
Texas Recycling Rates (2021)



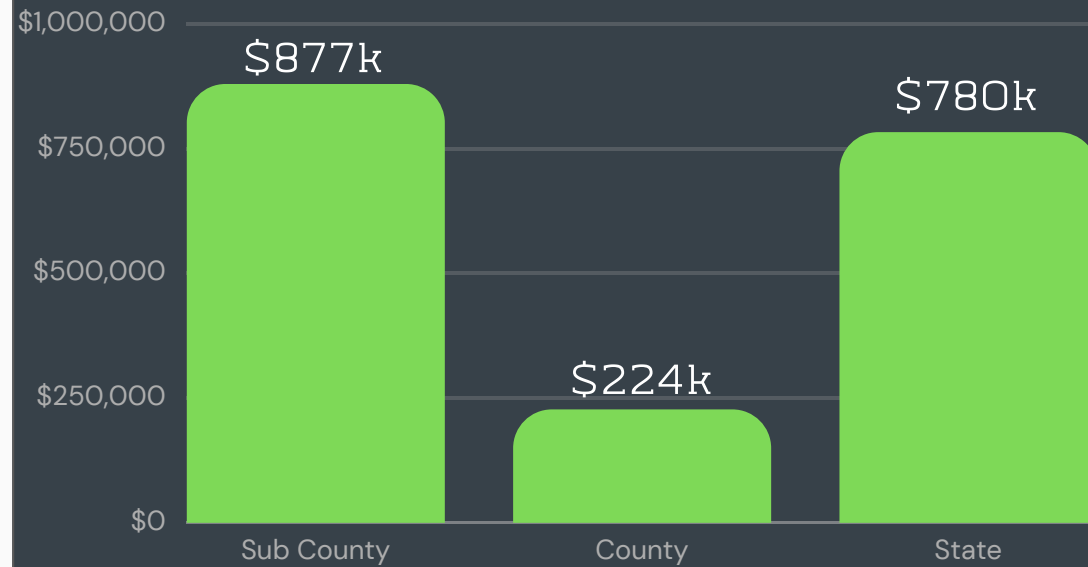
Additional Income with a Financial Incentive Bill (millions)



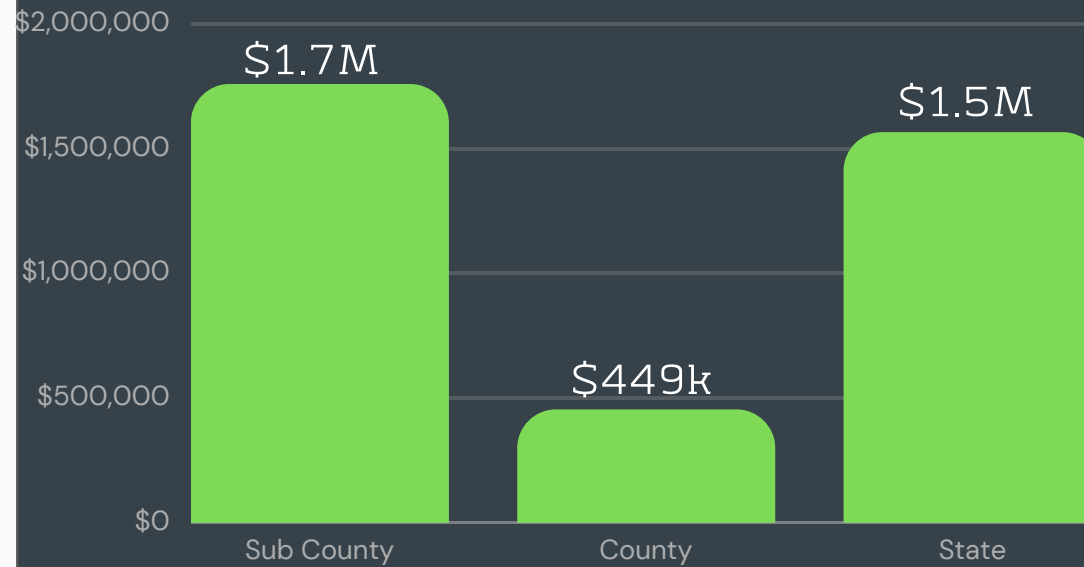
FTE's Supported/Created



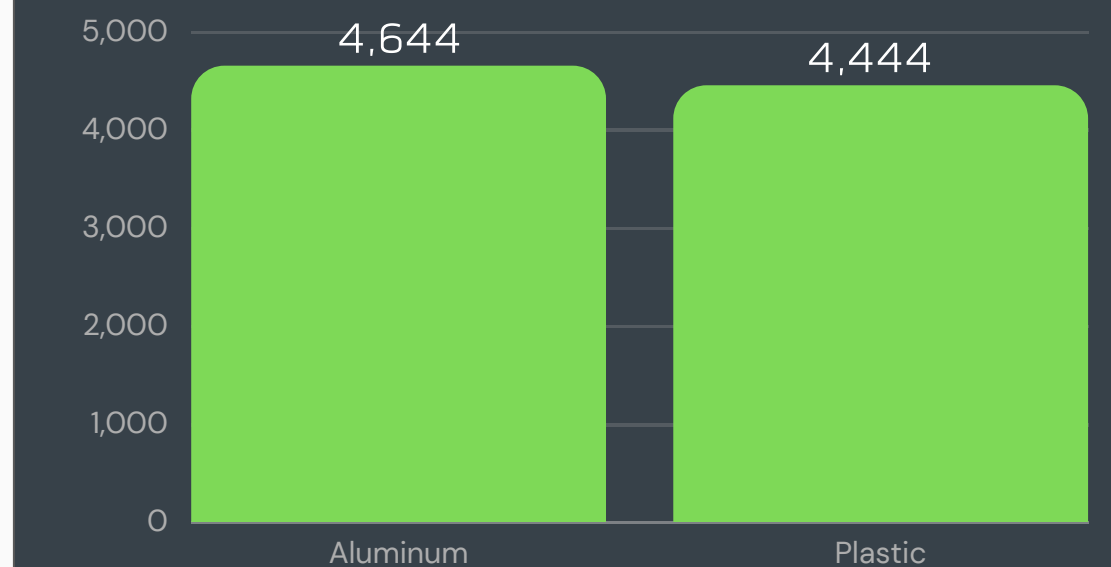
Tax Impacts with \$.05 Financial Incentive Bill



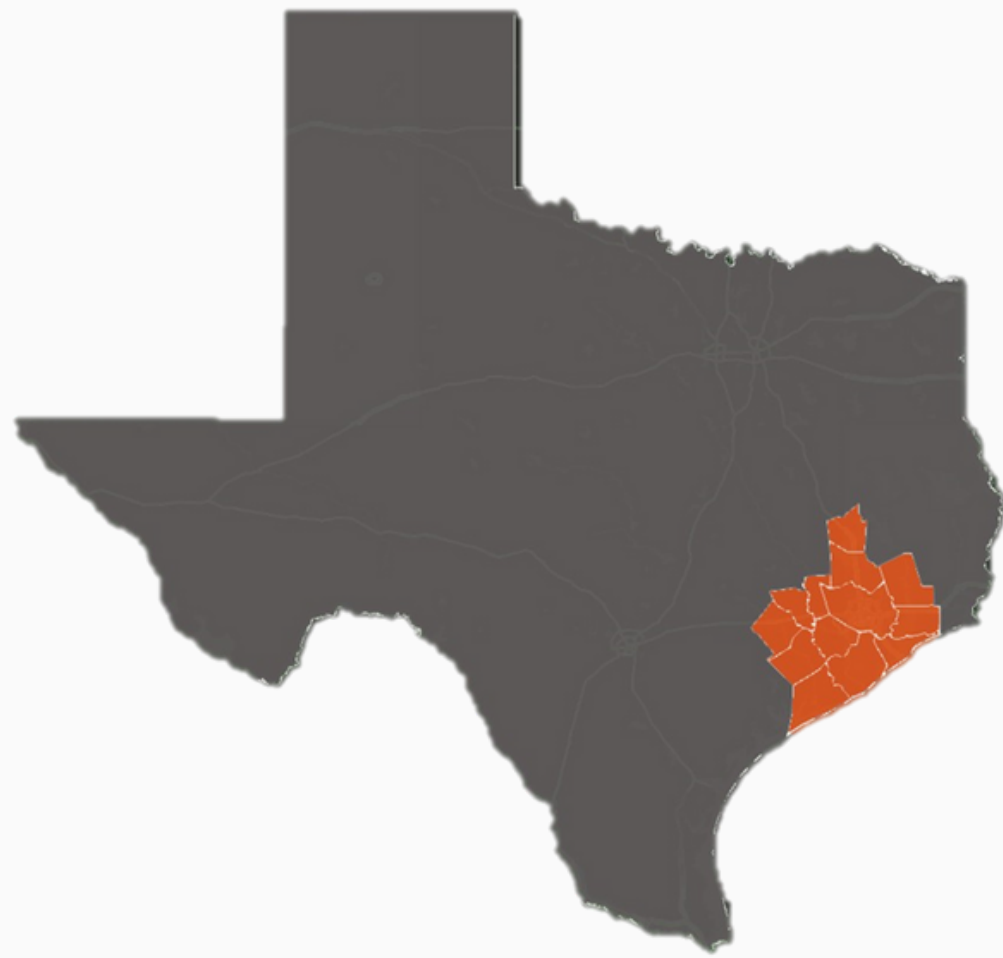
Tax Impacts with \$.10 Financial Incentive Bill



Tonnage Recycled



SUMMARY: GULF COAST REGION

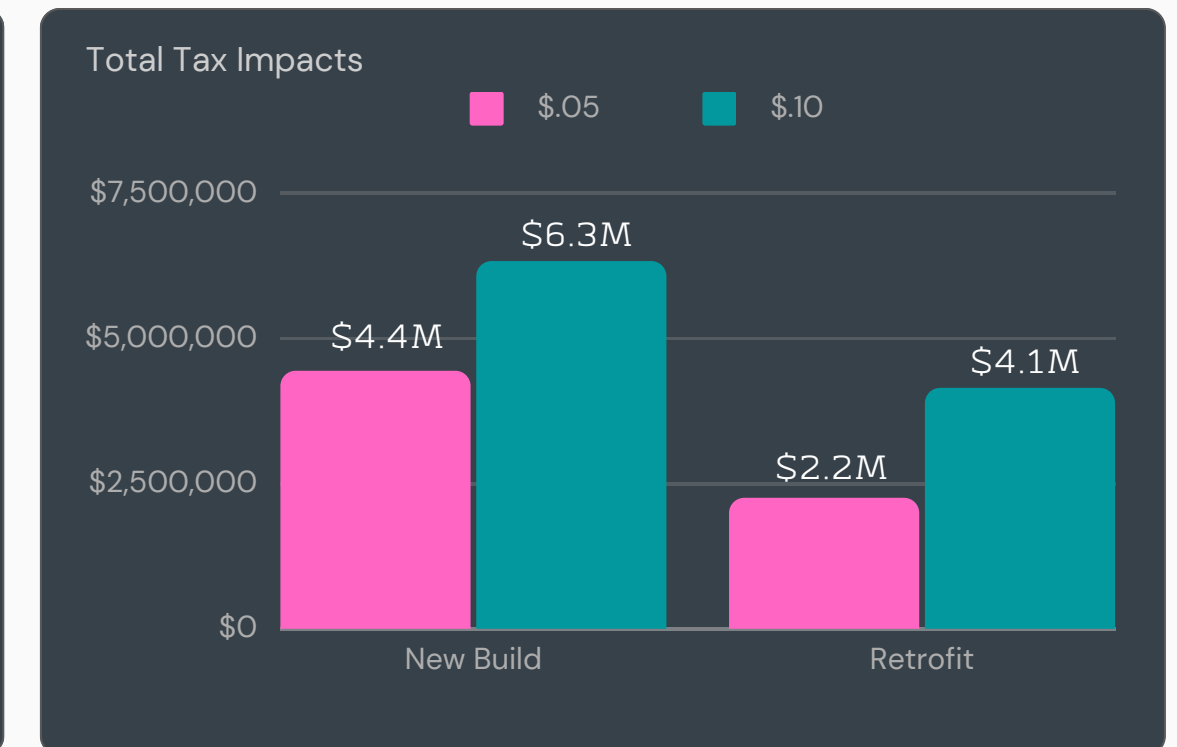
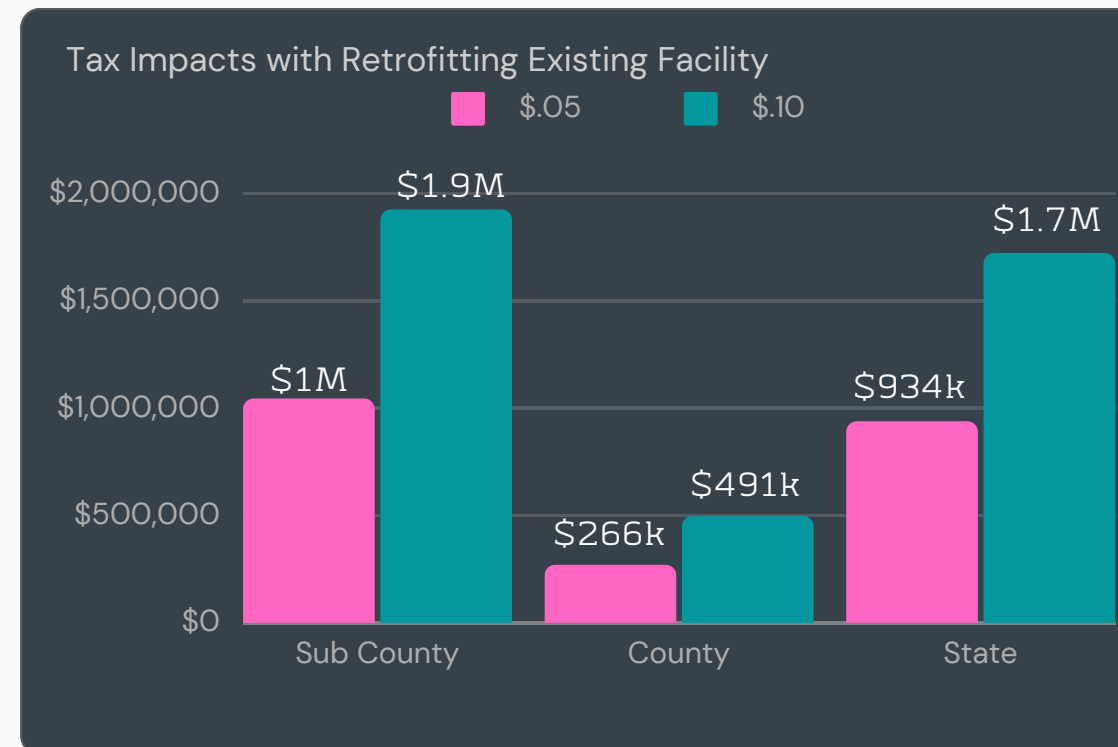
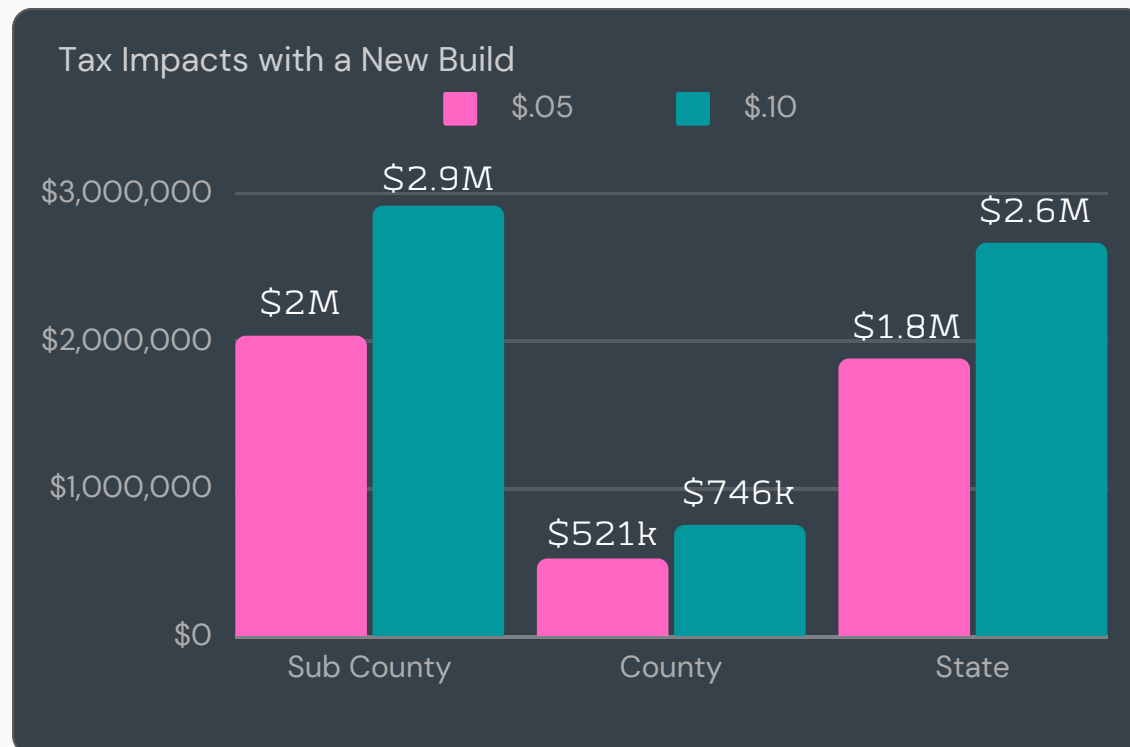
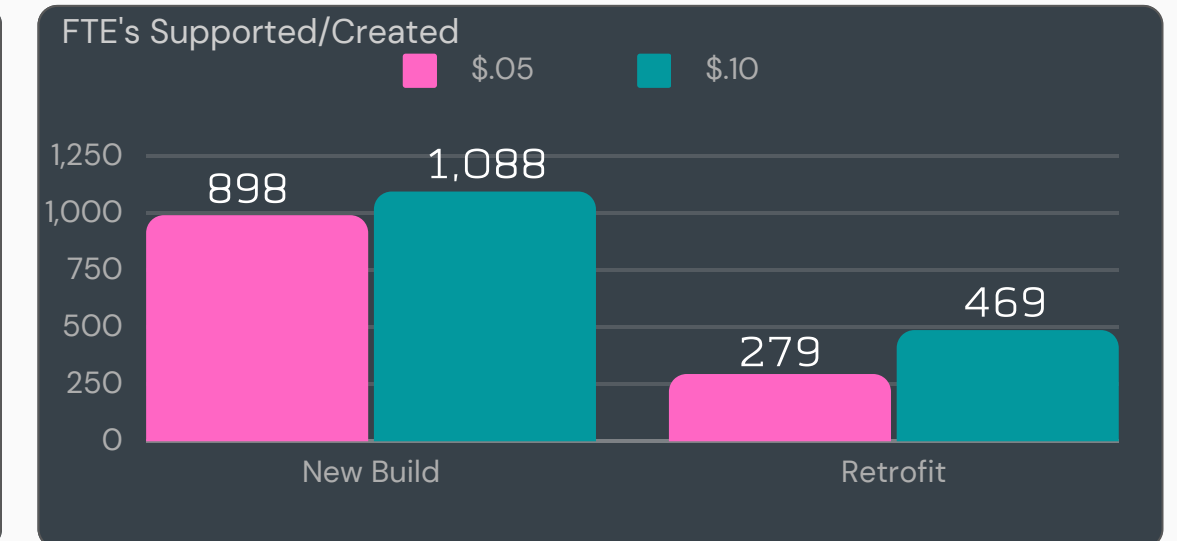
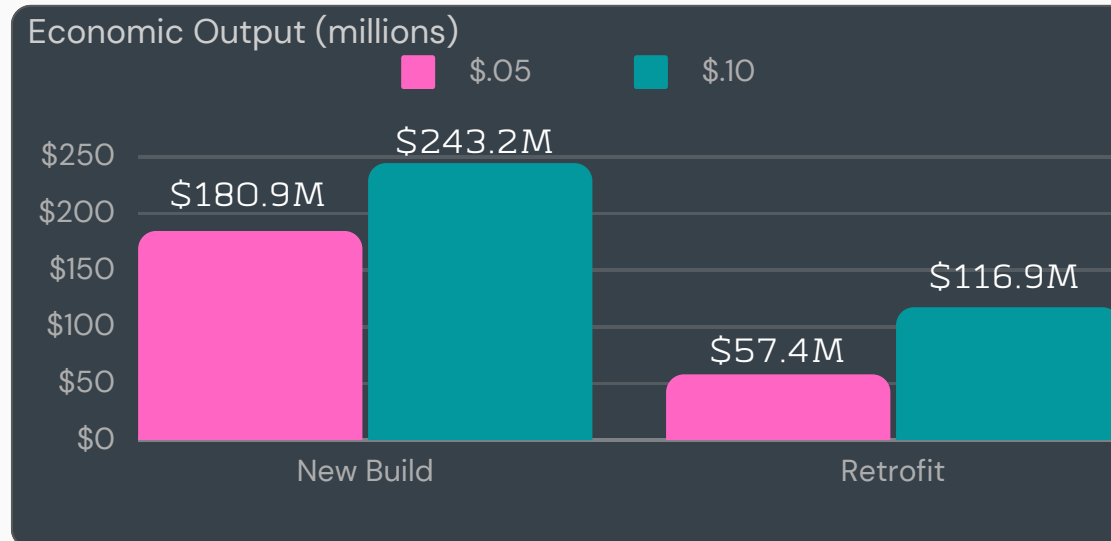


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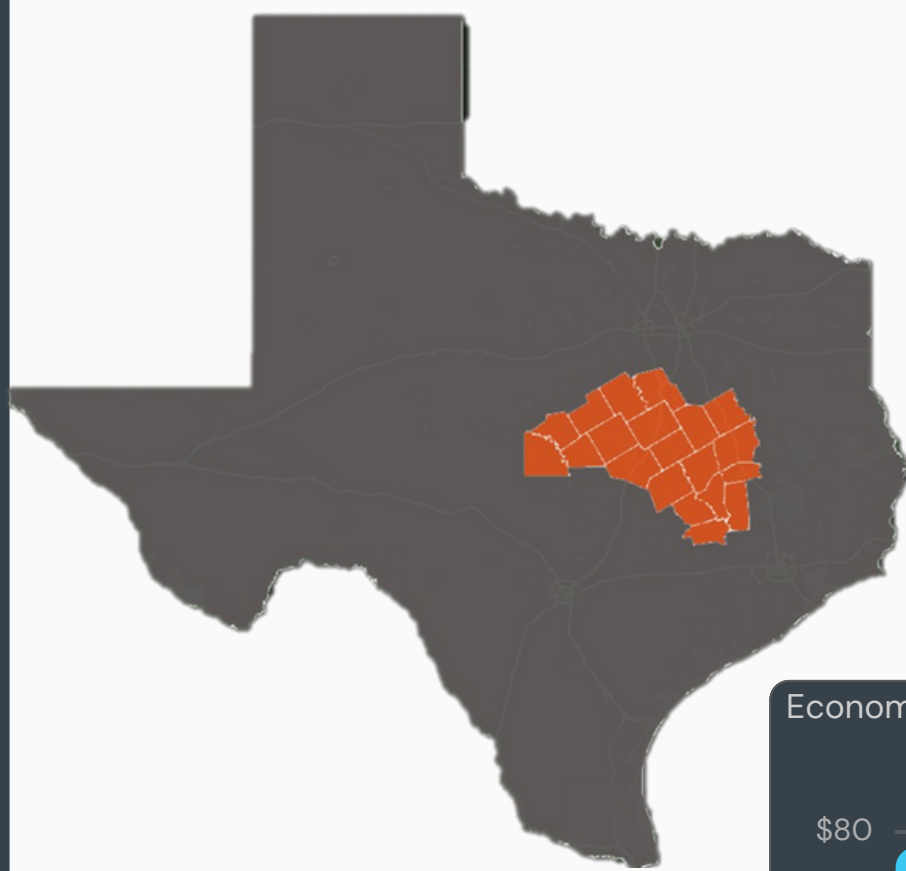
13 Counties in the region

Population
7,383,513

Median Income
\$68,140



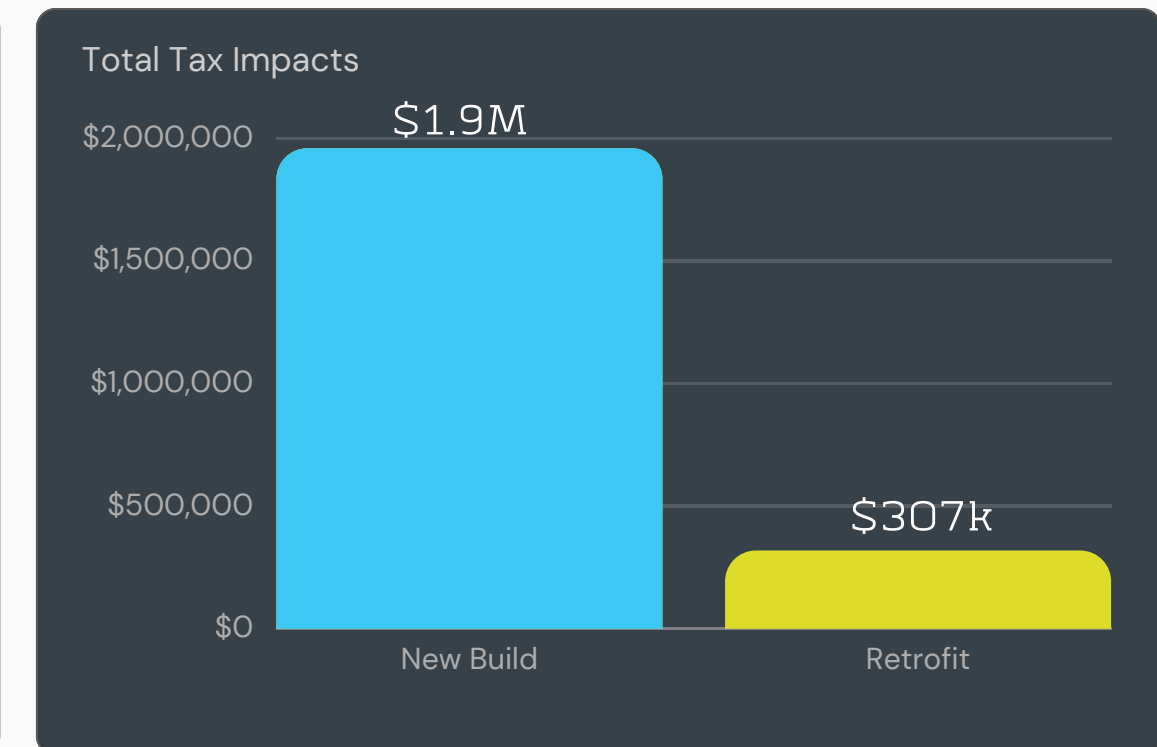
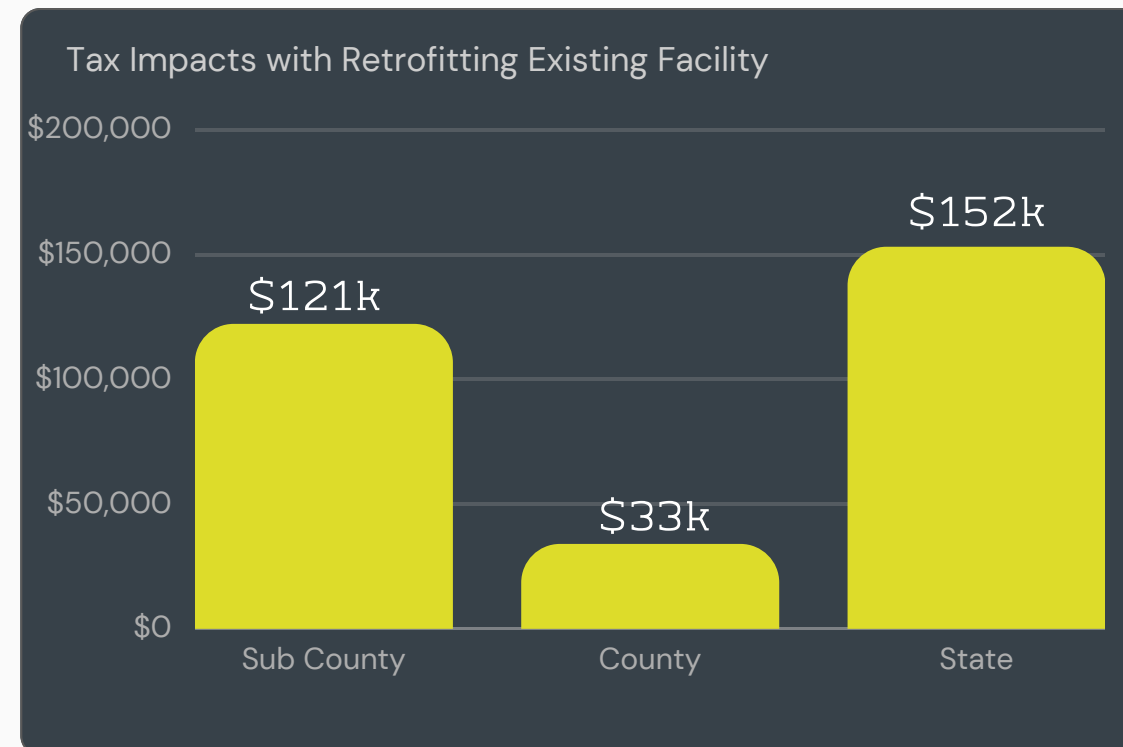
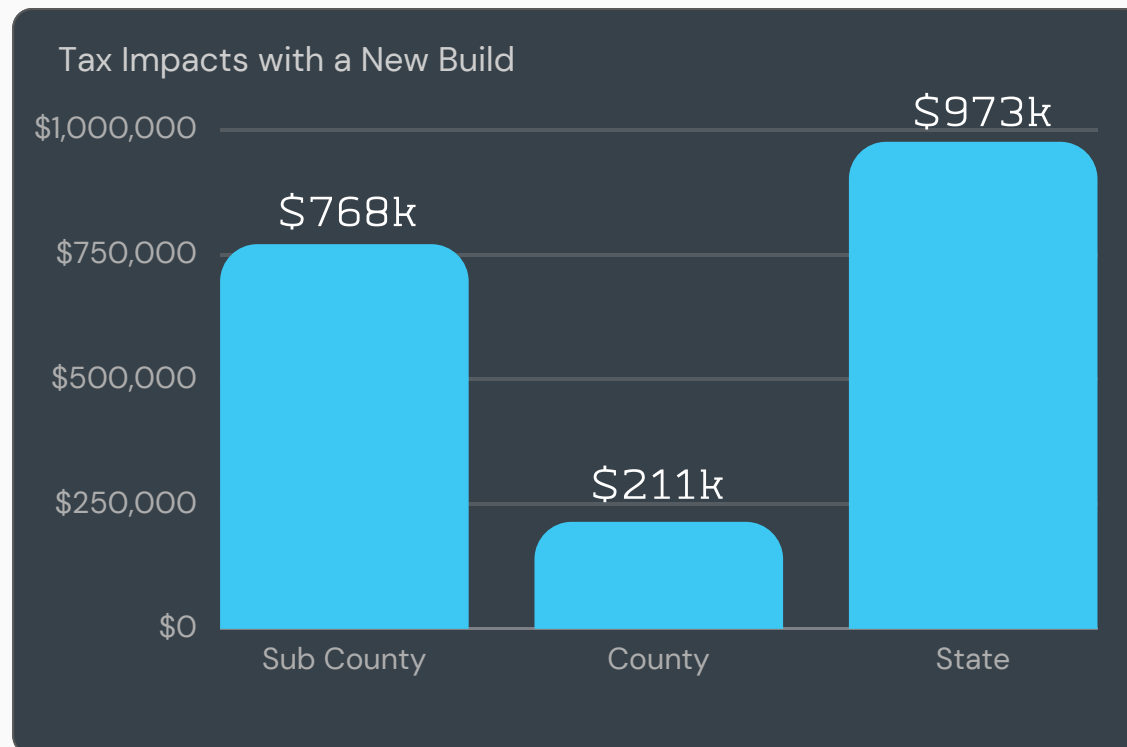
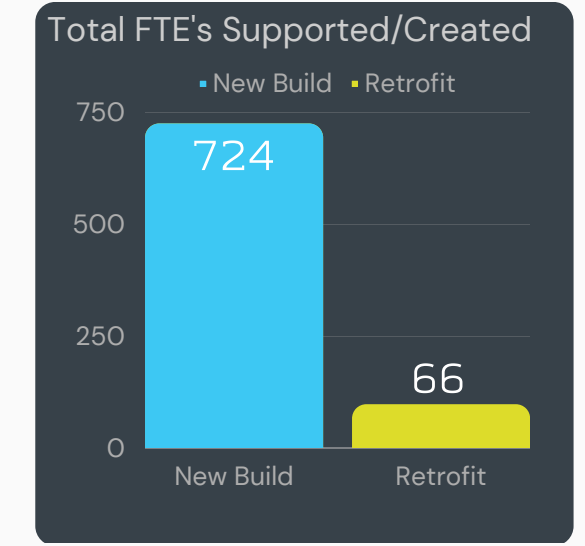
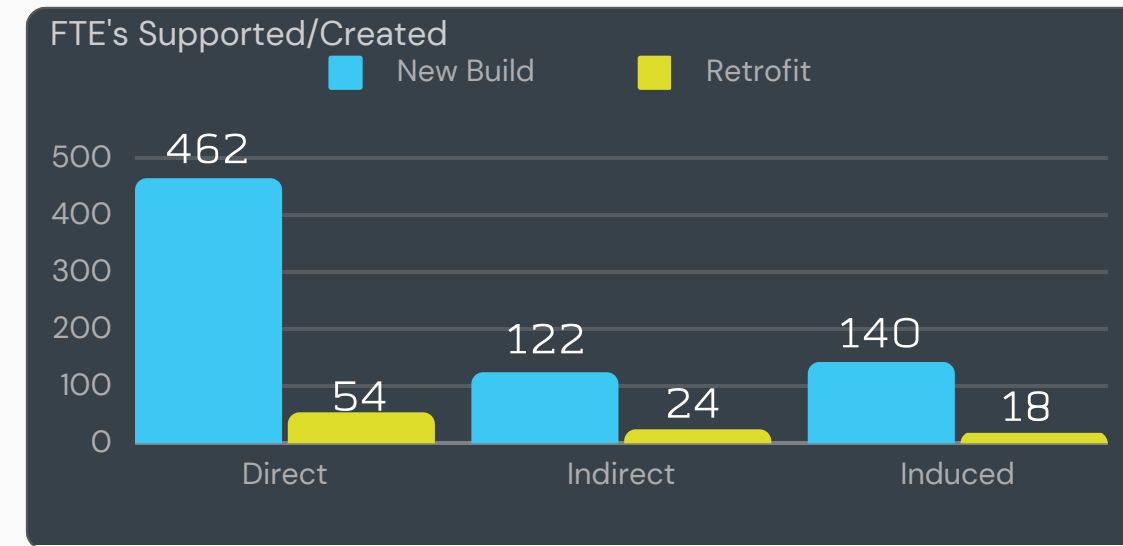
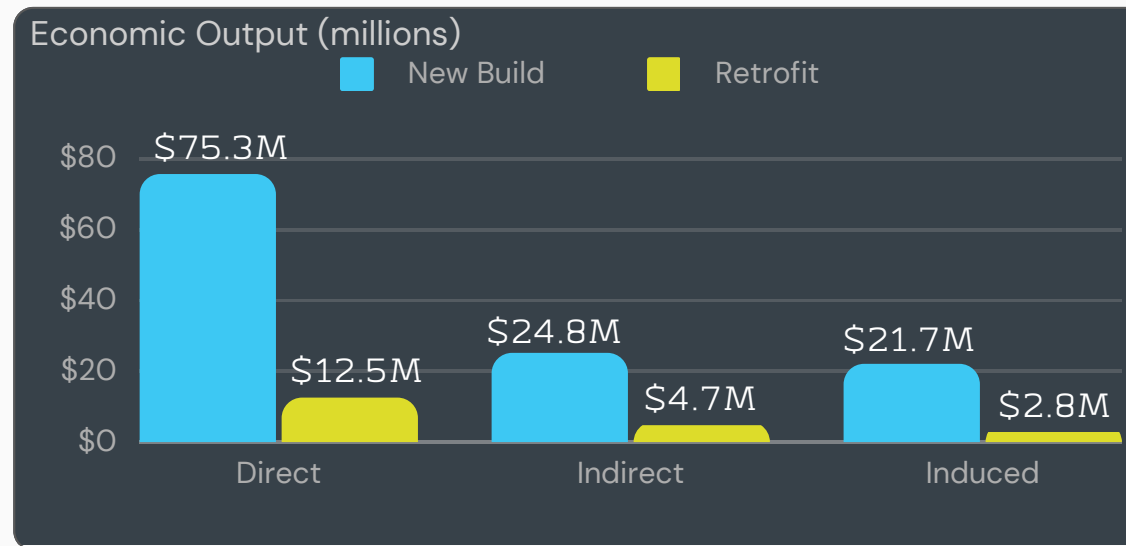
SCENARIO 2: CENTRAL REGION



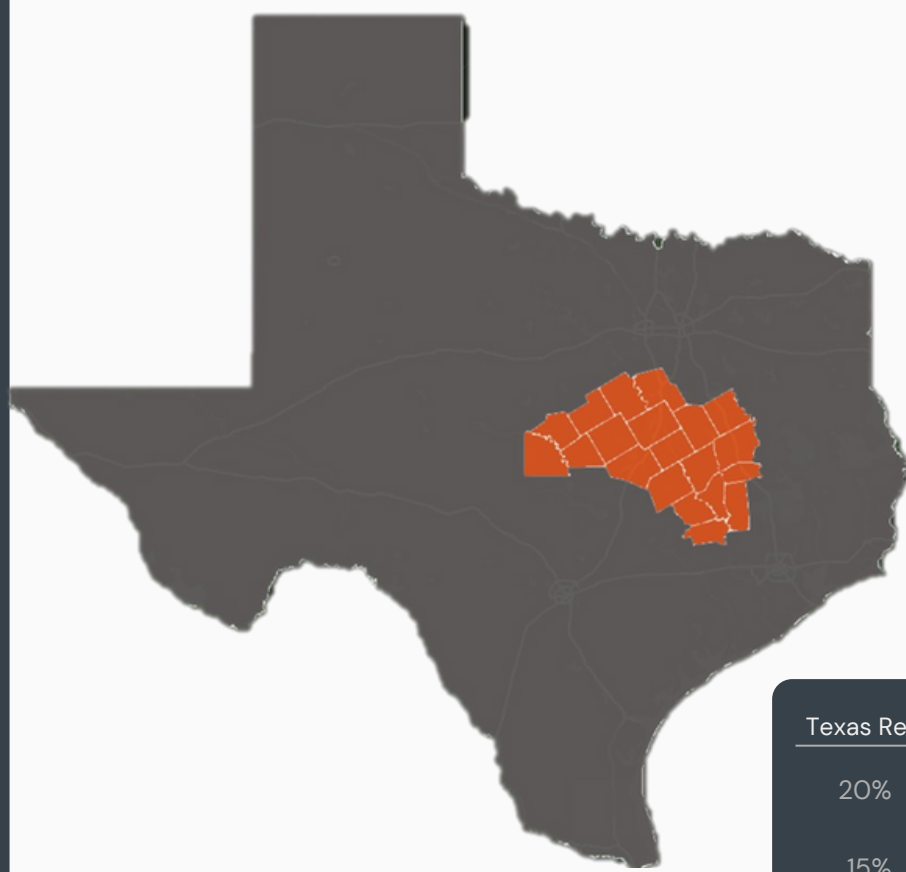
20 Counties in the region

Population
1,274,934

Median Income
\$51,684



SCENARIO 3: CENTRAL REGION



20 Counties in the region

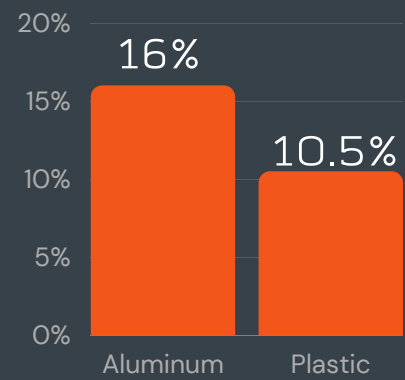
Population

1,274,934

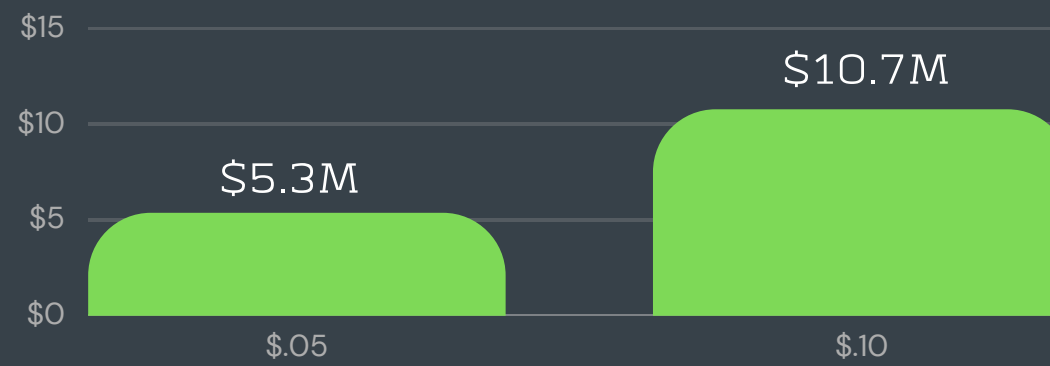
Median Income

\$51,684

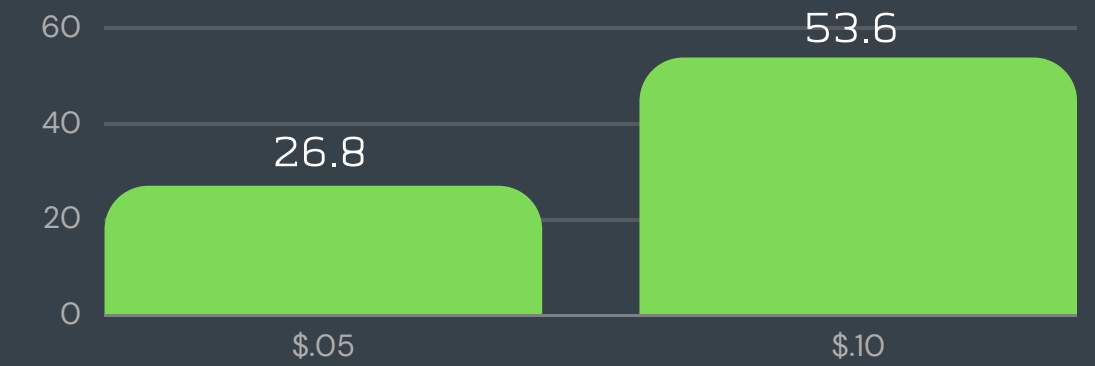
Texas Recycling Rates (2021)



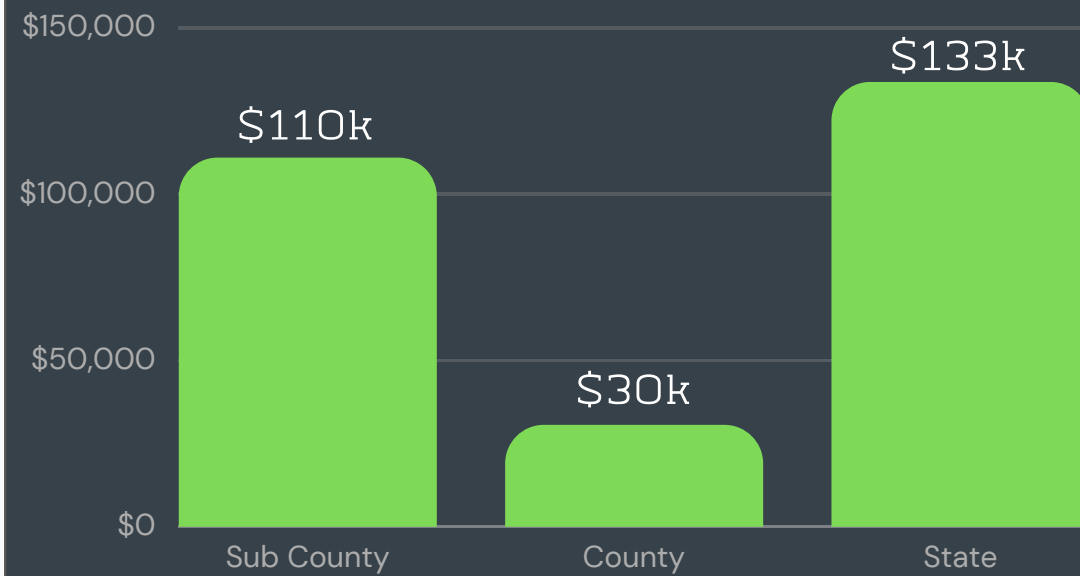
Additional Income with a Financial Incentive Bill (millions)



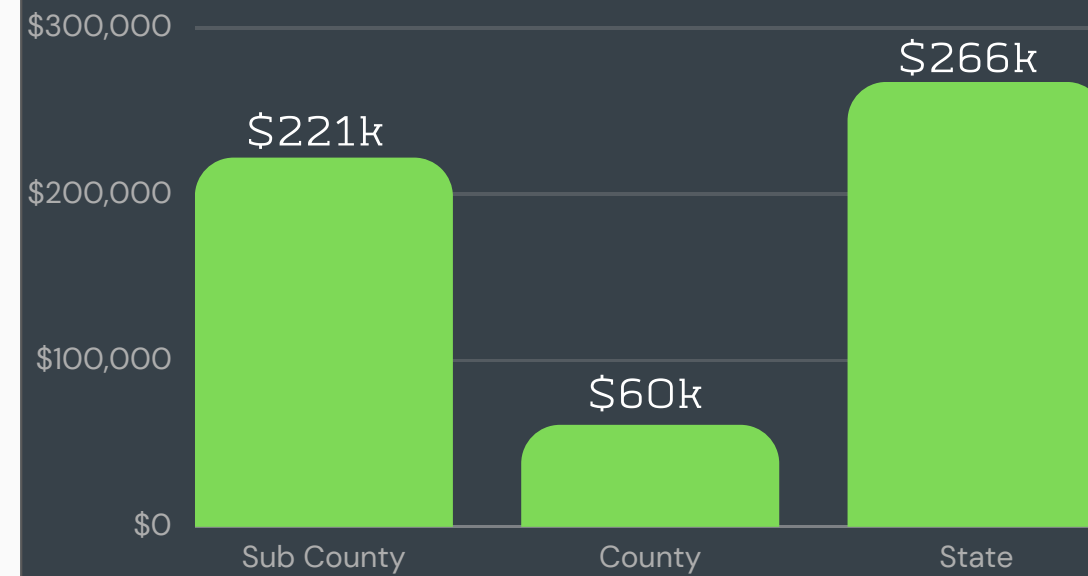
FTE's Supported/Created



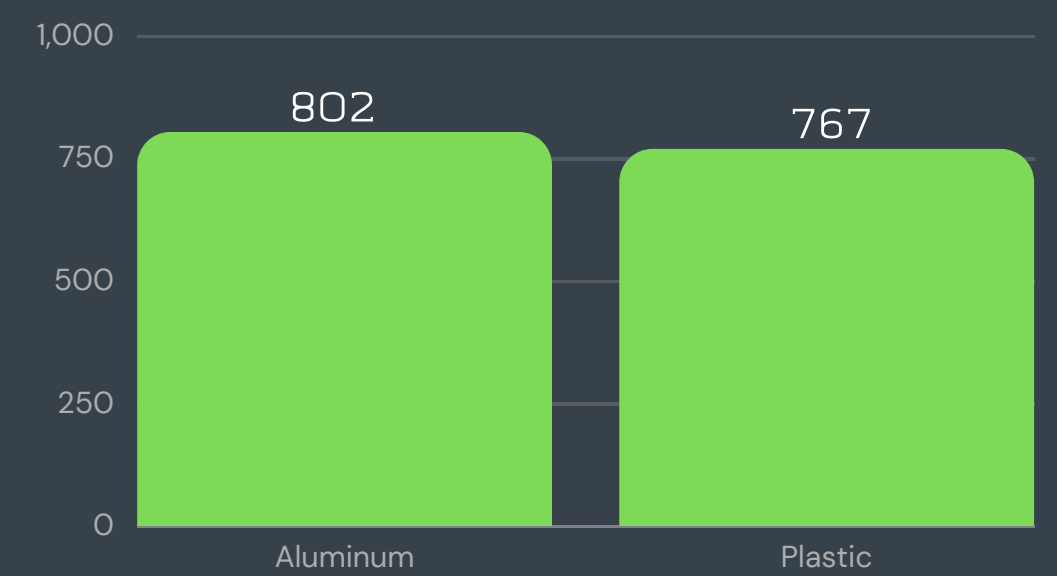
Tax Impacts with \$.05 Financial Incentive Bill



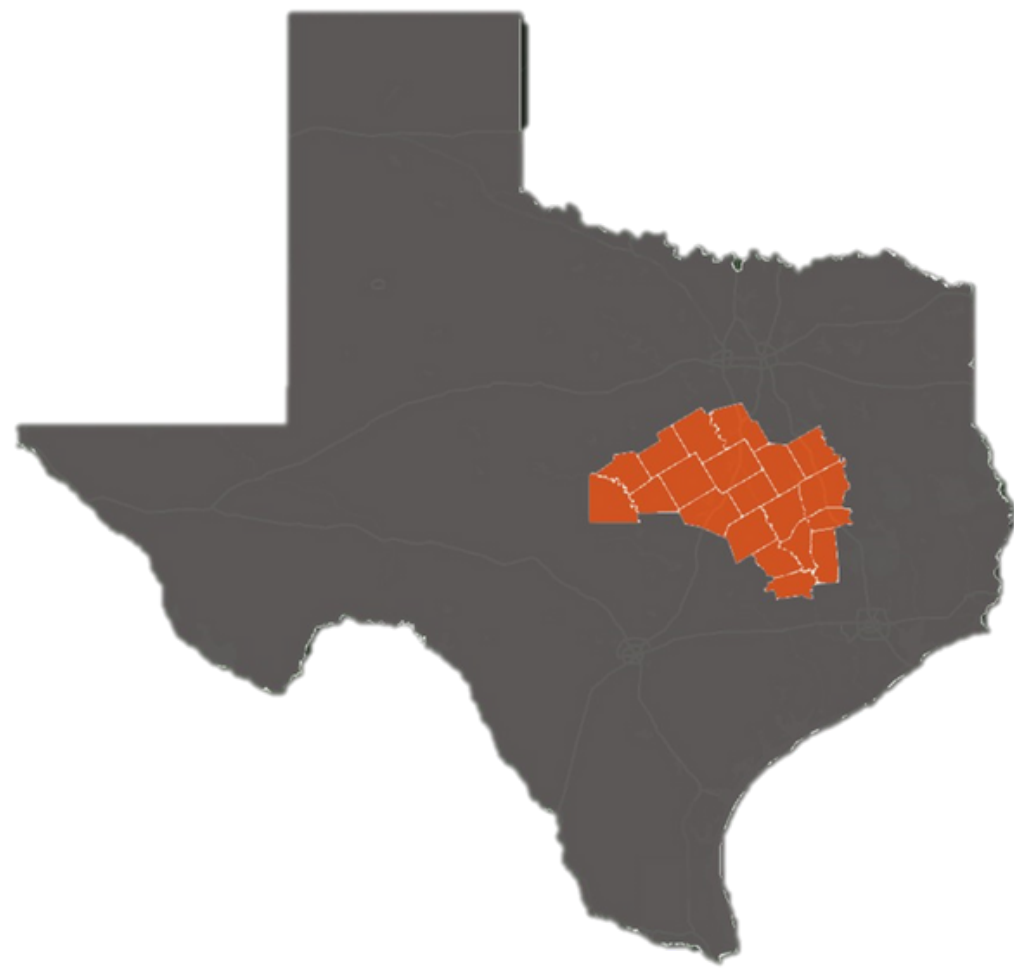
Tax Impacts with \$.10 Financial Incentive Bill



Tonnage Recycled



SUMMARY: CENTRAL REGION



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20 Counties in the region

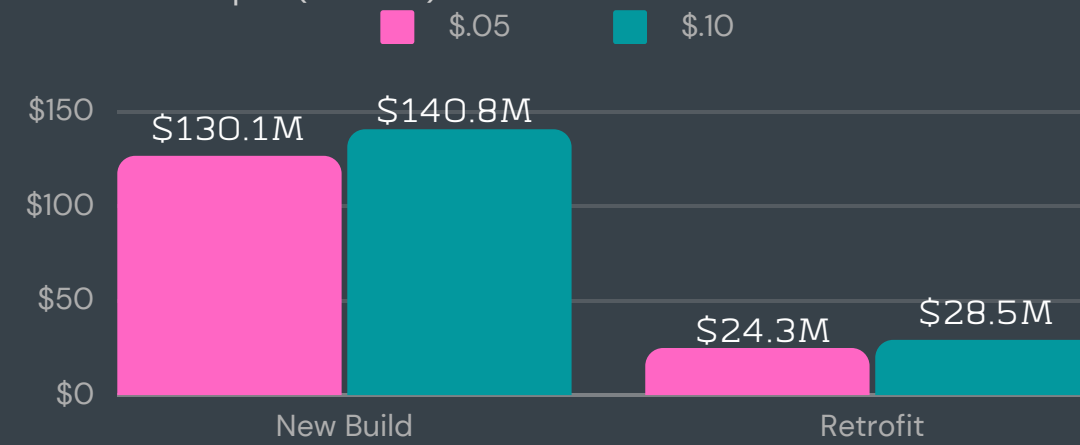
Population

1,274,934

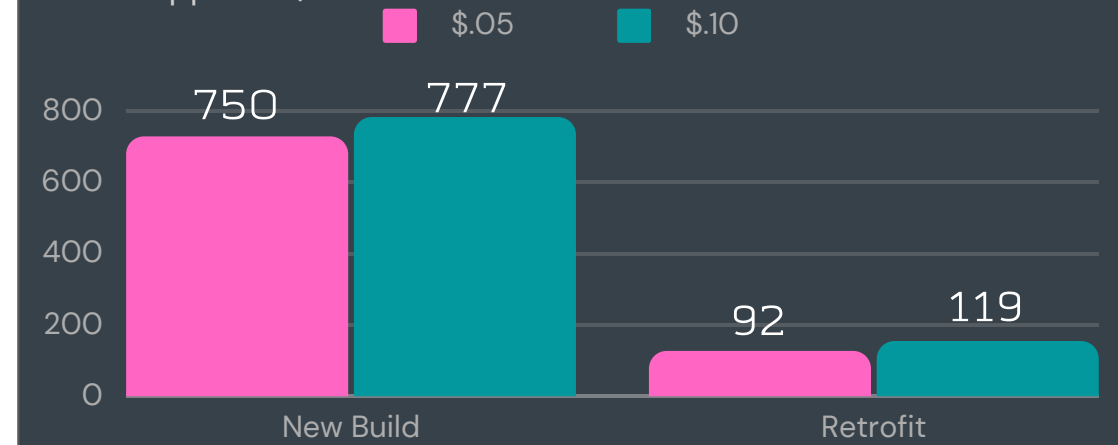
Median Income

\$51,684

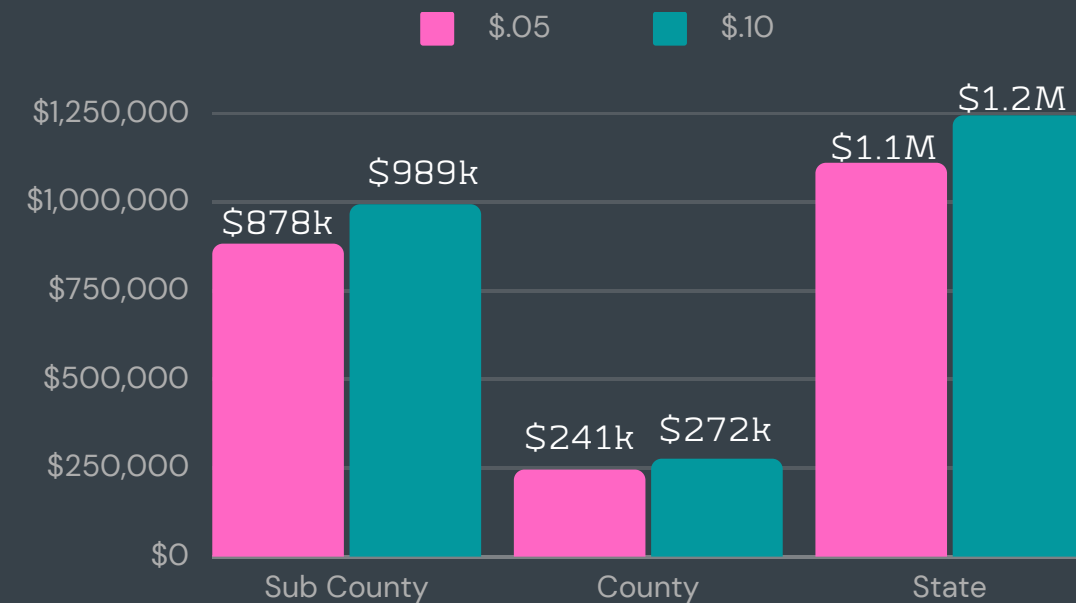
Economic Output (millions)



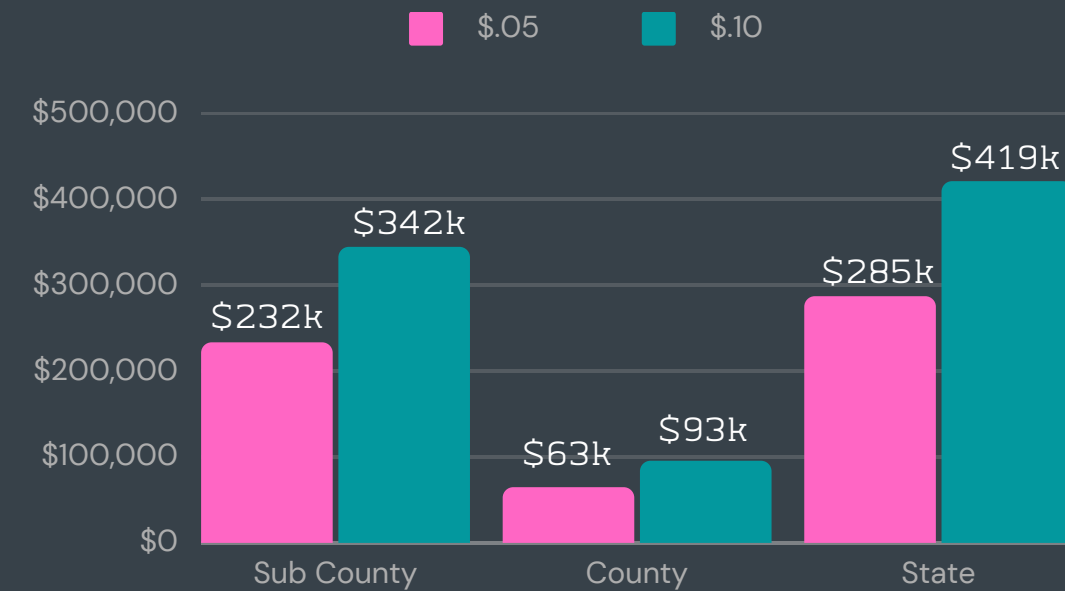
FTE's Supported/Created



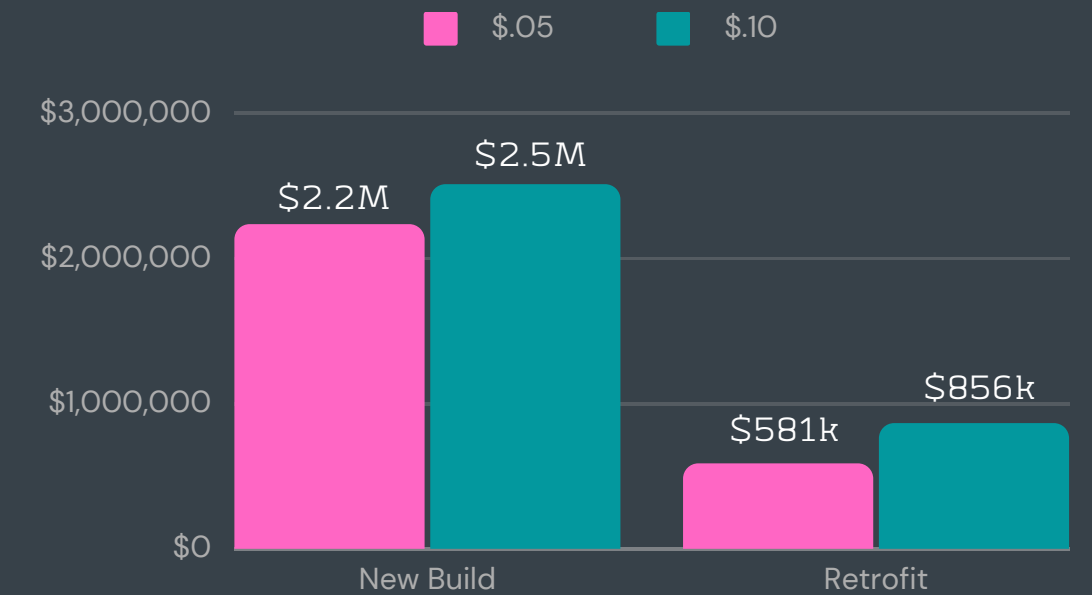
Tax Impacts with a New Build



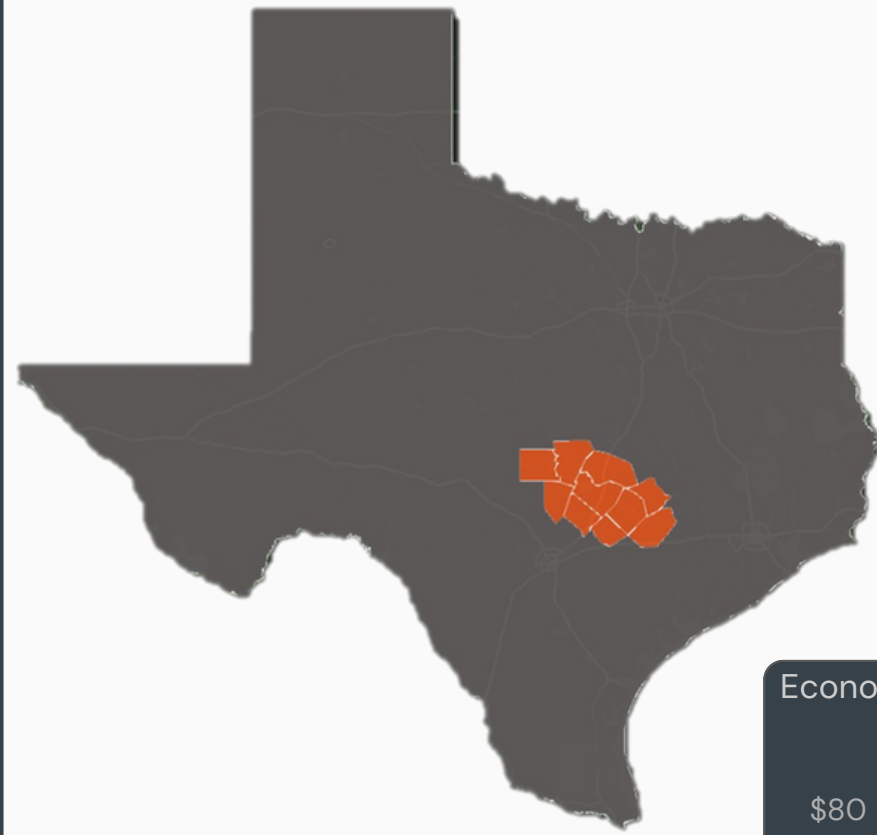
Tax Impacts with Retrofitting Existing Facility



Total Tax Impacts



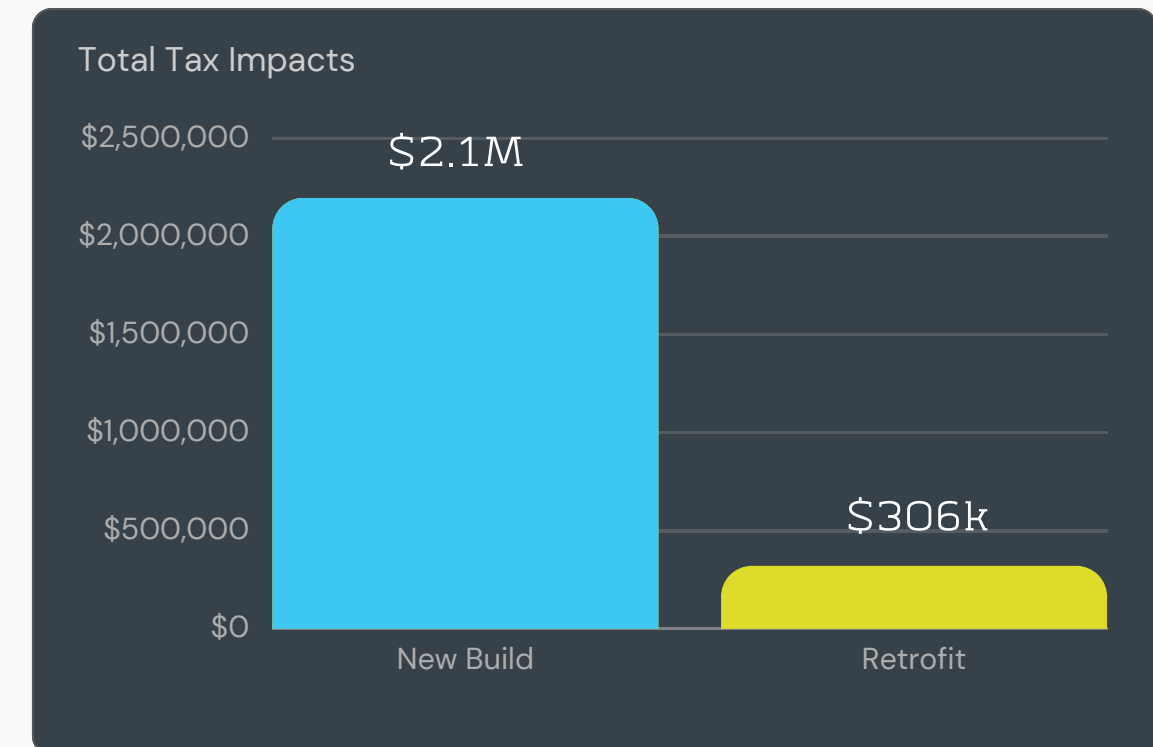
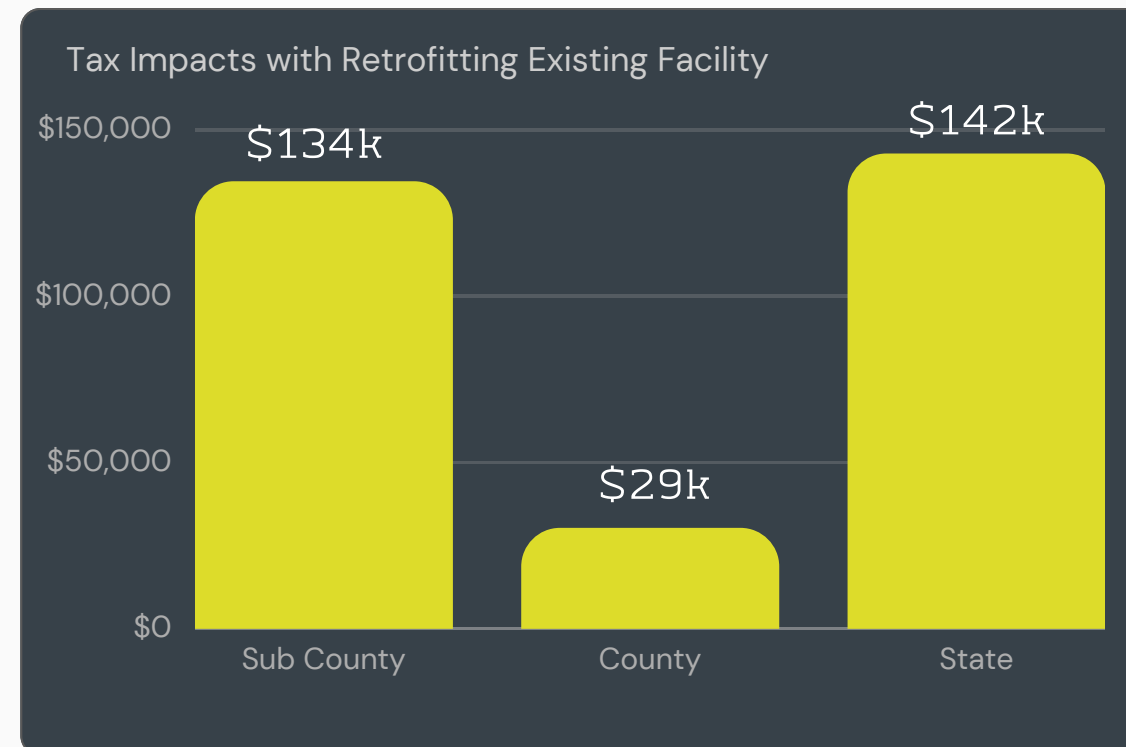
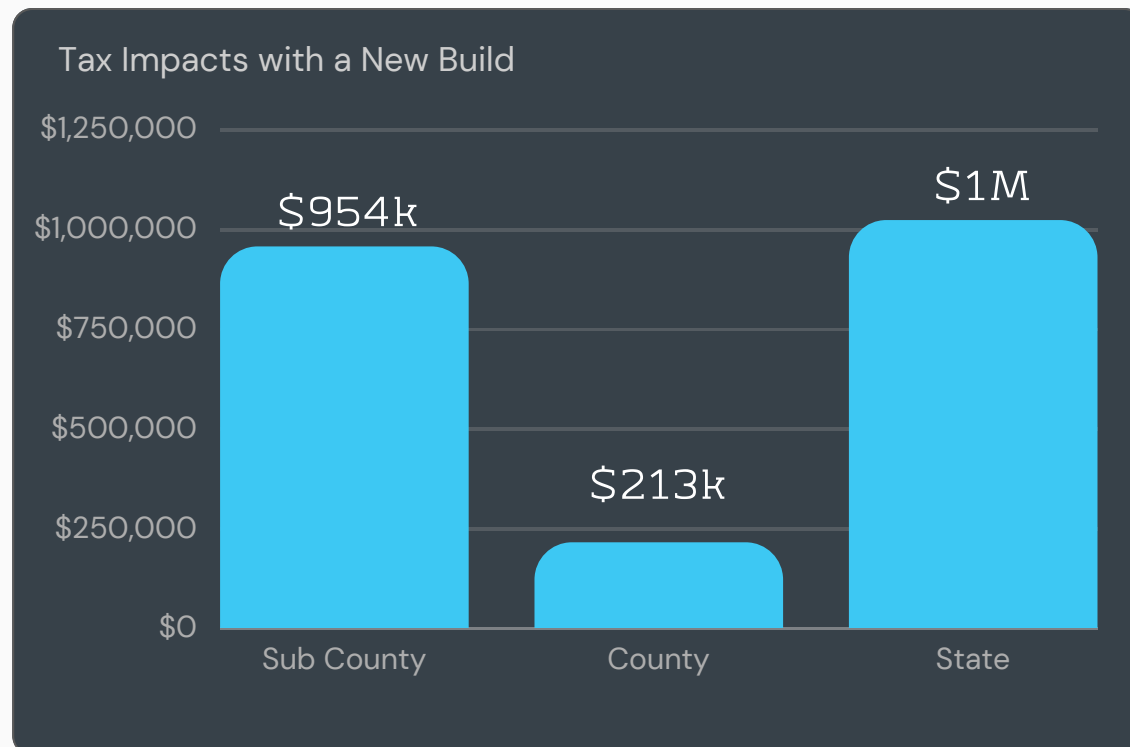
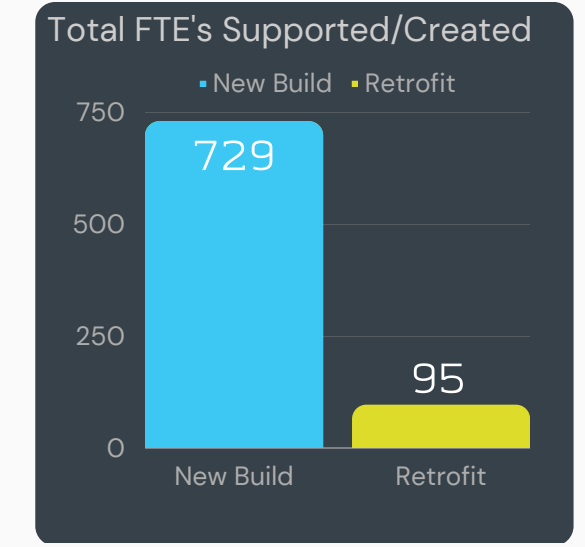
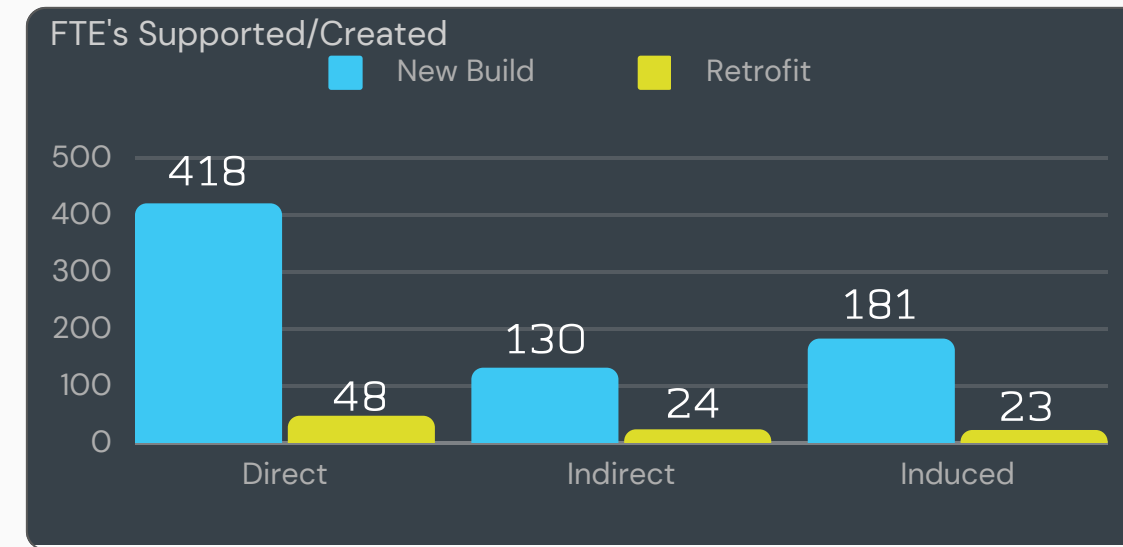
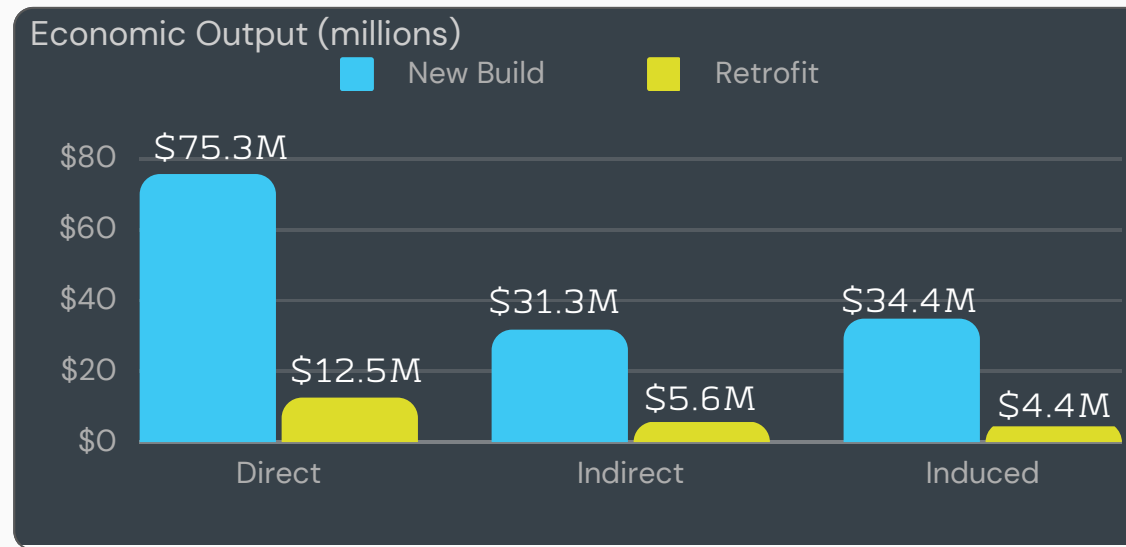
SCENARIO 2: CAPITAL REGION



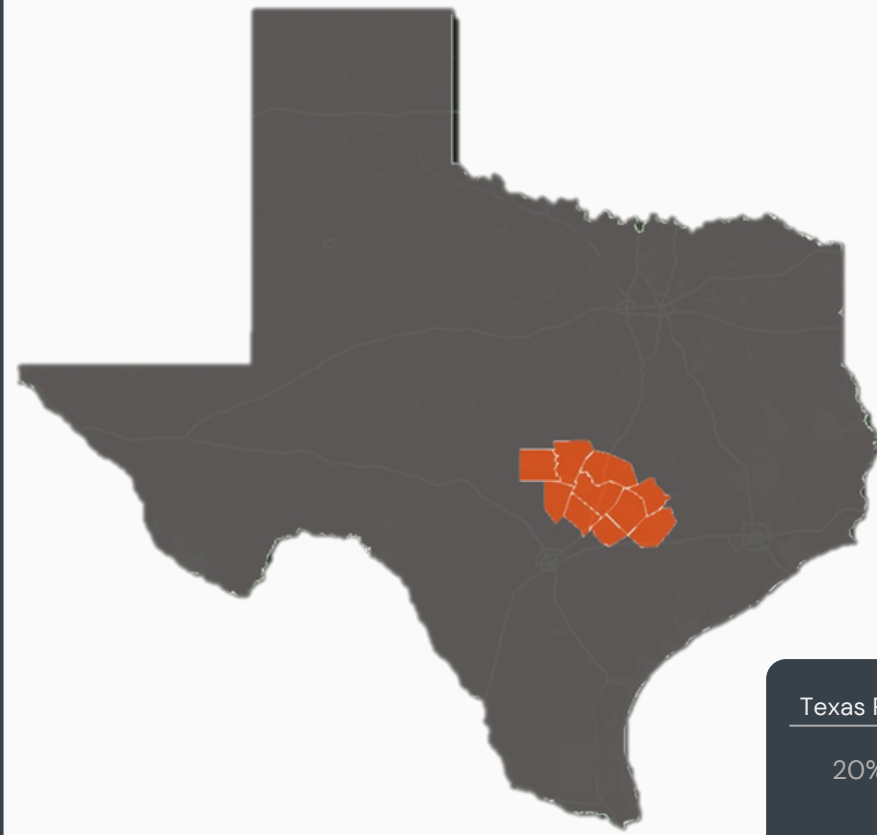
10 Counties in the region

Population
2,467,751

Median Income
\$76,101



SCENARIO 3: CAPITAL REGION

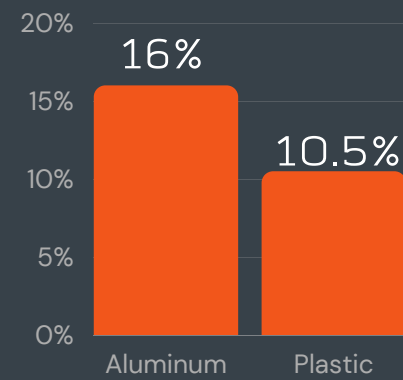


10 Counties in the region

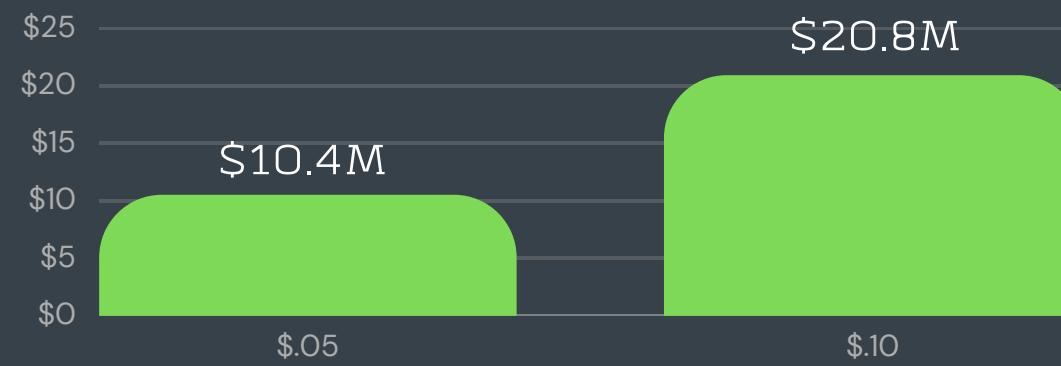
Population
2,467,751

Median Income
\$76,101

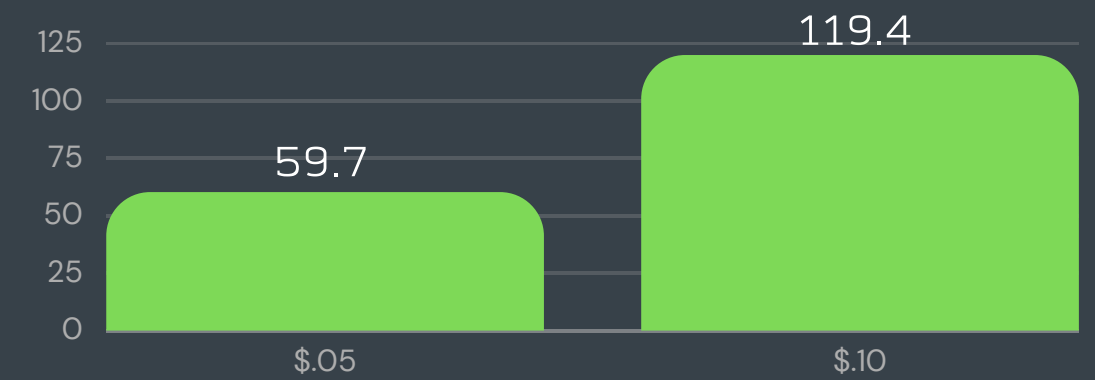
Texas Recycling Rates (2021)



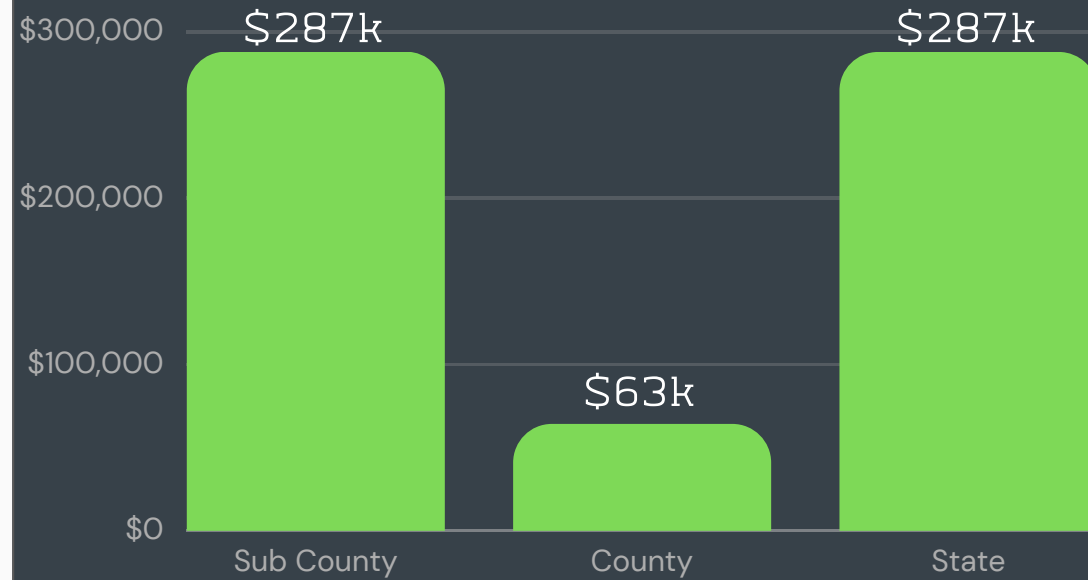
Additional Income with a Financial Incentive Bill (millions)



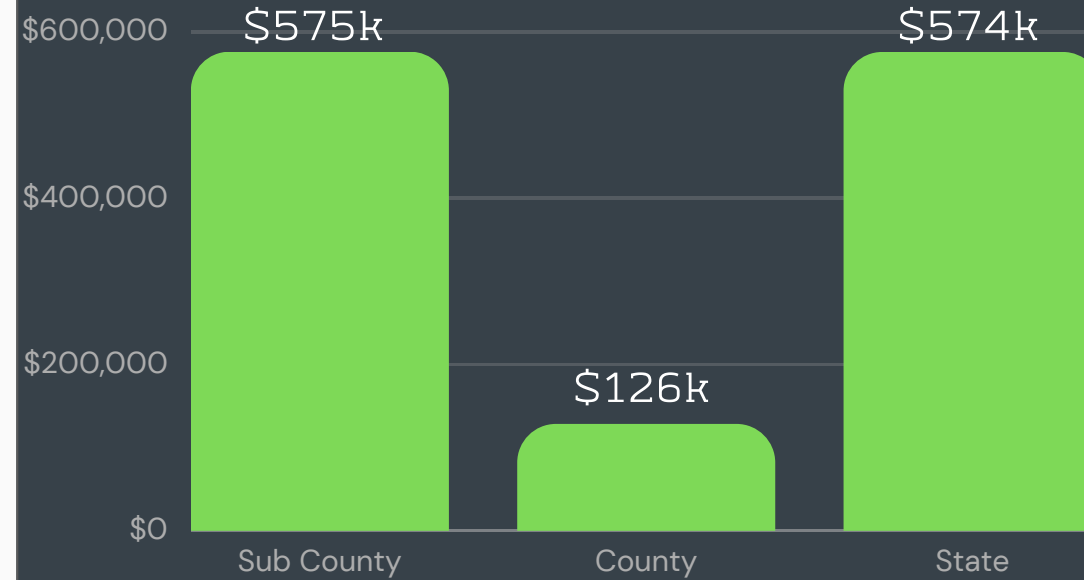
FTE's Supported/Created



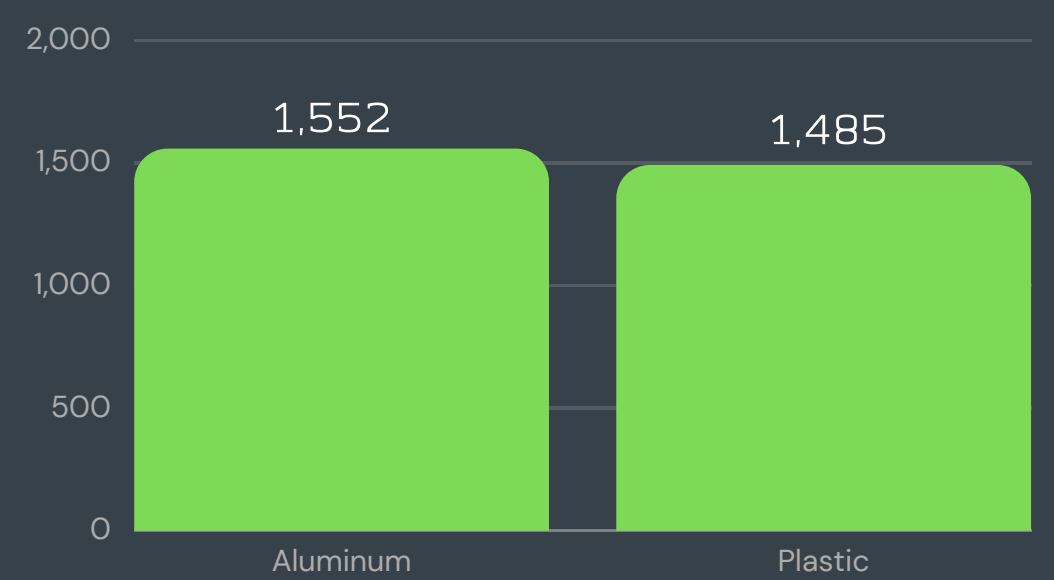
Tax Impacts with \$.05 Financial Incentive Bill



Tax Impacts with \$.10 Financial Incentive Bill



Tonnage Recycled



SUMMARY: CAPITAL REGION



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10 Counties in the region

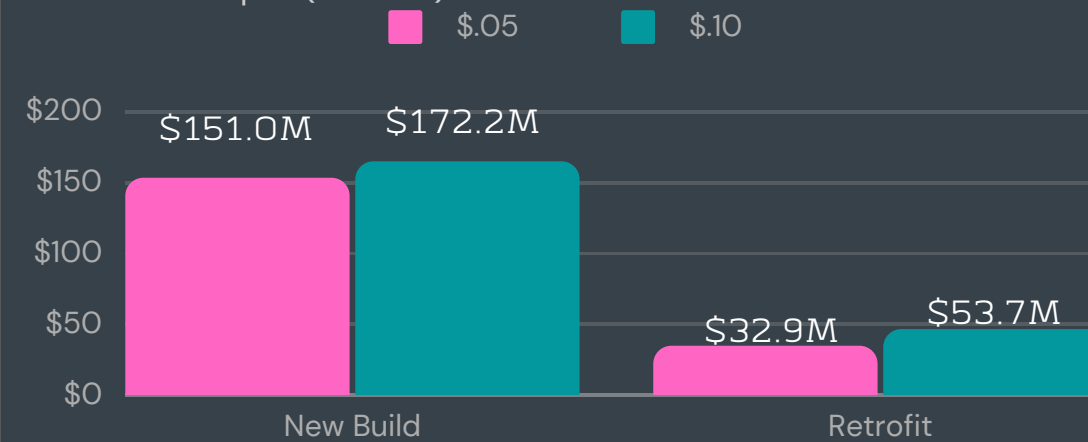
Population

2,467,751

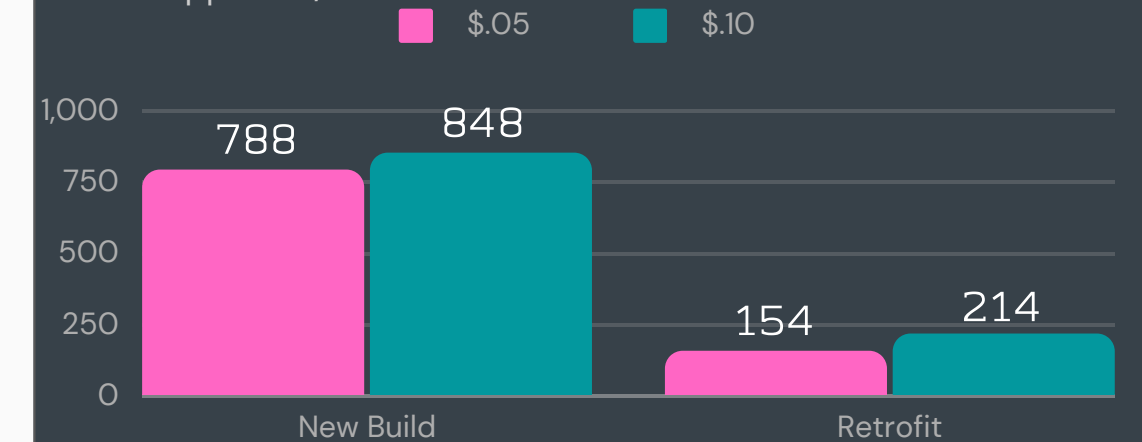
Median Income

\$76,101

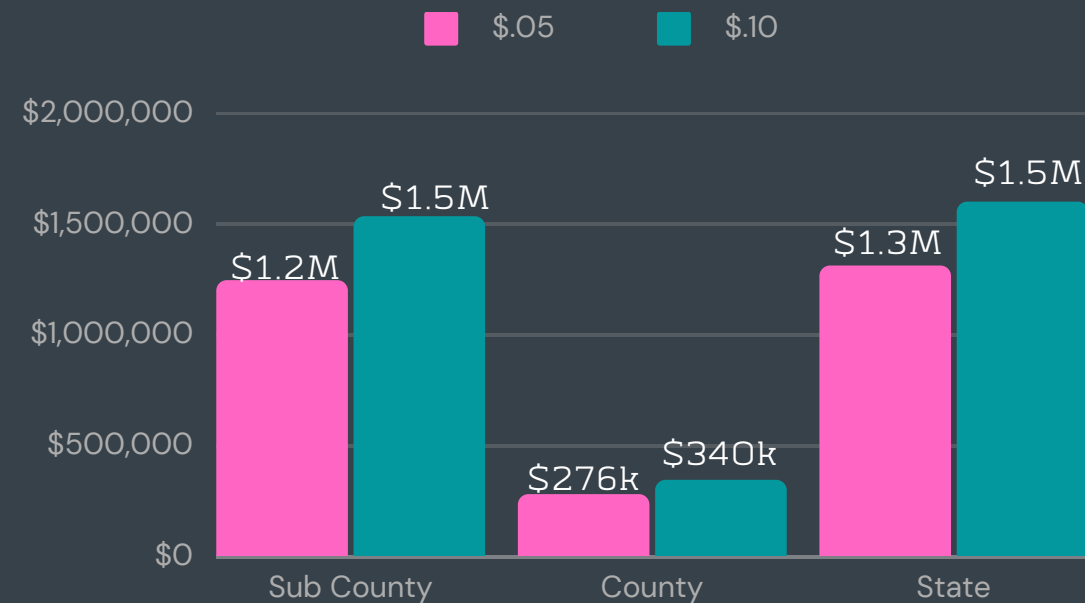
Economic Output (millions)



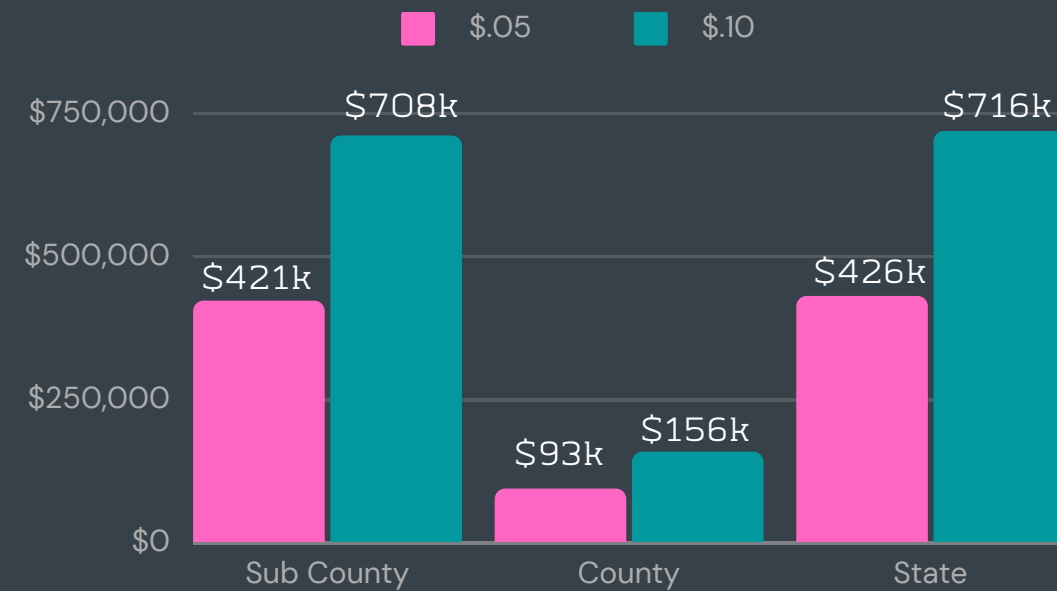
FTE's Supported/Created



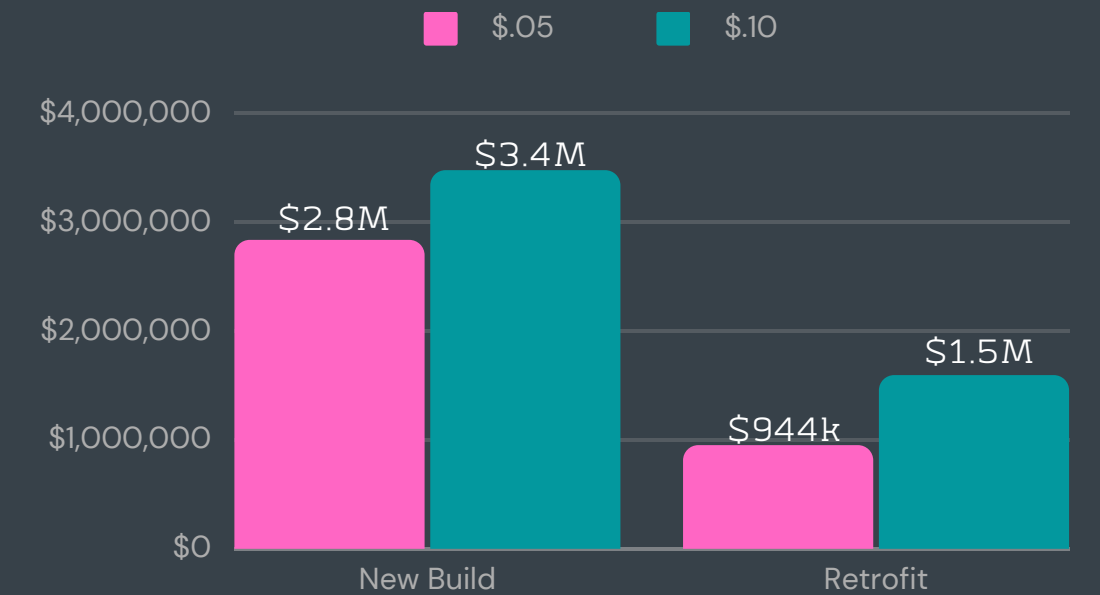
Tax Impacts with a New Build



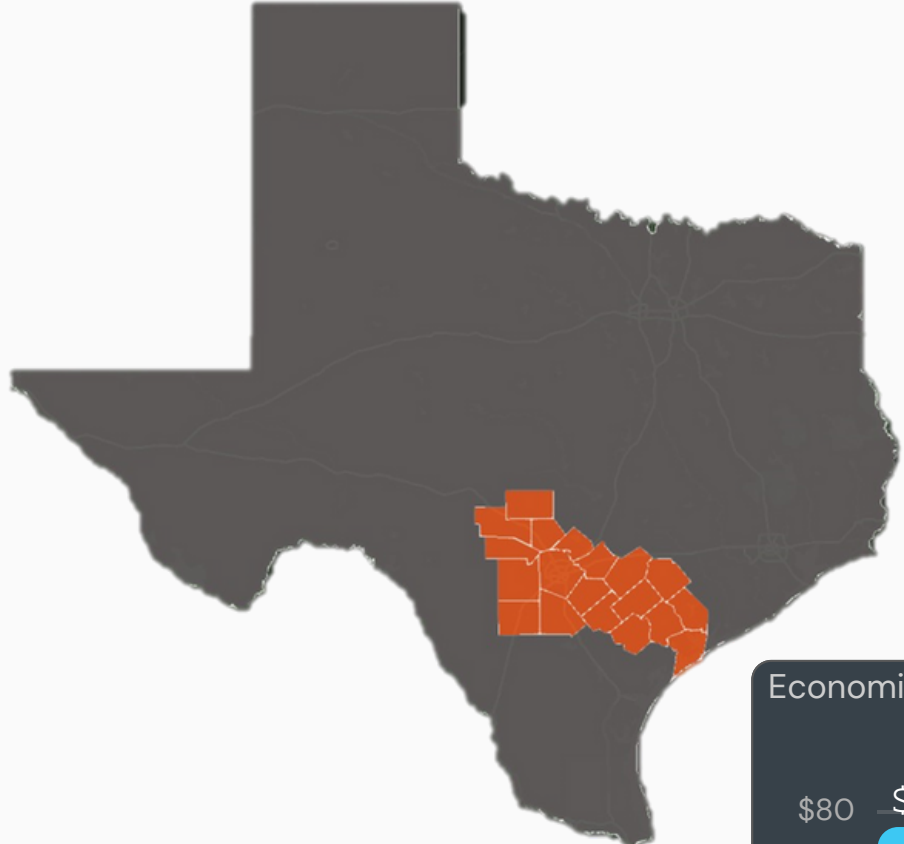
Tax Impacts with Retrofitting Existing Facility



Total Tax Impacts



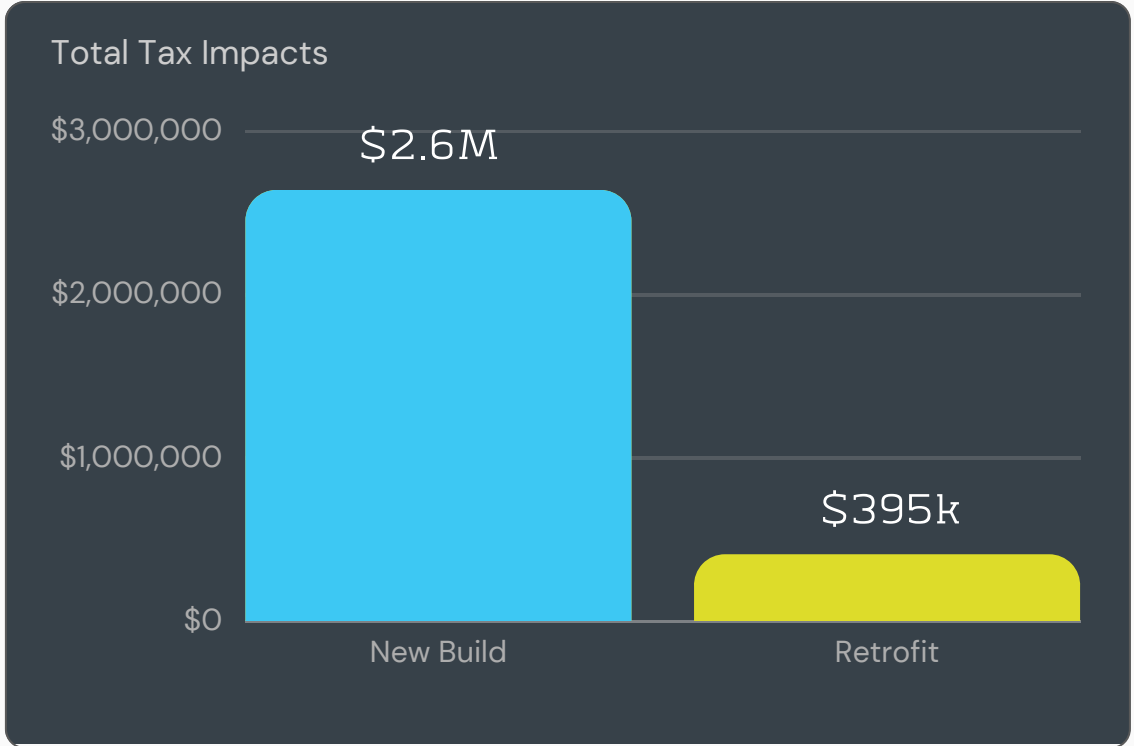
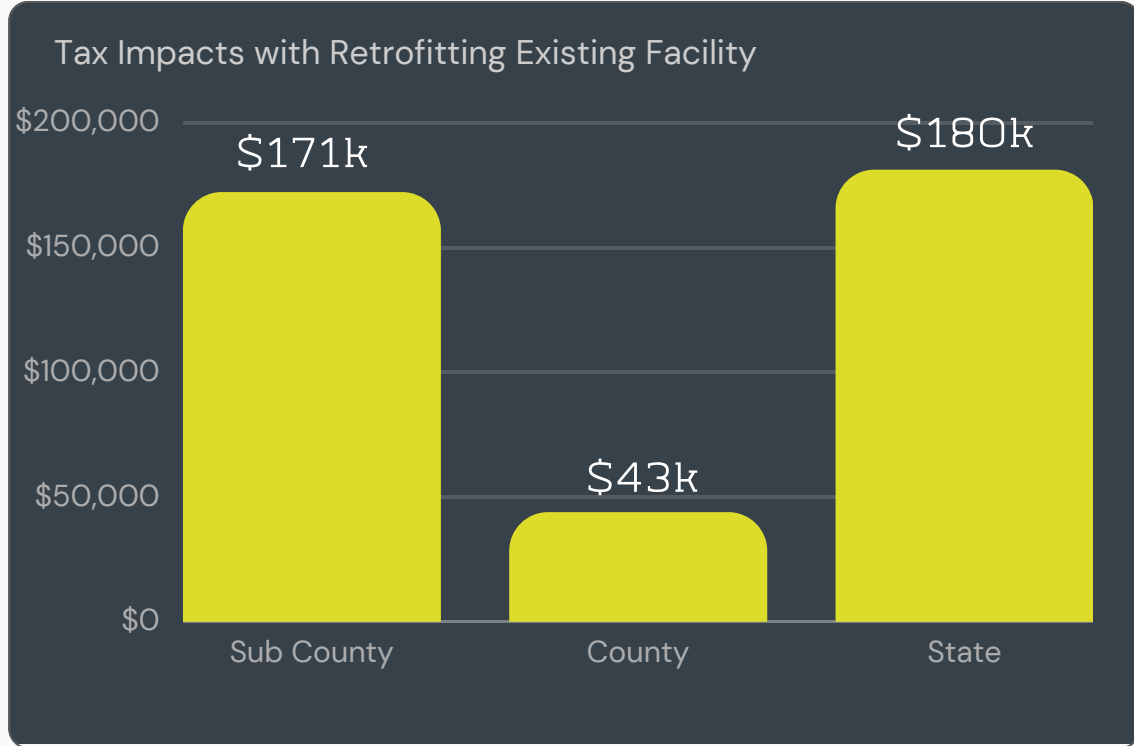
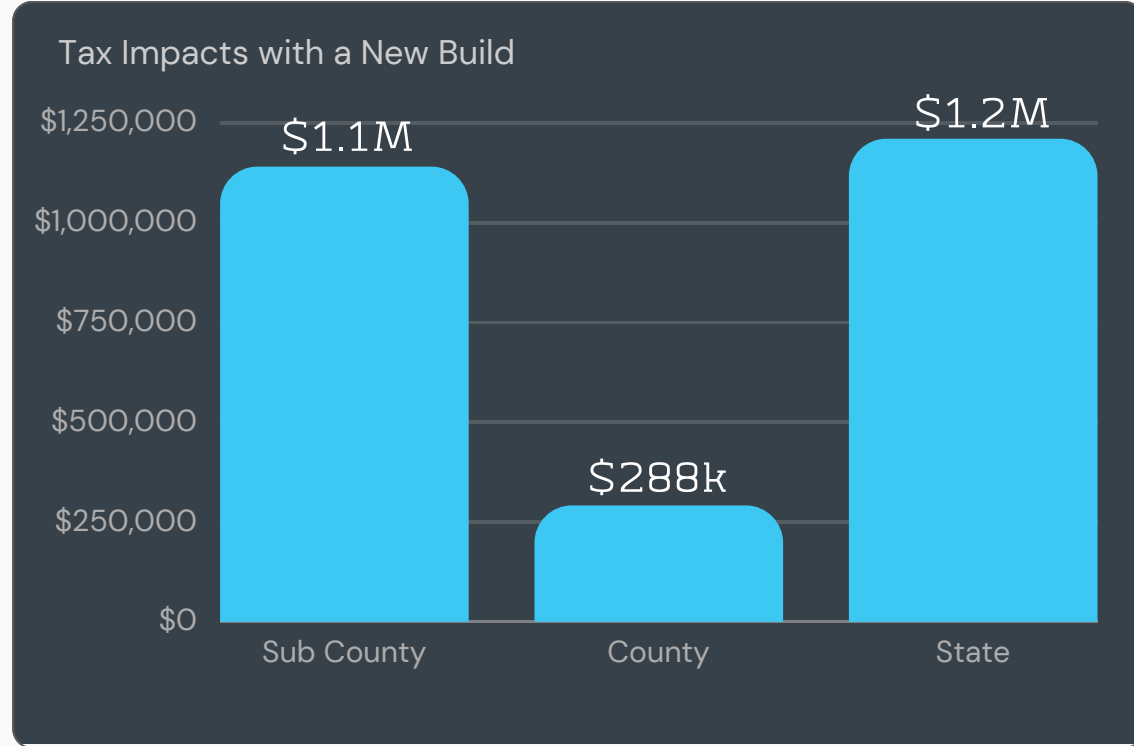
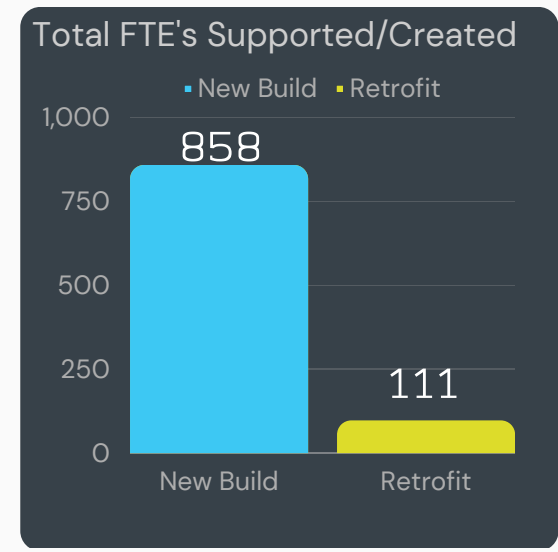
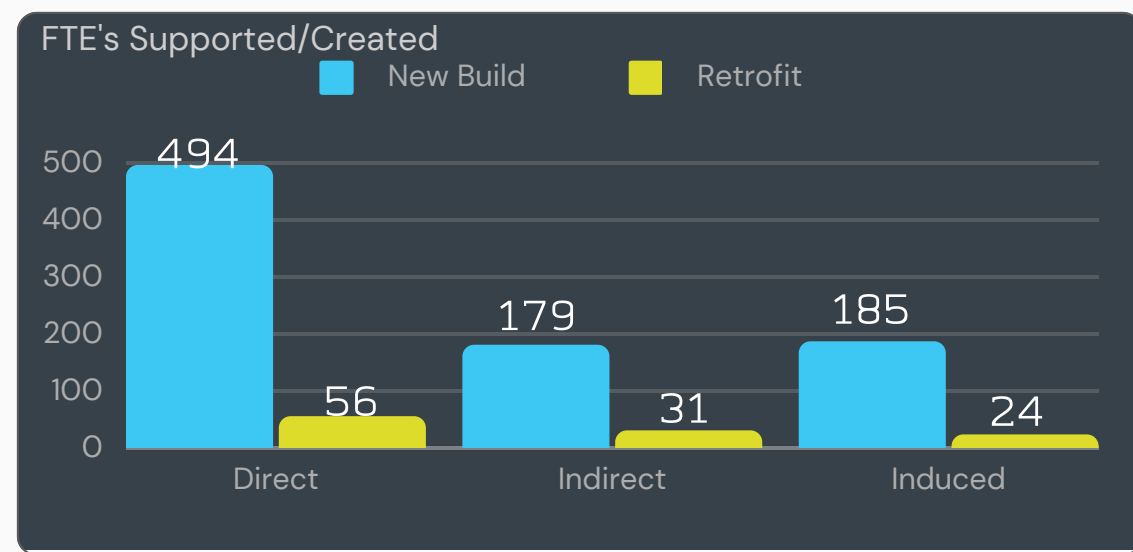
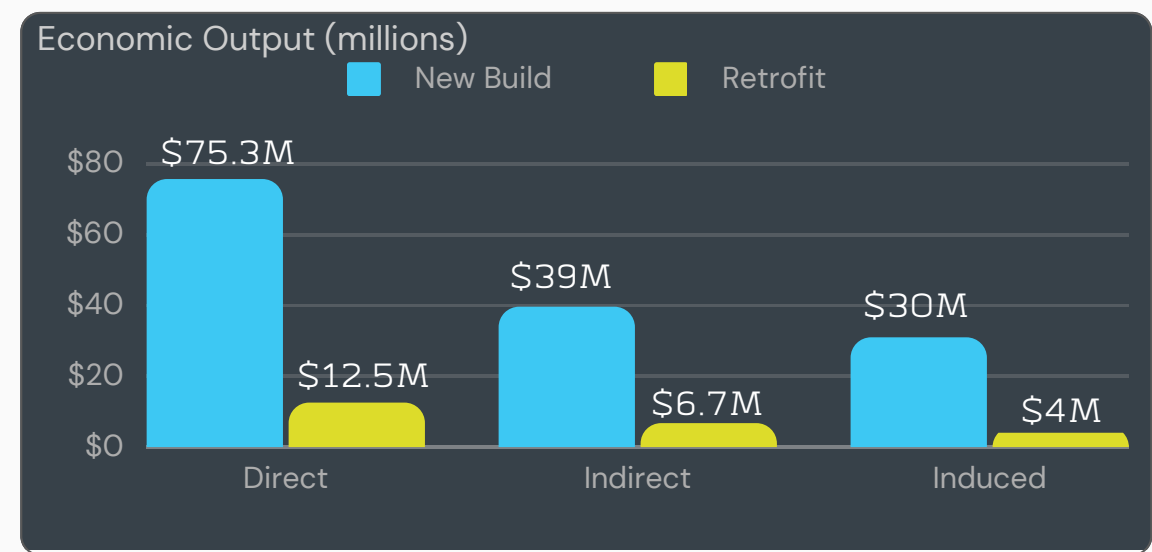
SCENARIO 2: ALAMO REGION



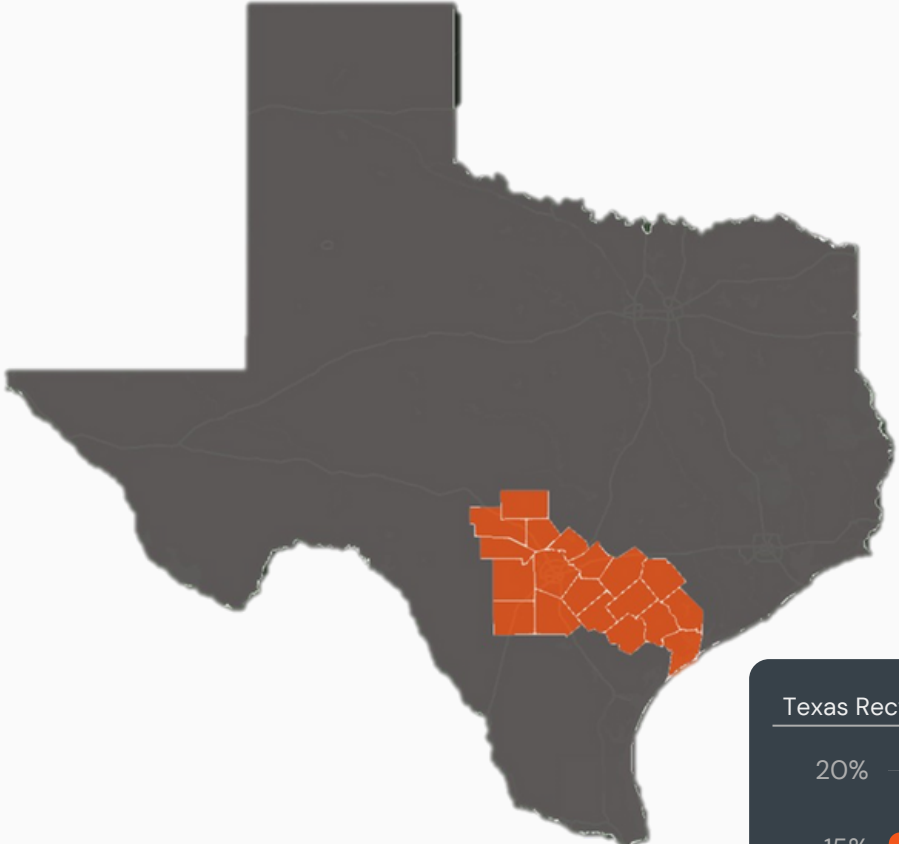
19 Counties in the region

Population
2,908,514

Median Income
\$60,196



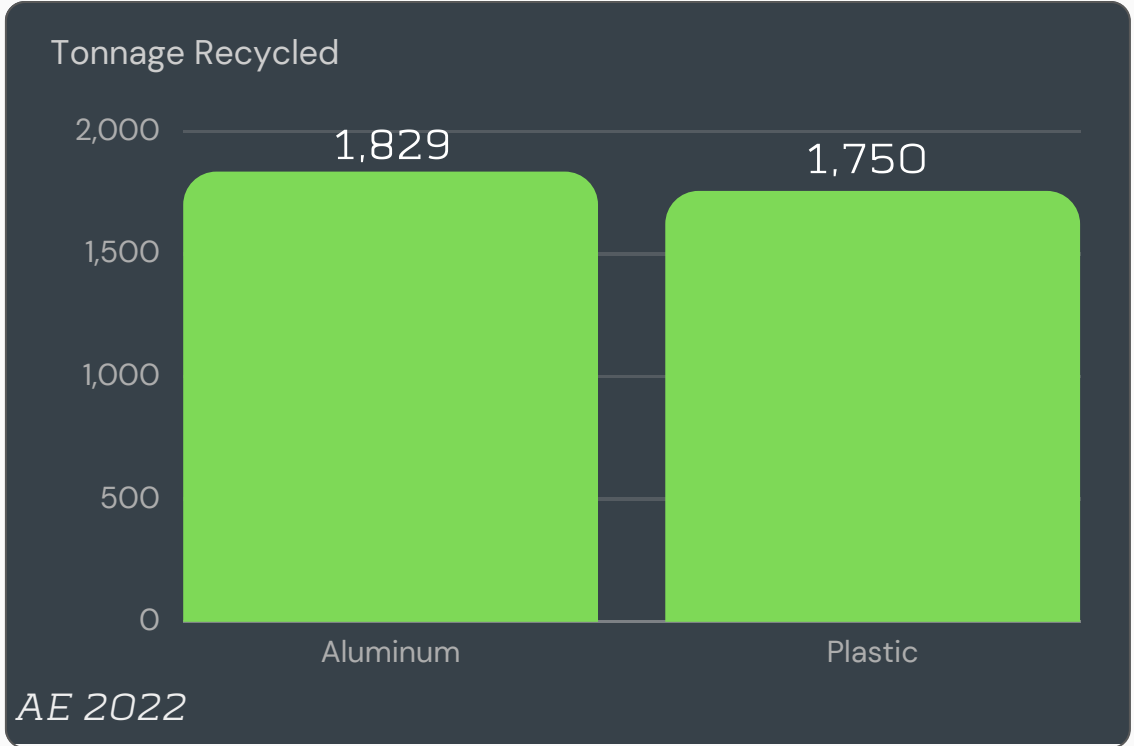
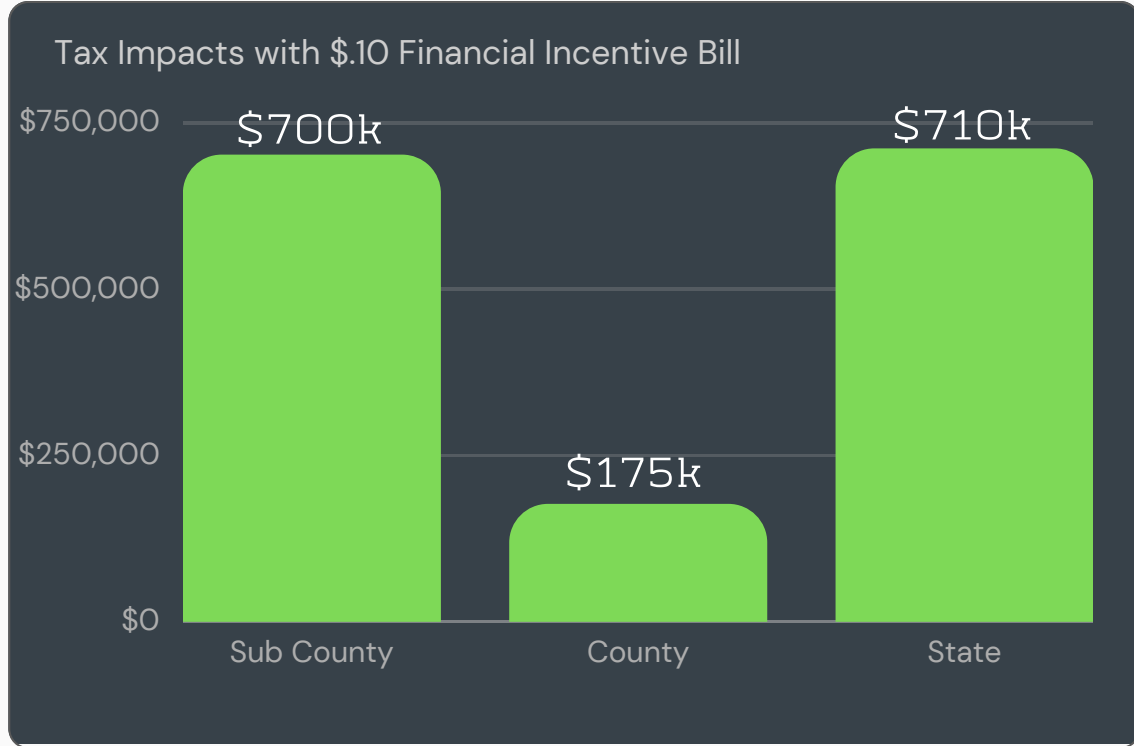
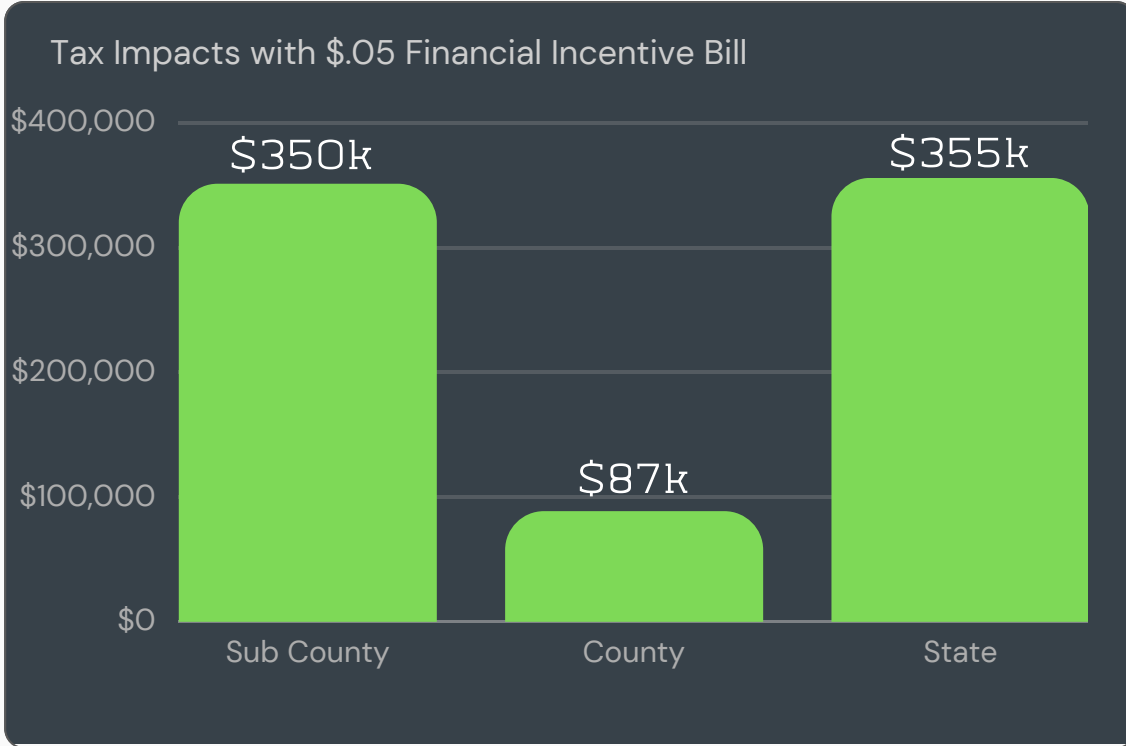
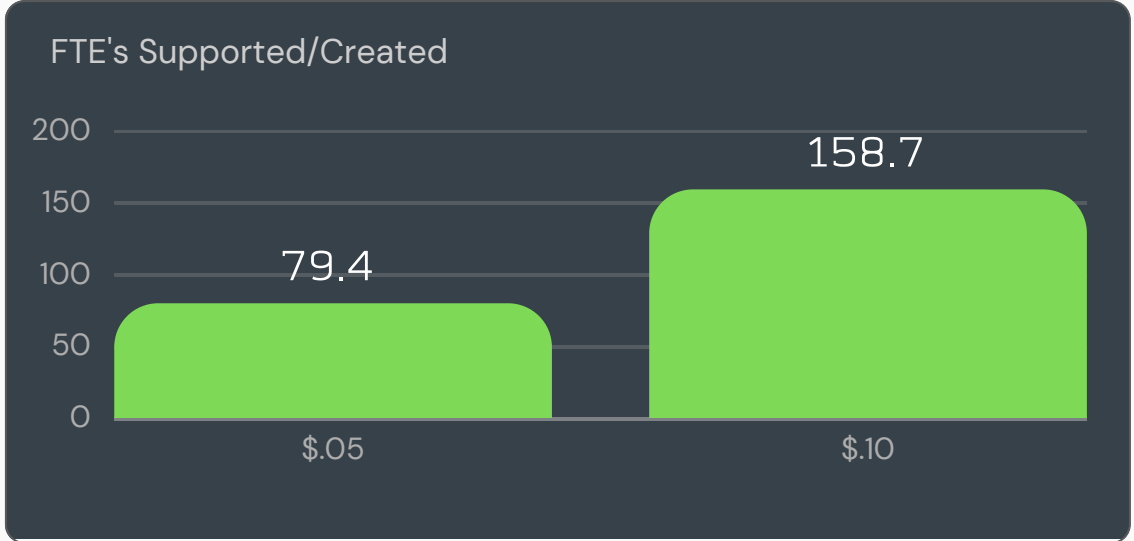
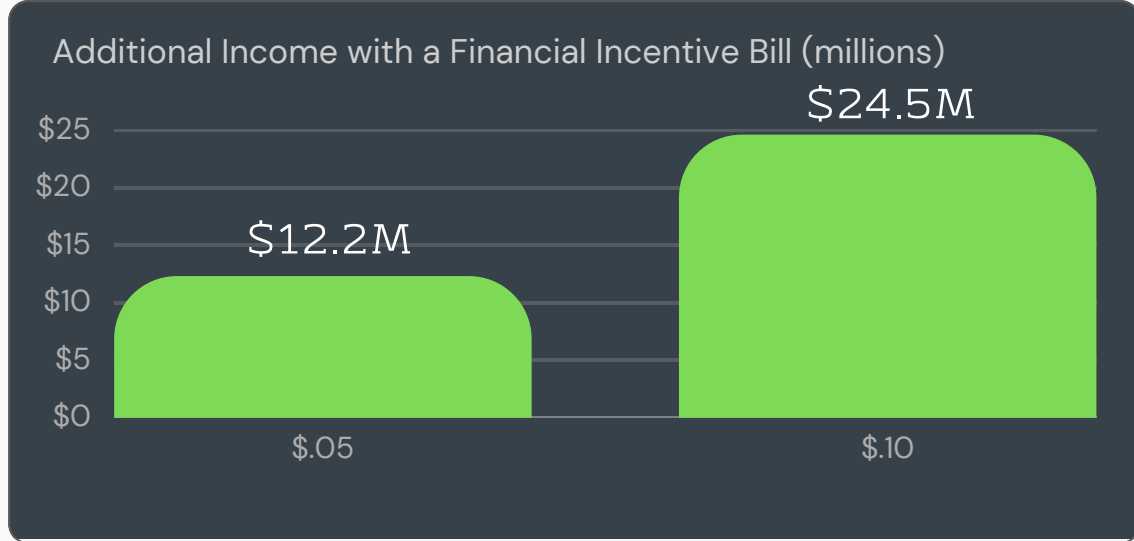
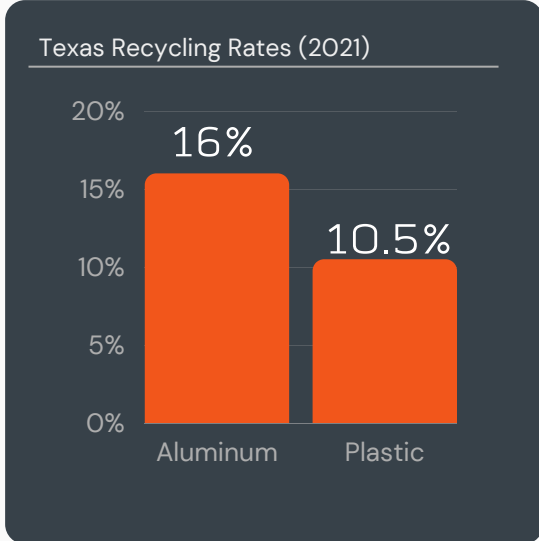
SCENARIO 3: ALAMO REGION



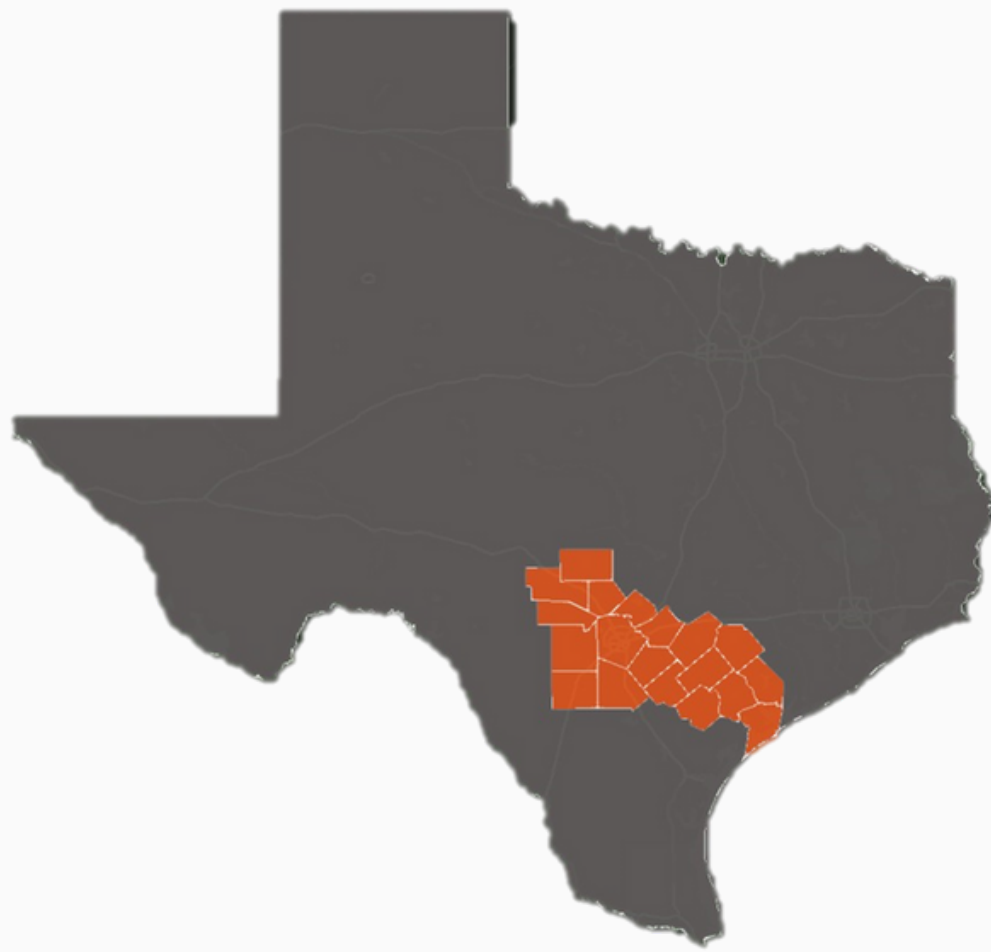
19 Counties in the region

Population
2,908,514

Median Income
\$60,196



SUMMARY: ALAMO REGION



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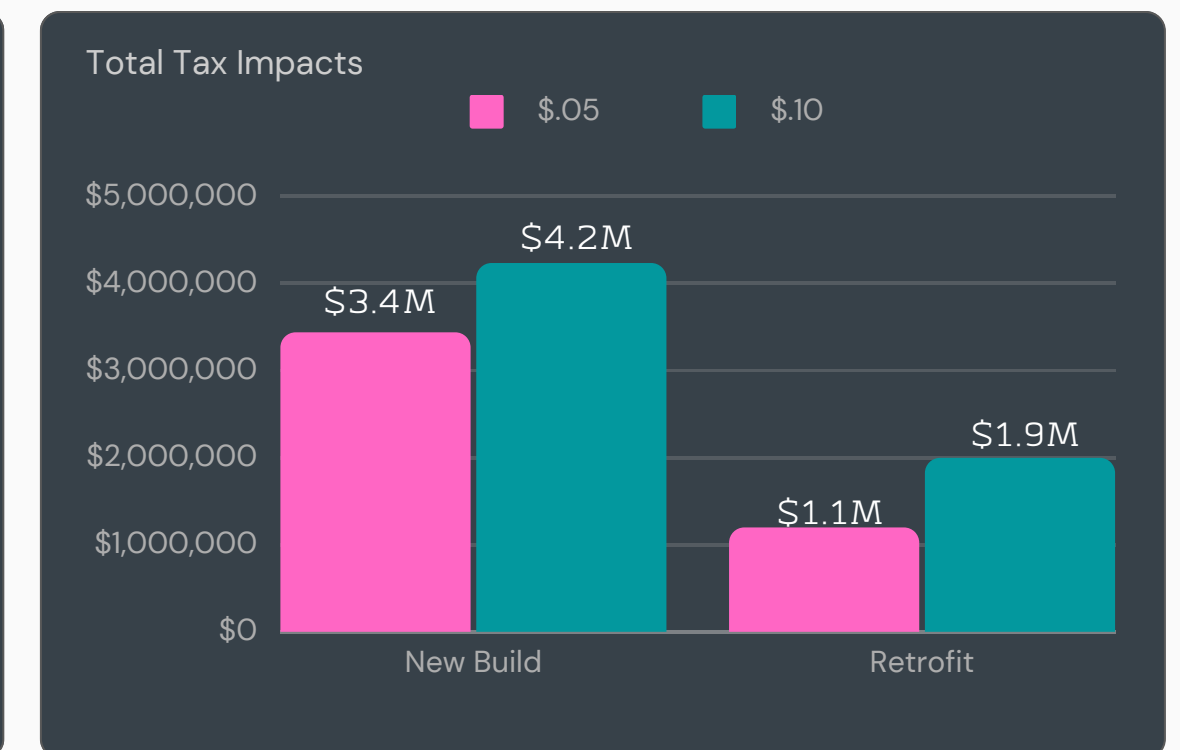
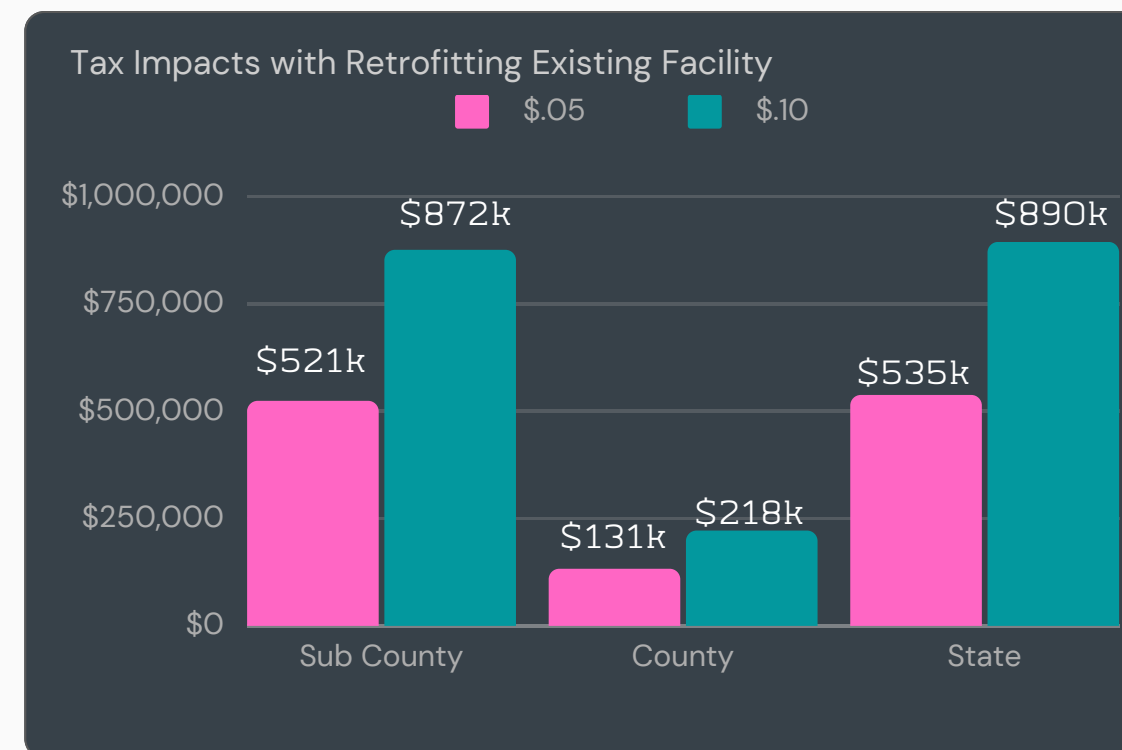
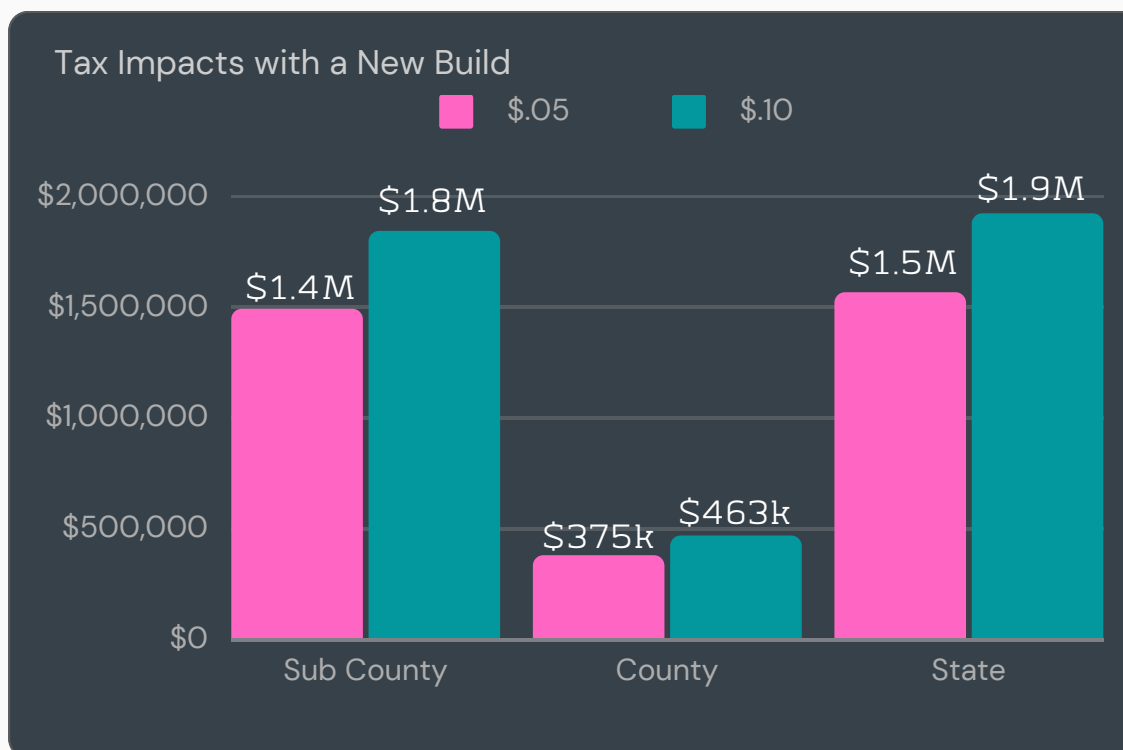
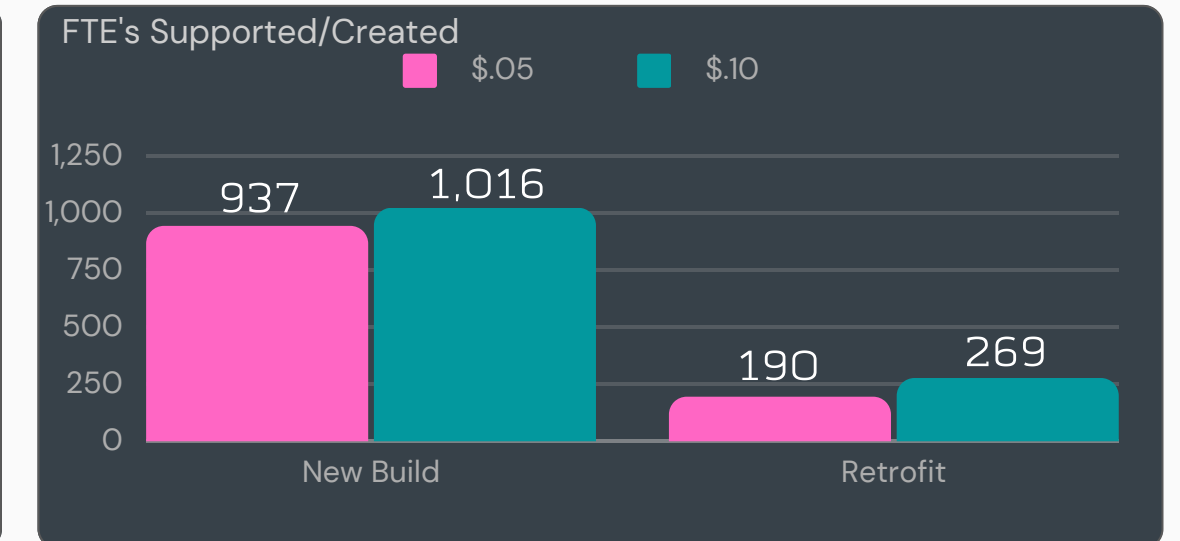
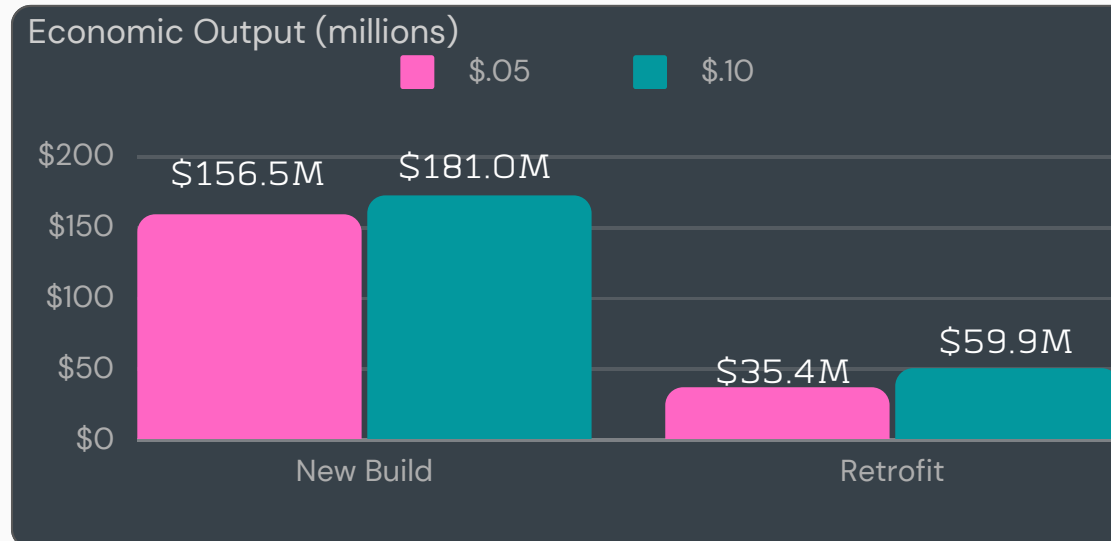
19 Counties in the region

Population

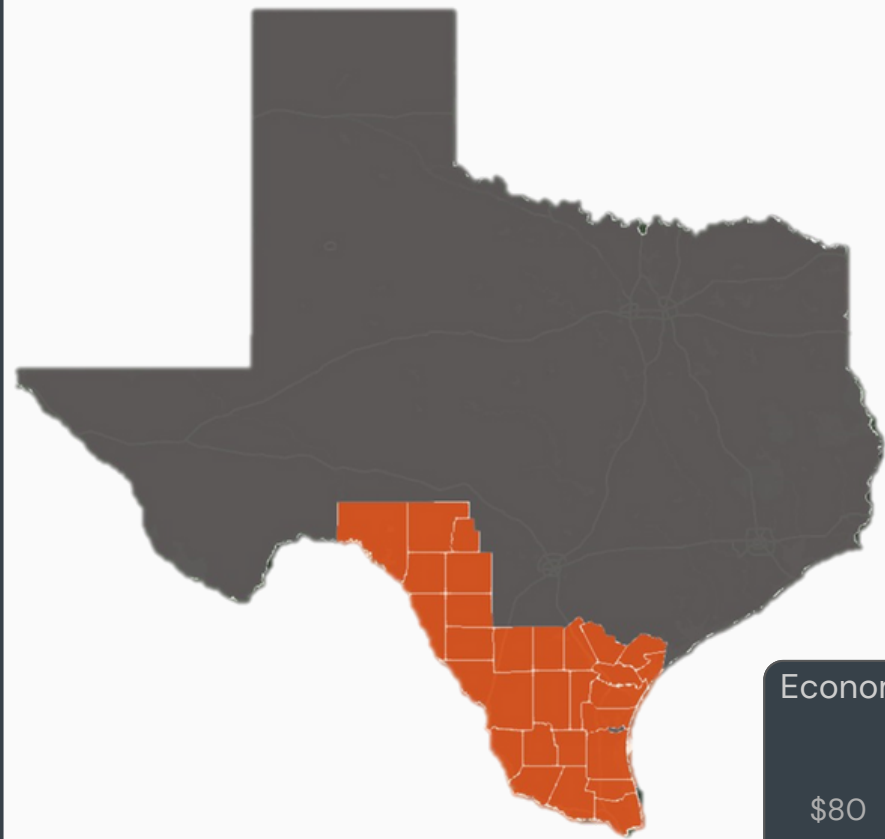
2,908,514

Median Income

\$60,196



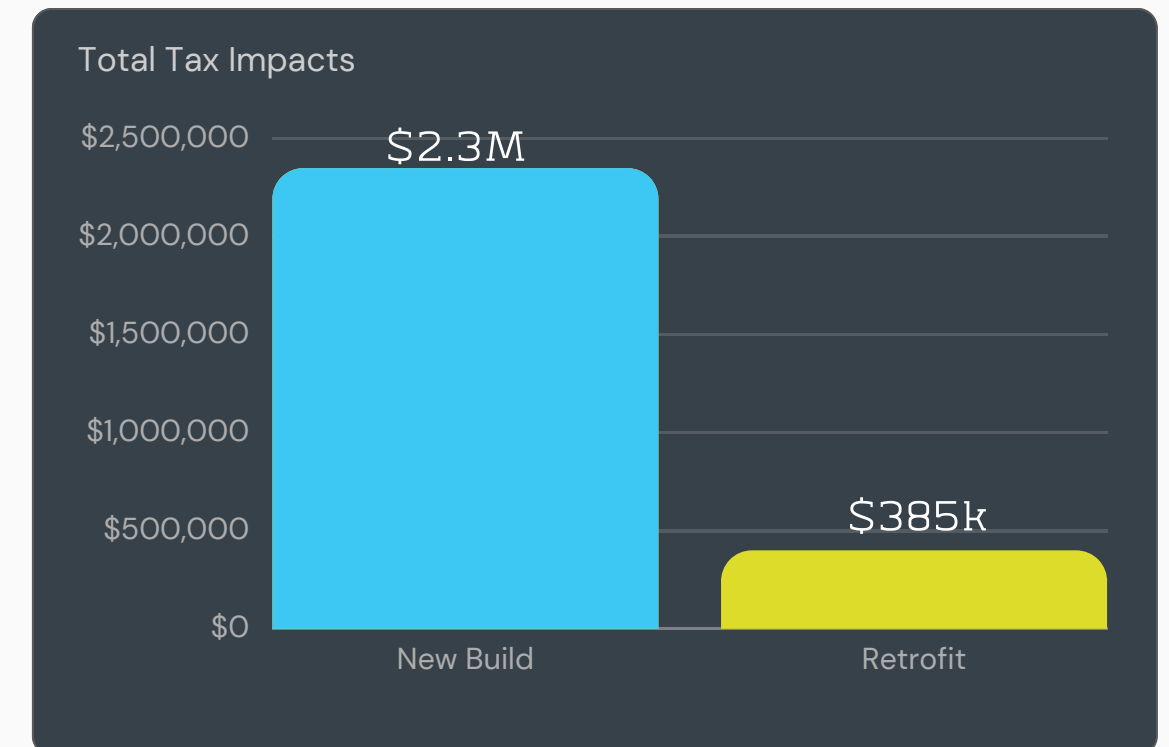
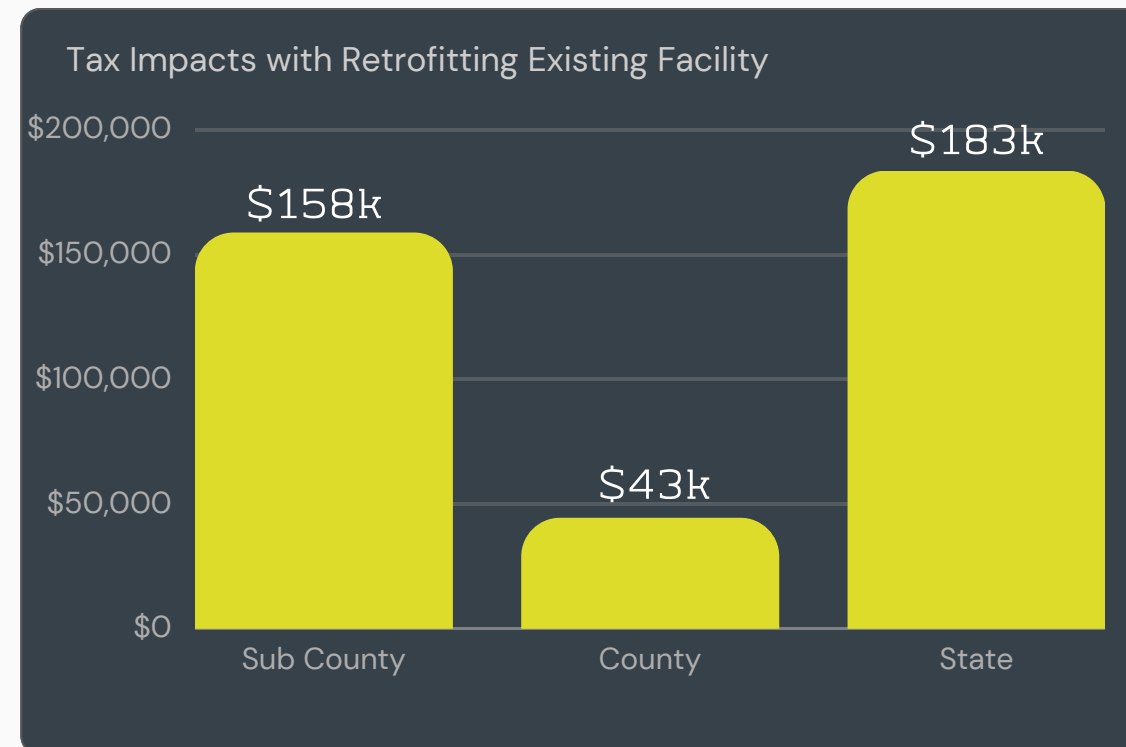
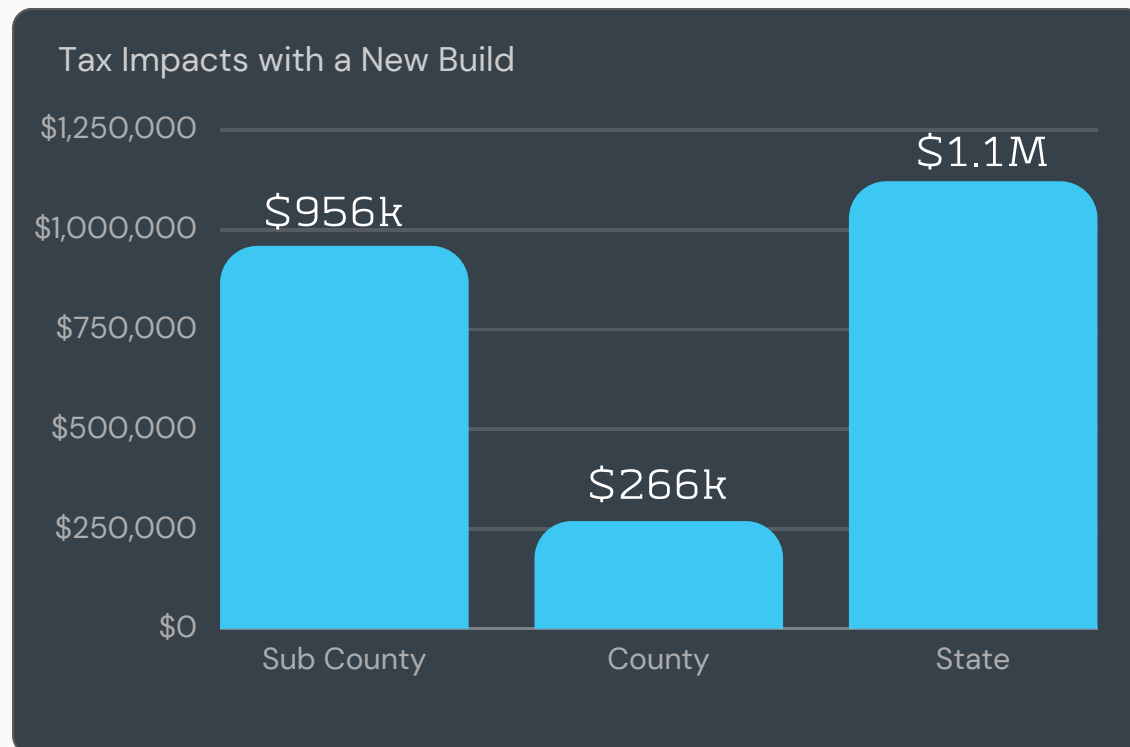
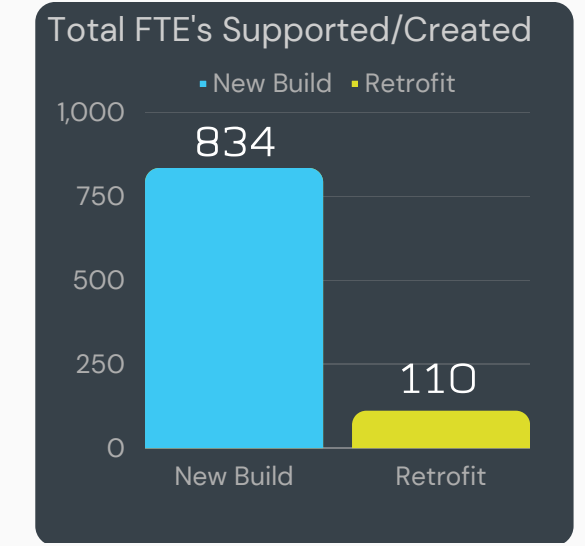
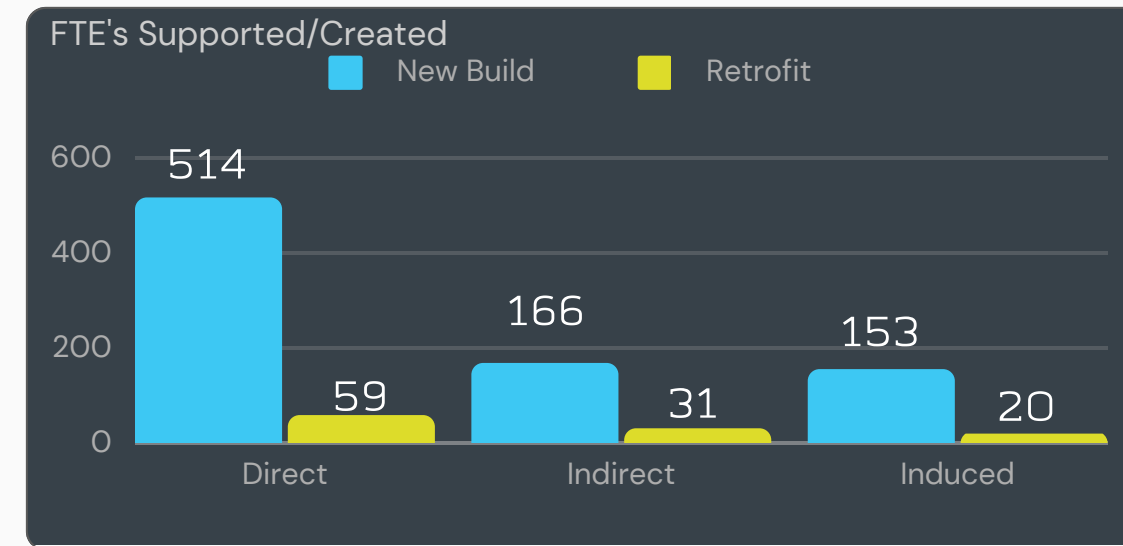
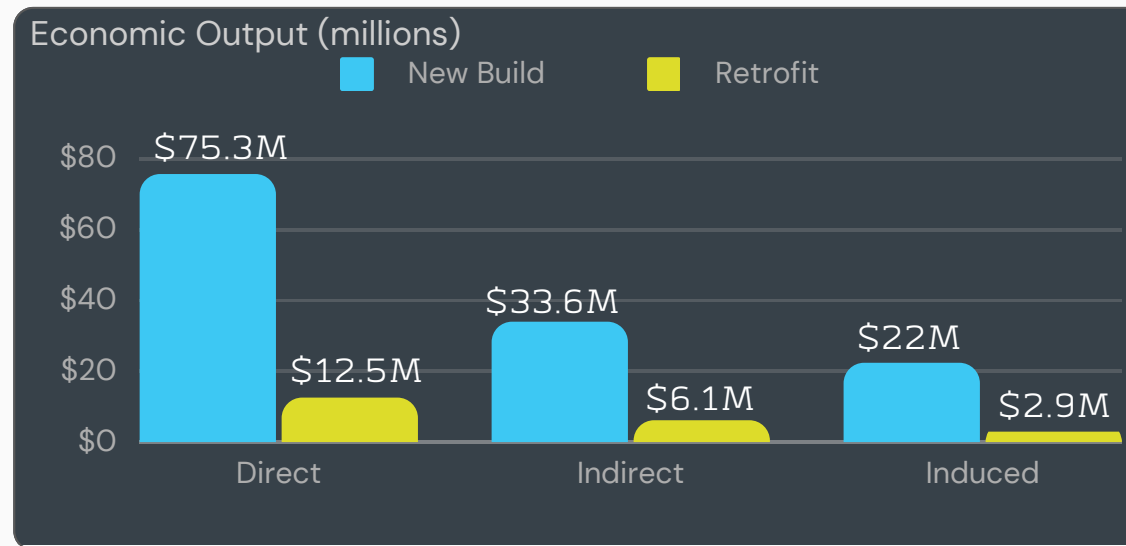
SCENARIO 2: SOUTH TEXAS REGION



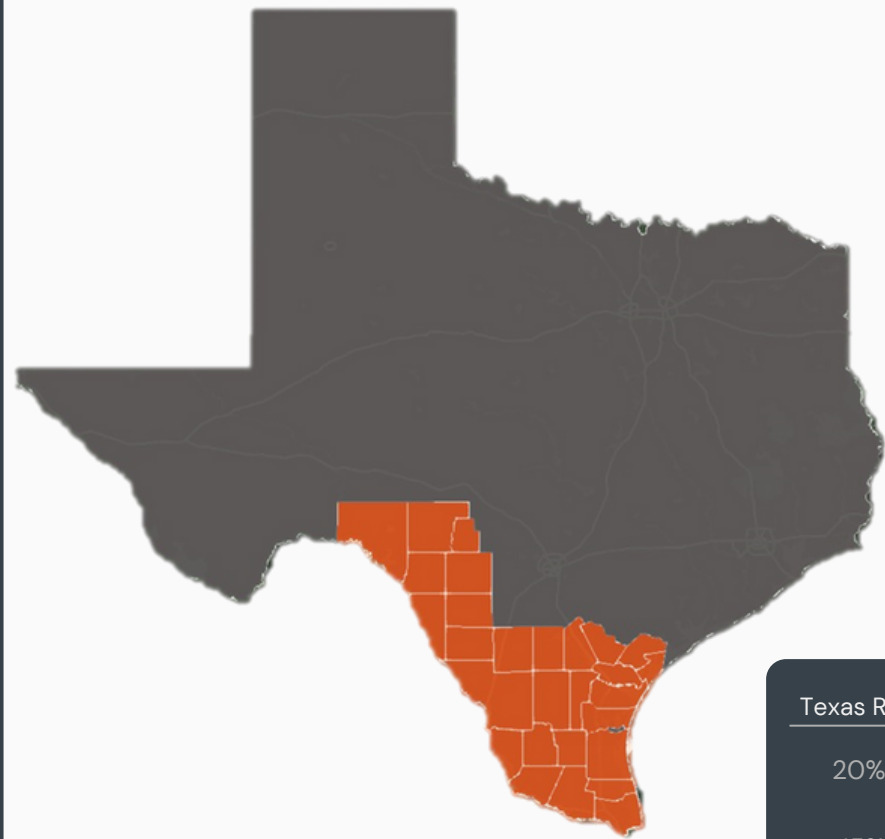
28 Counties in the region

Population
2,422,349

Median Income
\$43,873



SCENARIO 3: SOUTH TEXAS REGION

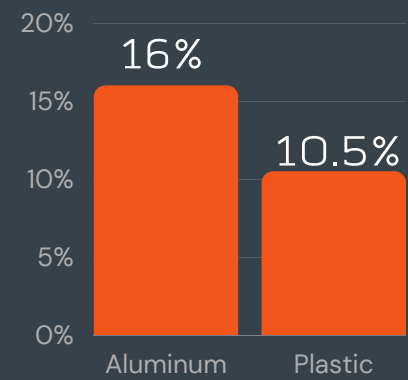


28 Counties in the region

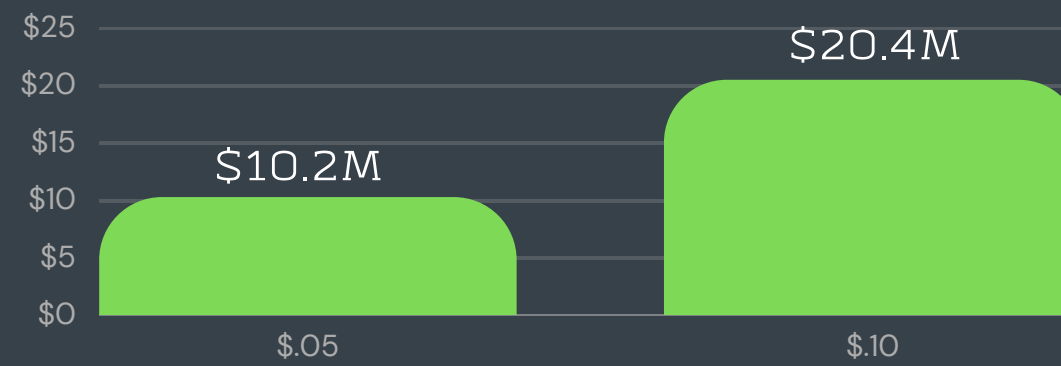
Population
2,422,349

Median Income
\$43,873

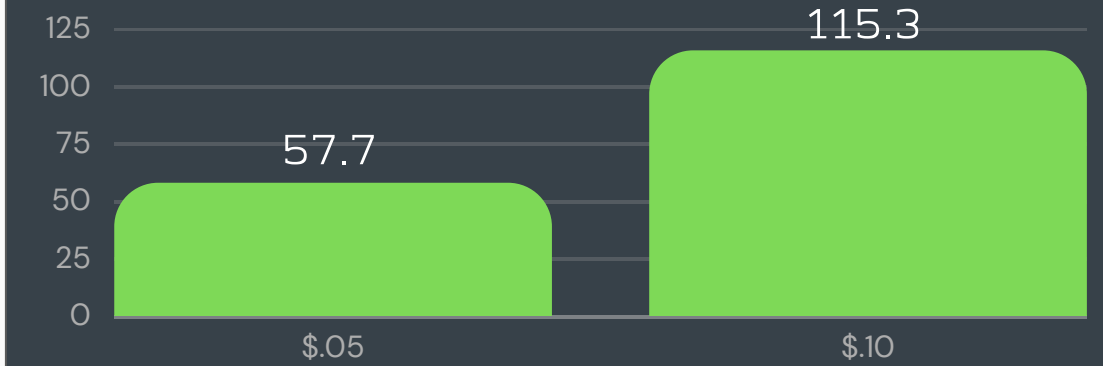
Texas Recycling Rates (2021)



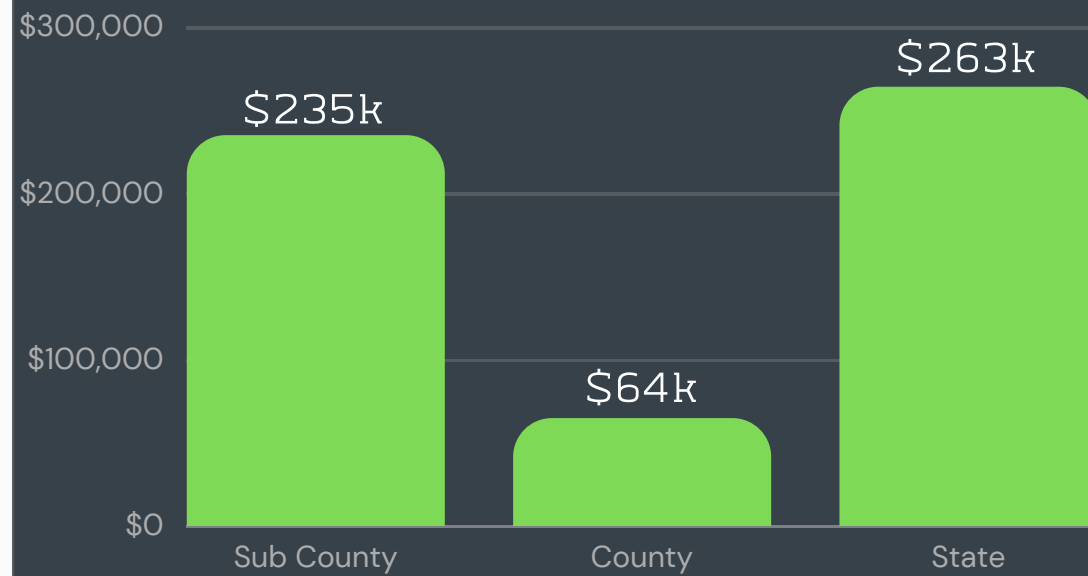
Additional Income with a Financial Incentive Bill (millions)



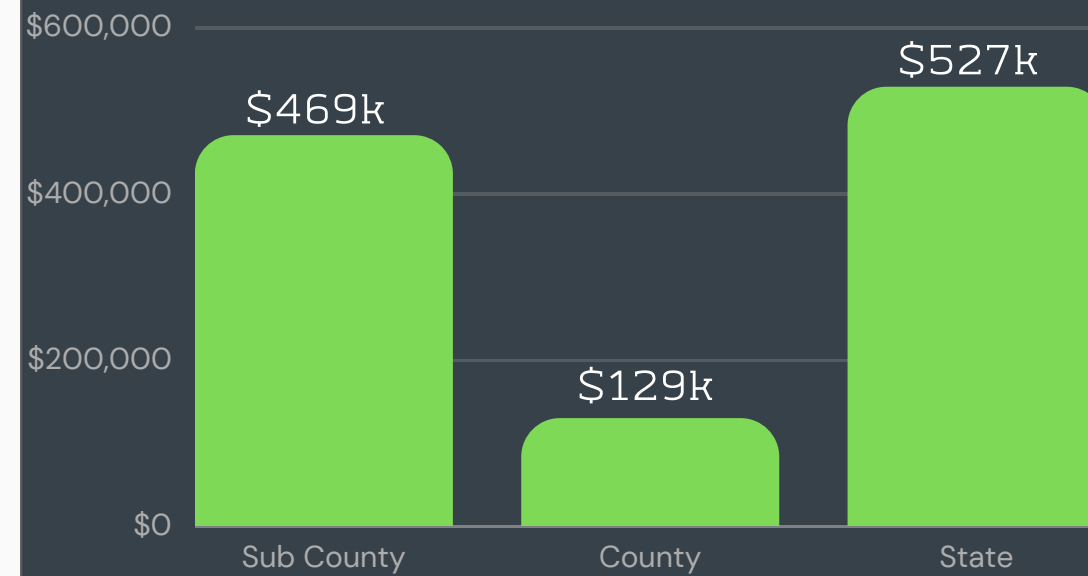
FTE's Supported/Created



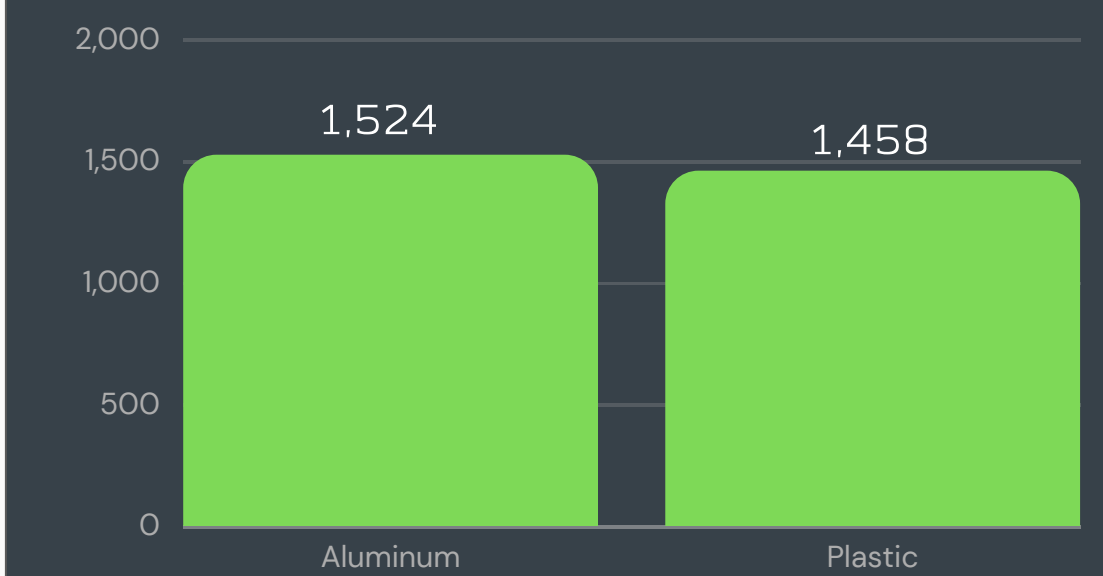
Tax Impacts with \$.05 Financial Incentive Bill



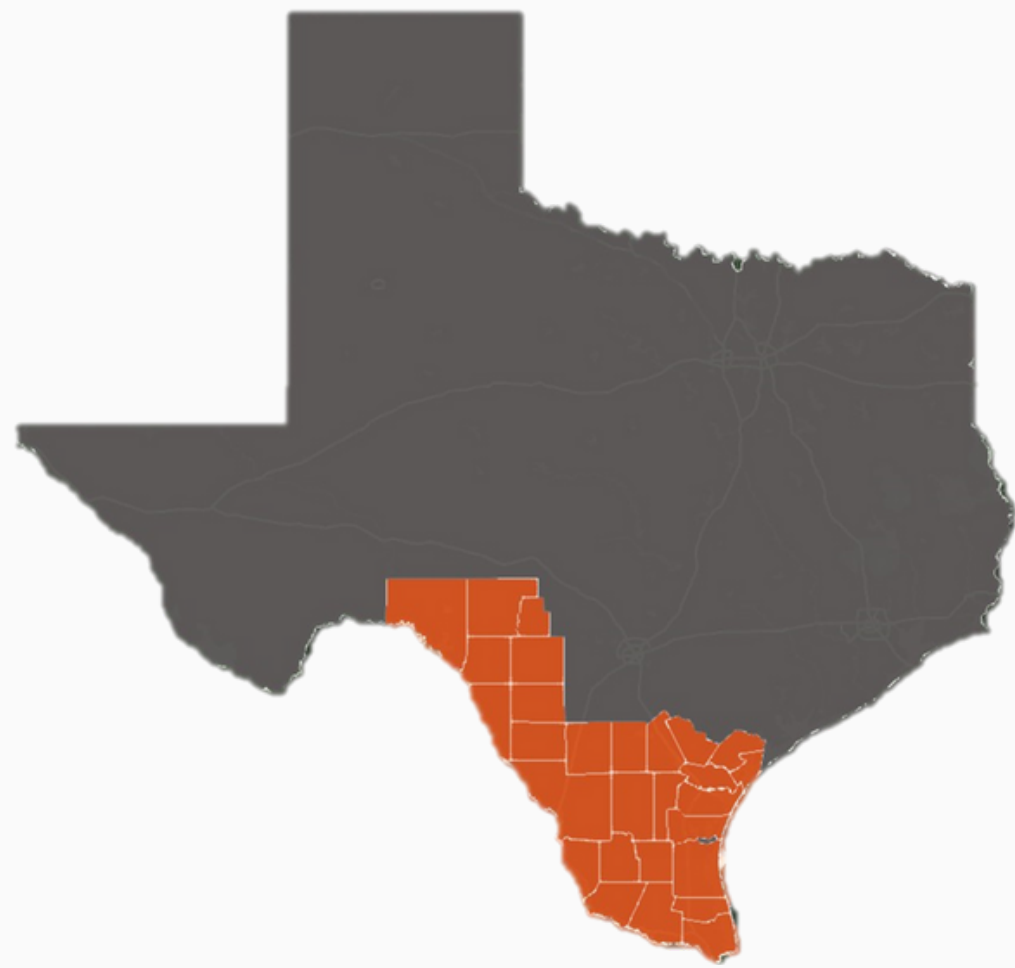
Tax Impacts with \$.10 Financial Incentive Bill



Tonnage Recycled



SUMMARY: SOUTH TEXAS REGION



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28 Counties in the region

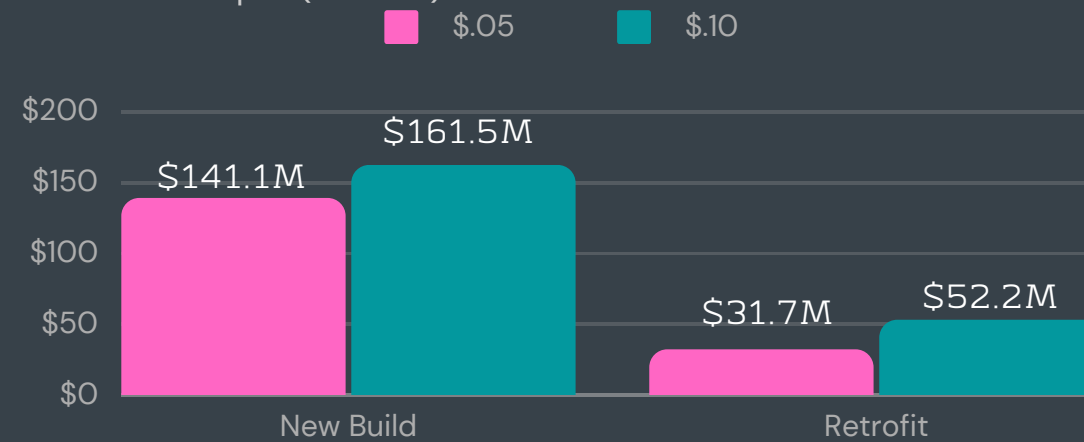
Population

2,422,349

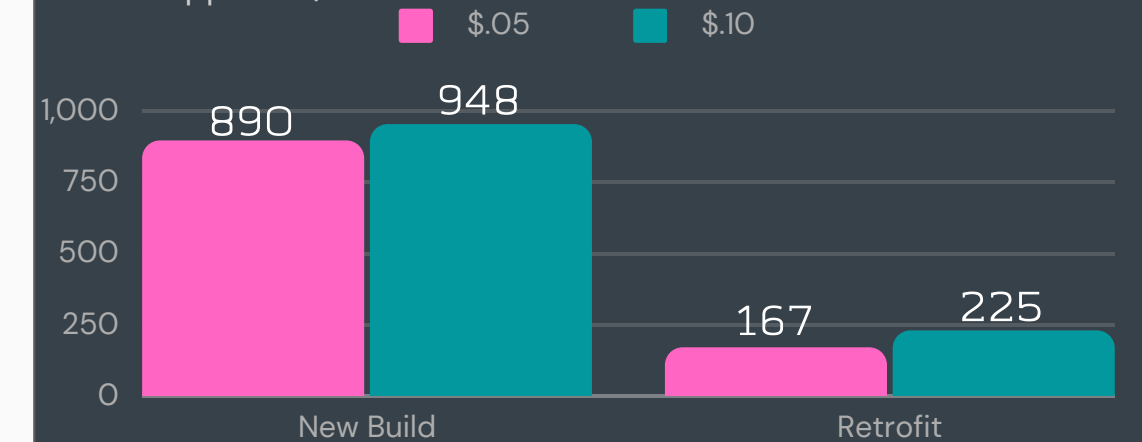
Median Income

\$43,873

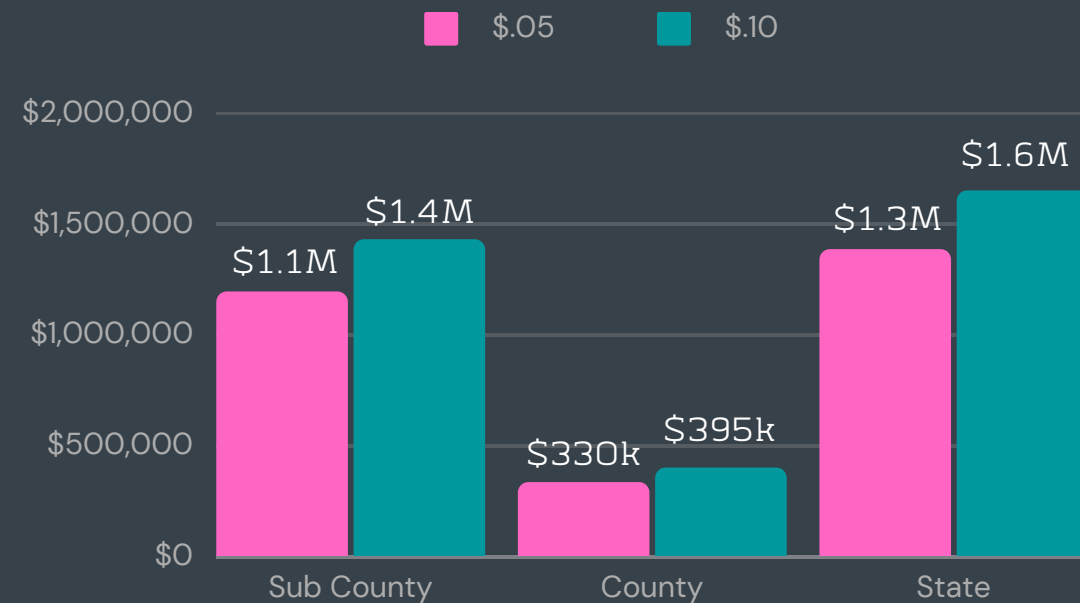
Economic Output (millions)



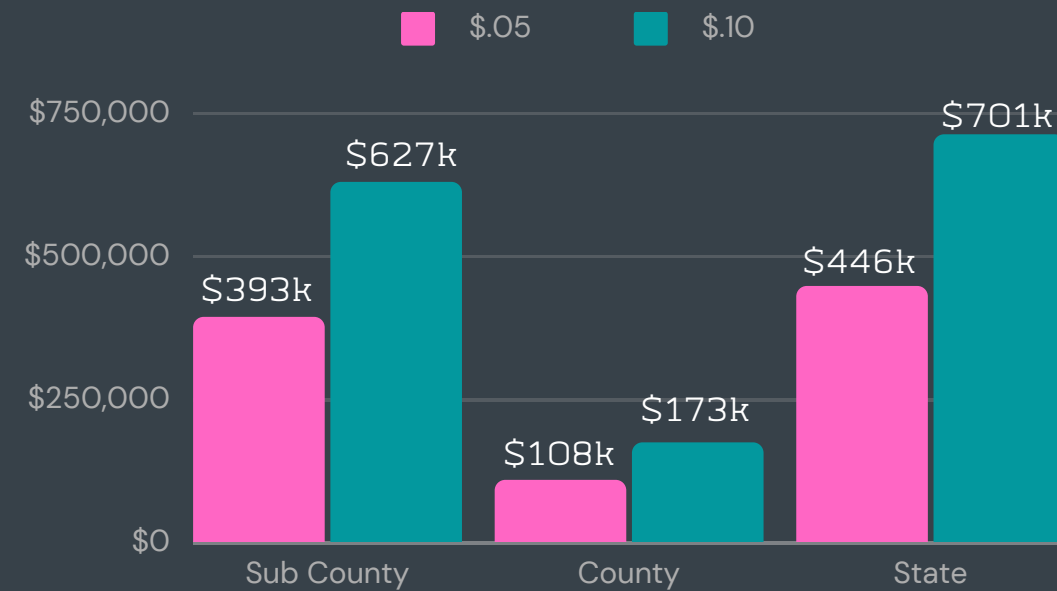
FTE's Supported/Created



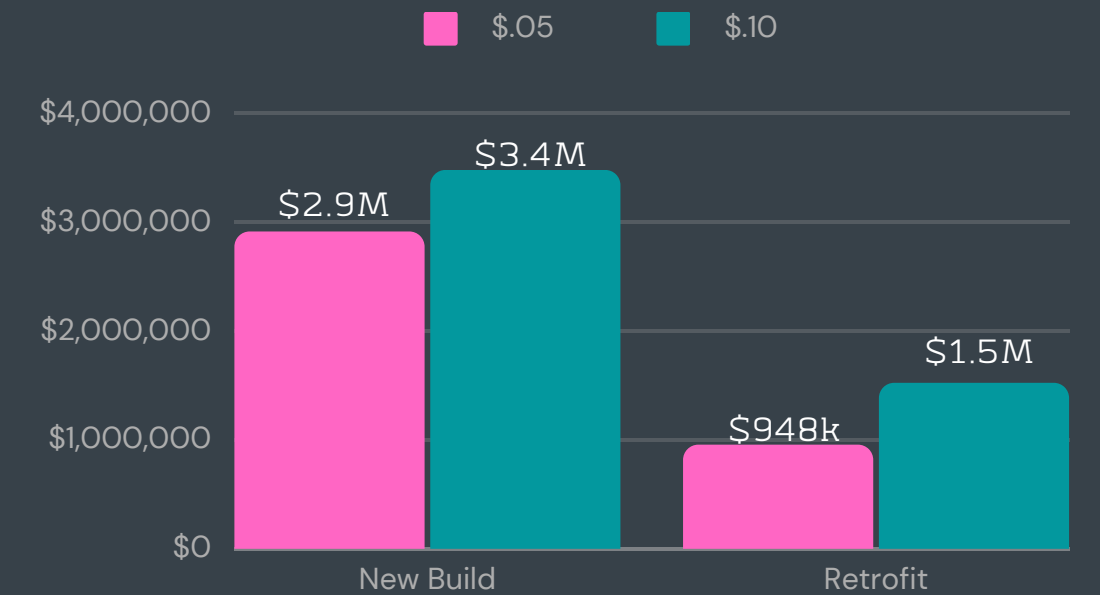
Tax Impacts with a New Build



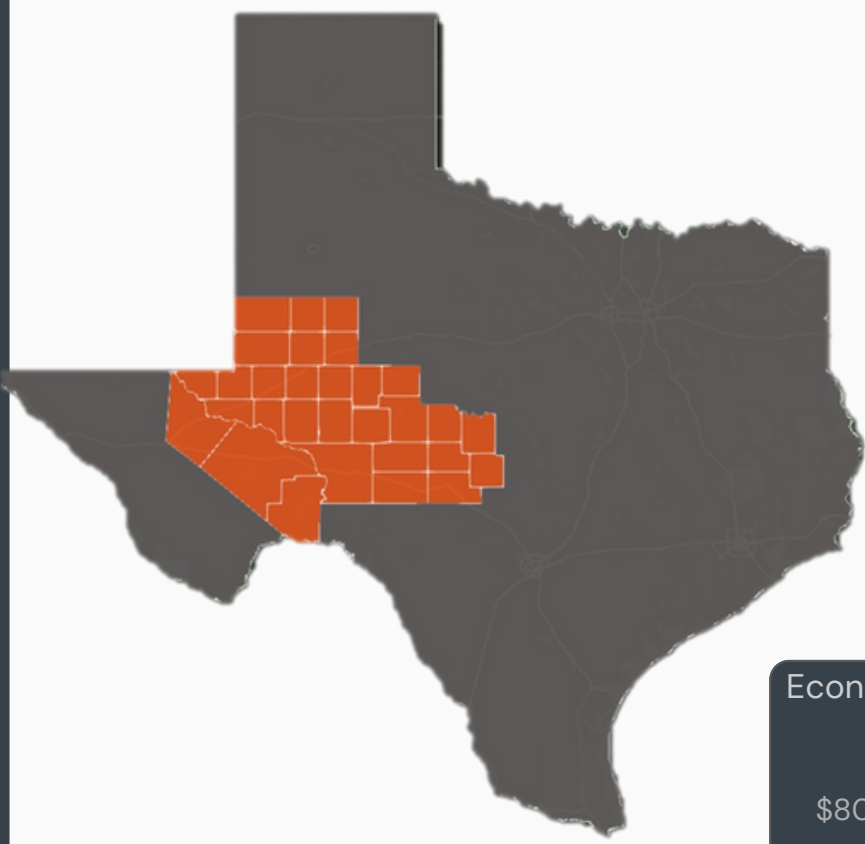
Tax Impacts with Retrofitting Existing Facility



Total Tax Impacts



SCENARIO 2: WEST TEXAS REGION



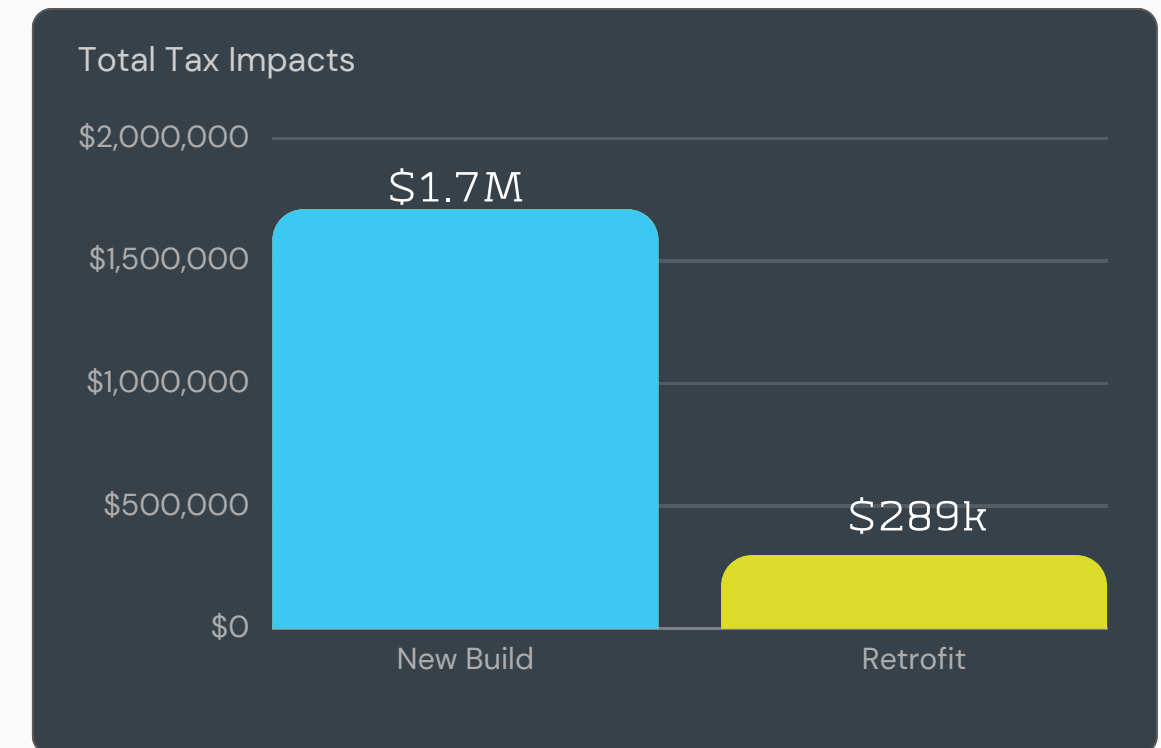
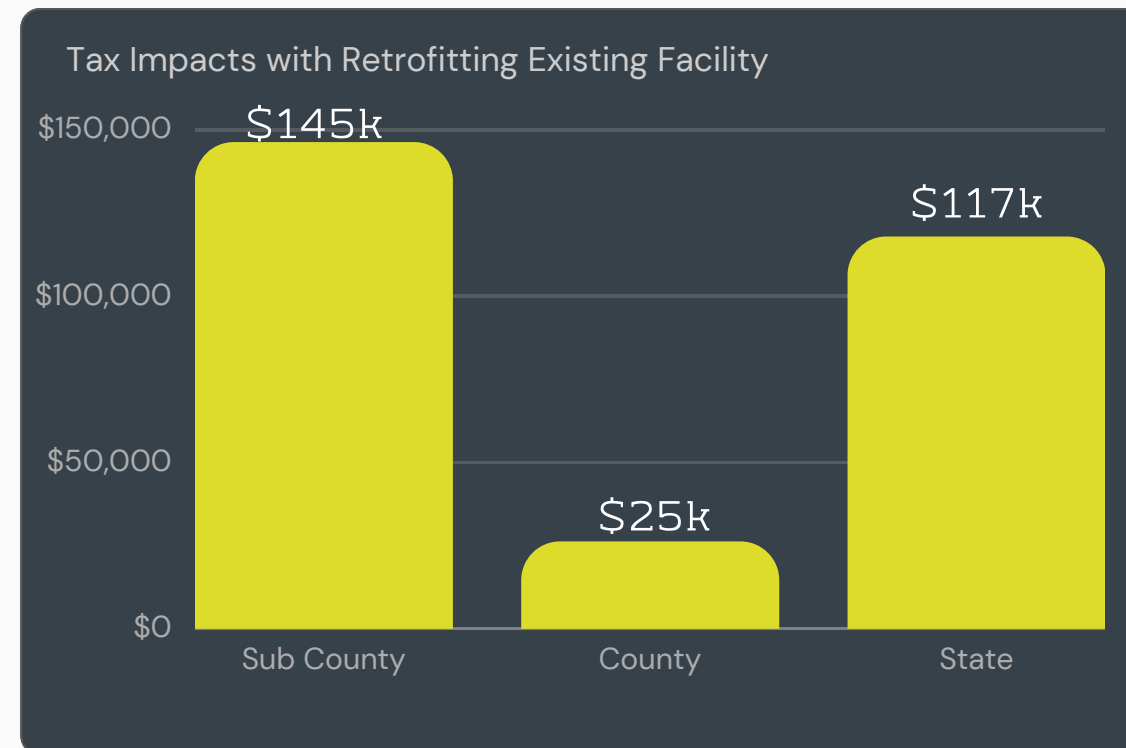
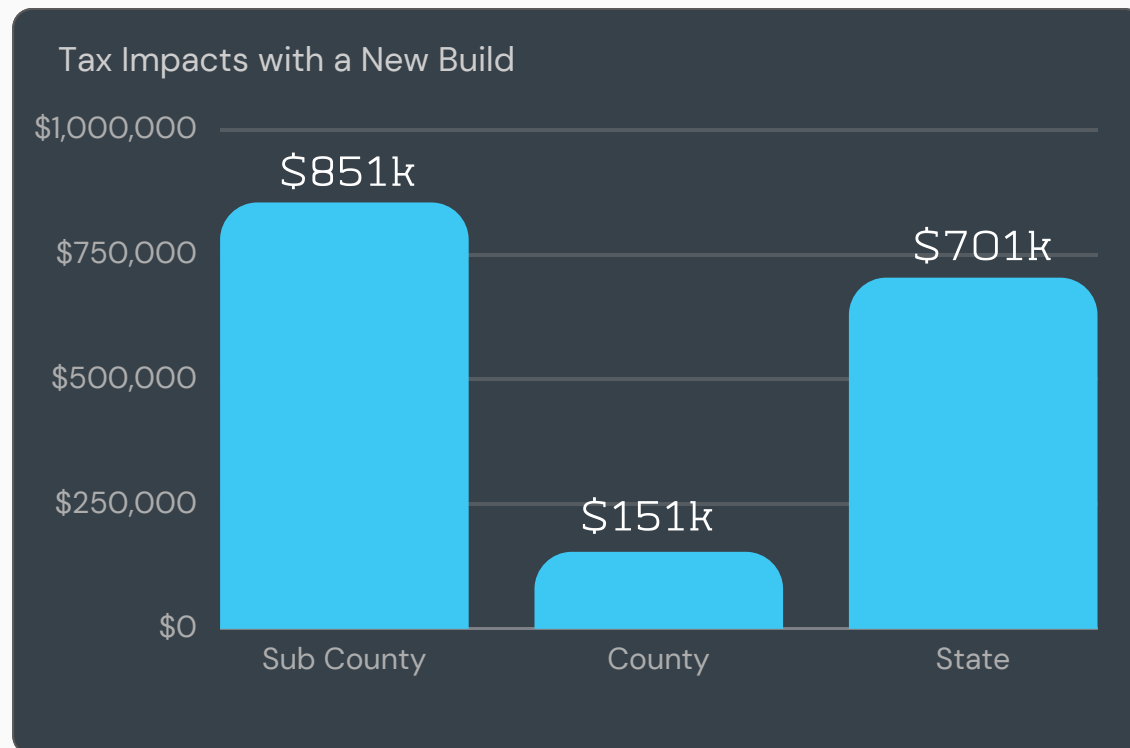
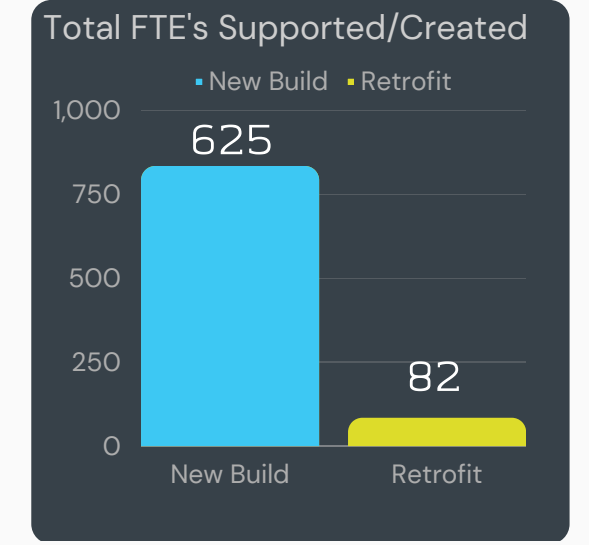
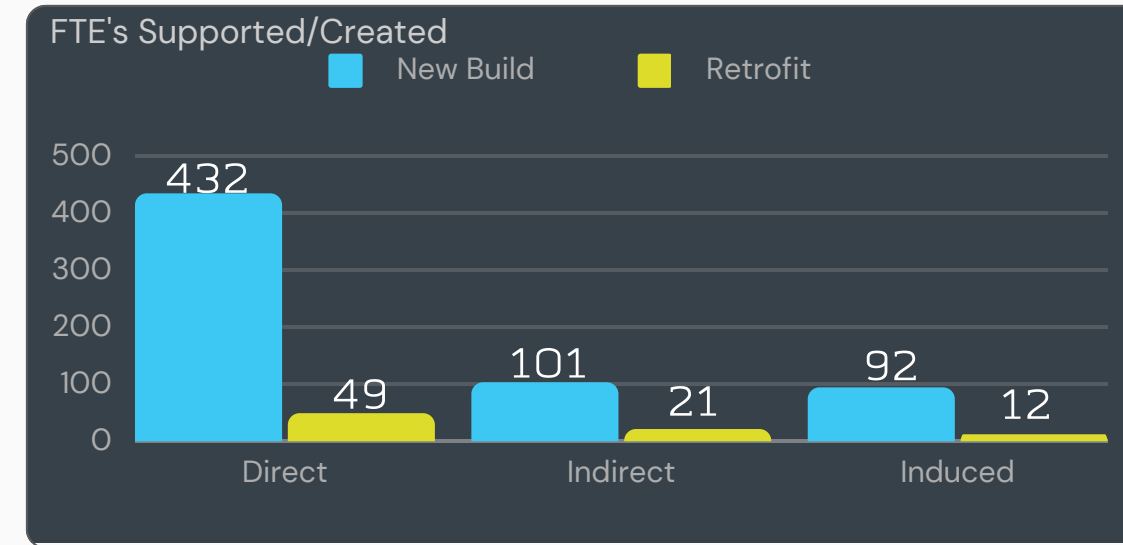
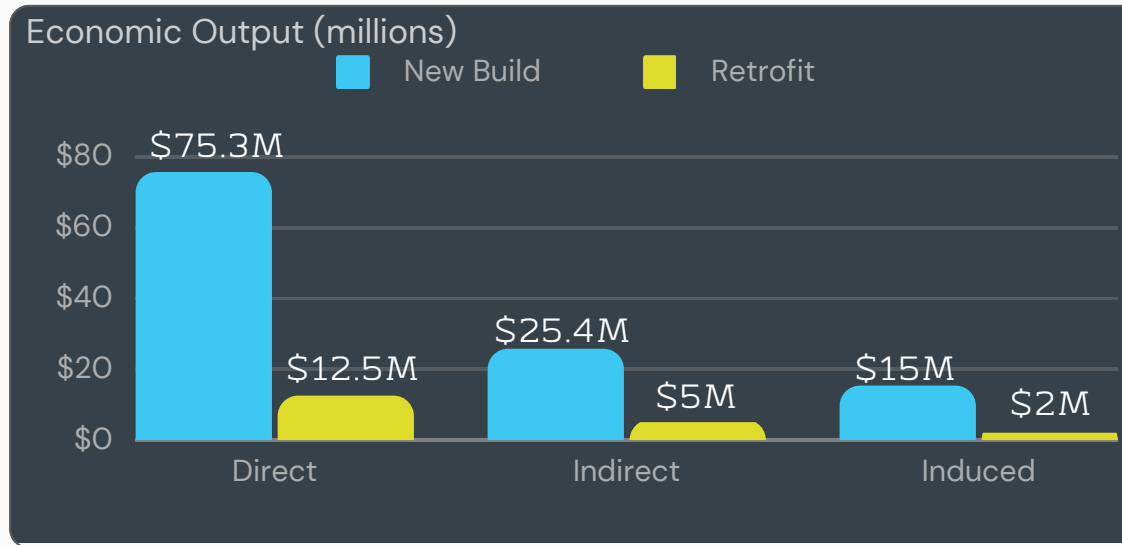
30 Counties in the region

Population

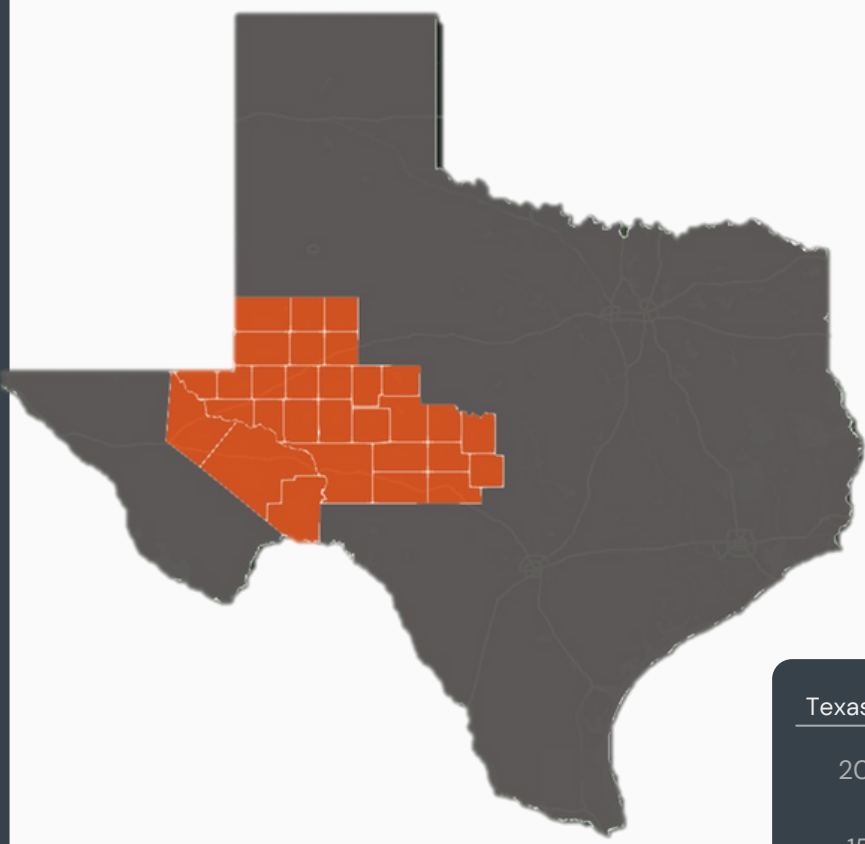
638,751

Median Income

\$63,488



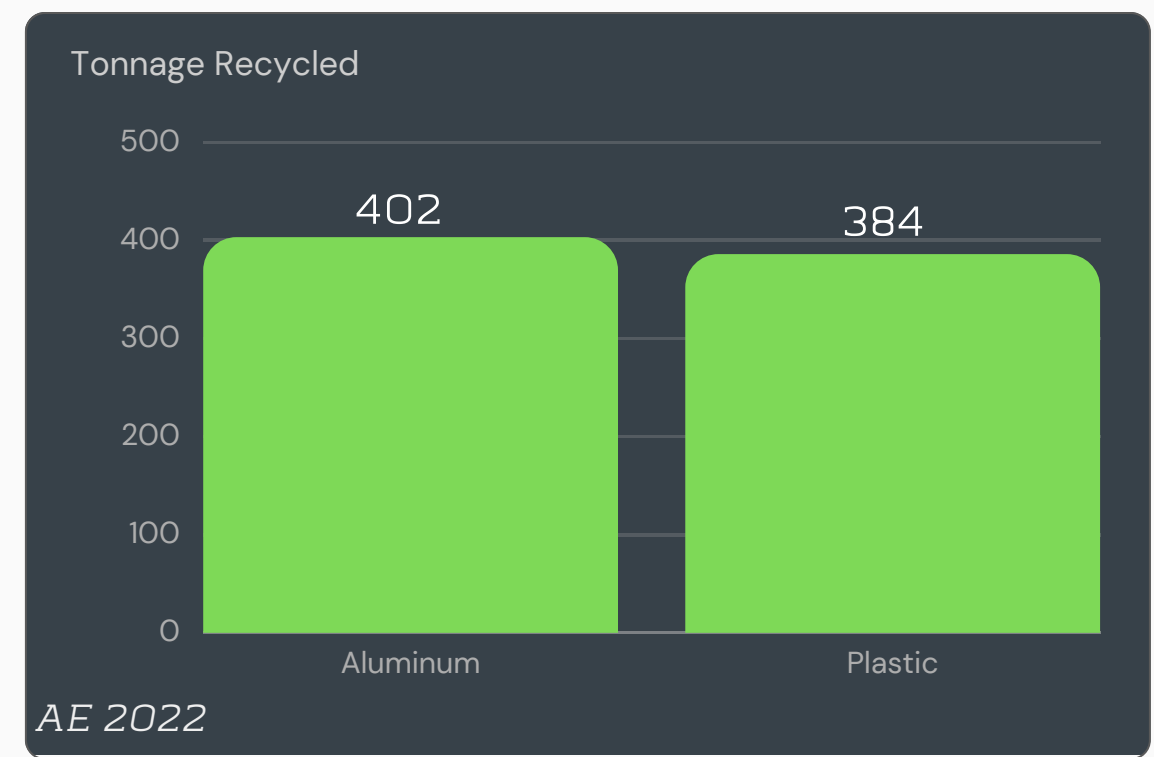
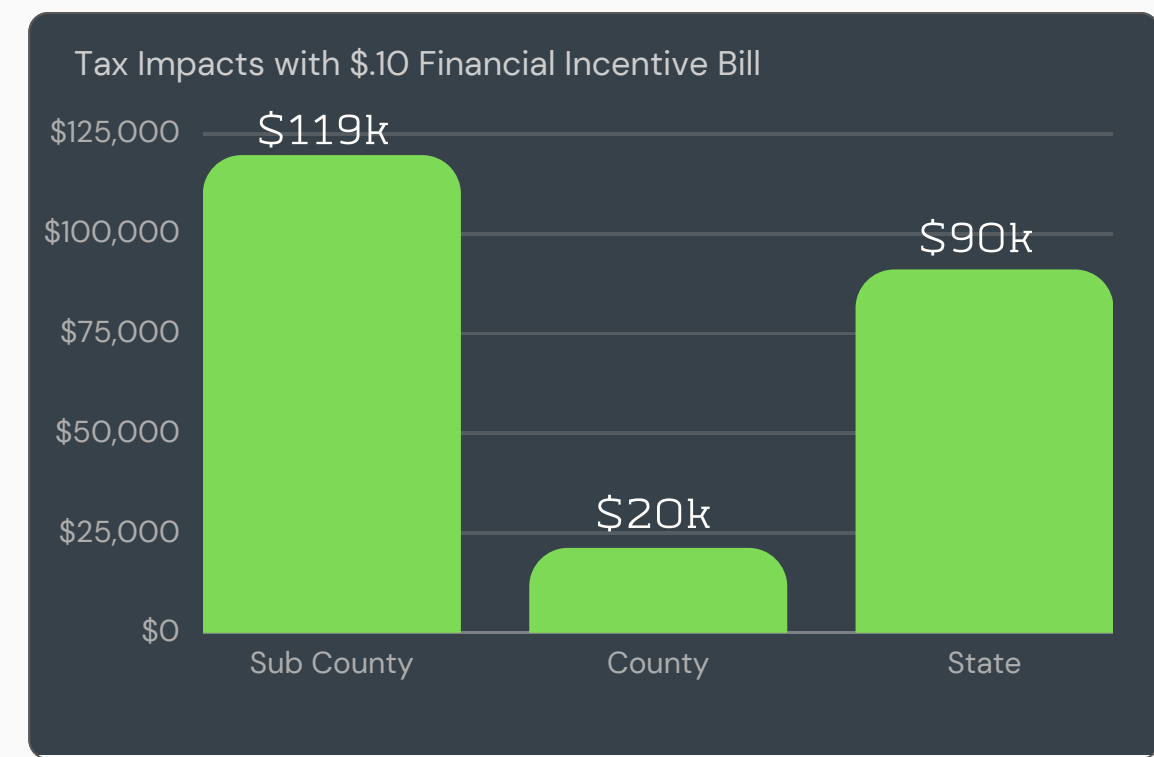
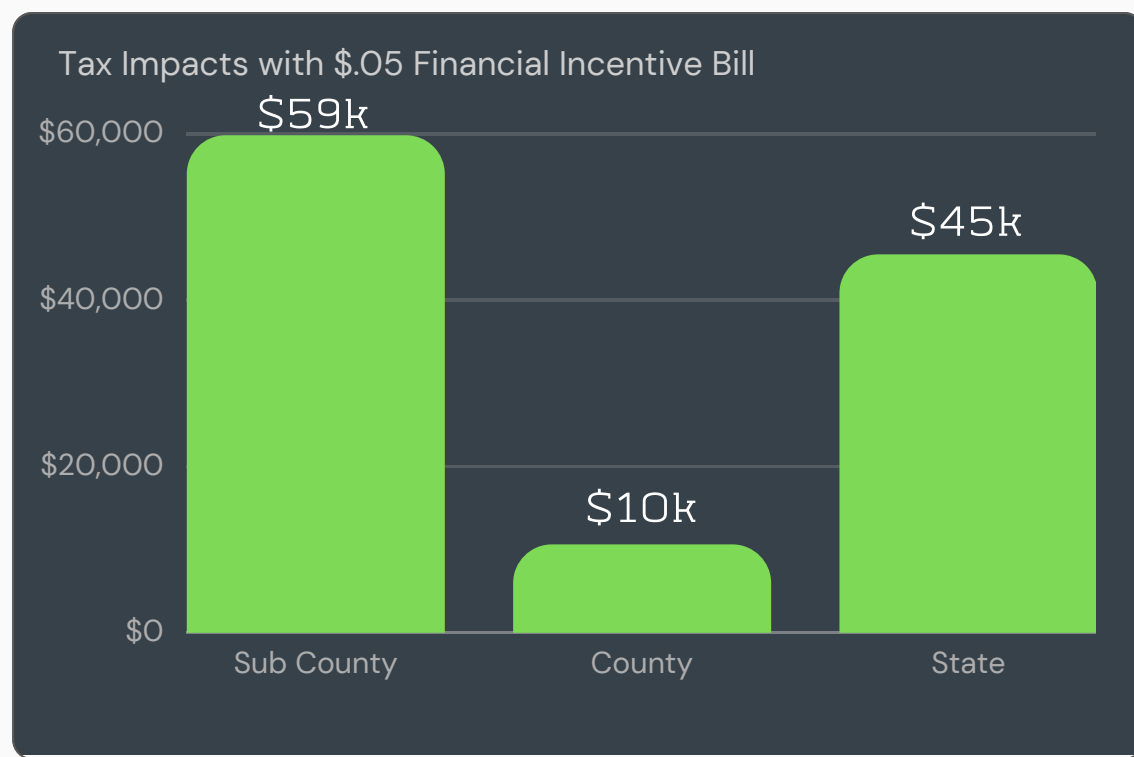
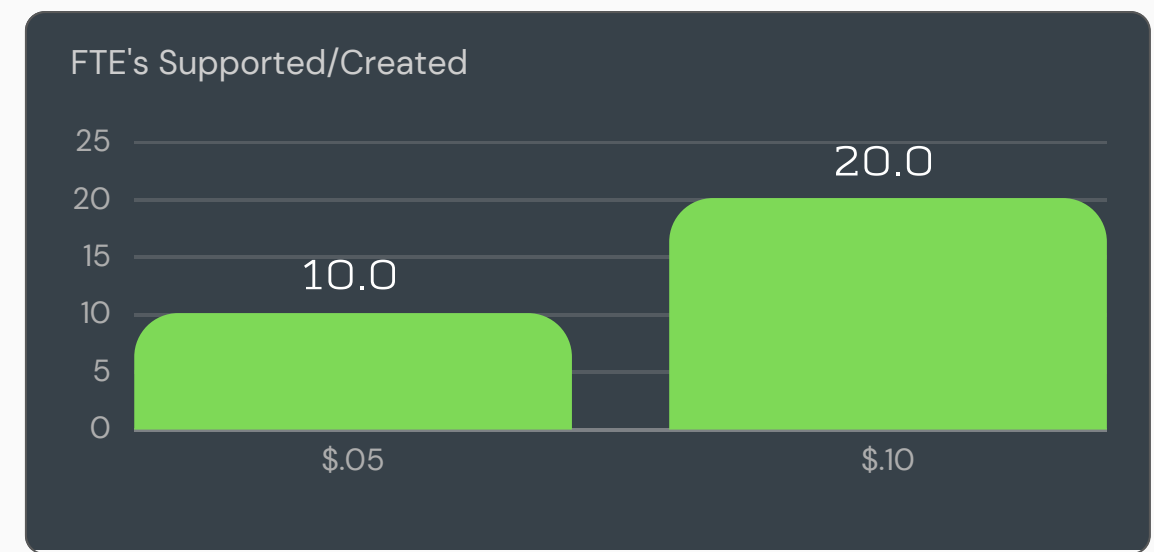
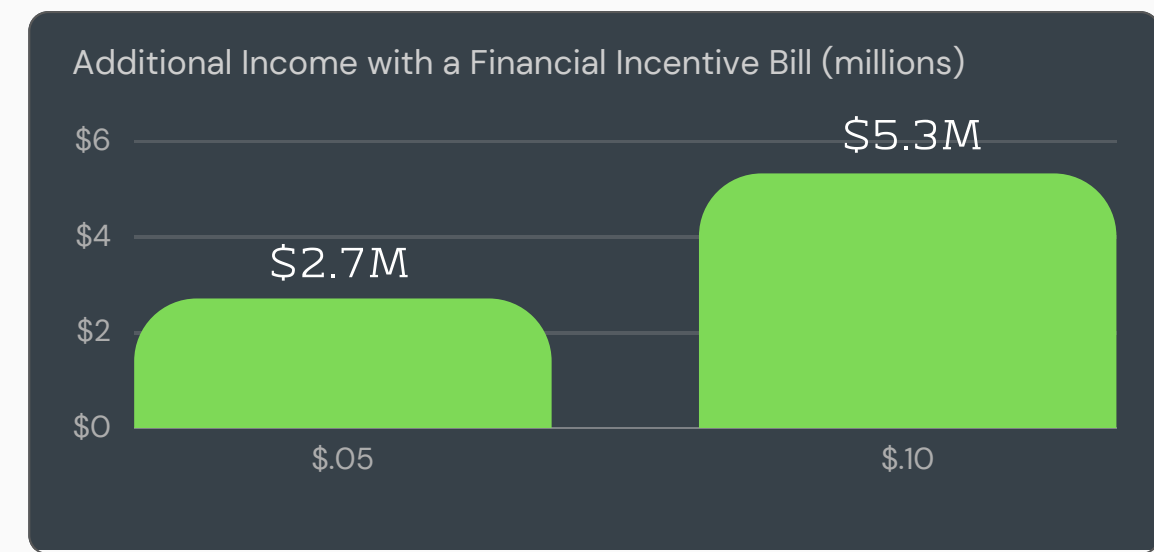
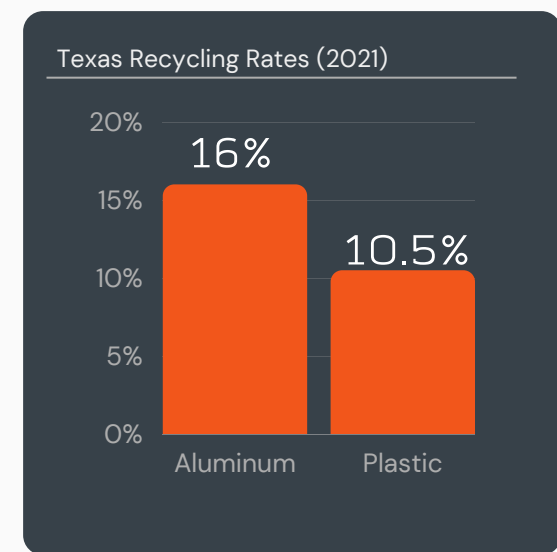
SCENARIO 3: WEST TEXAS REGION



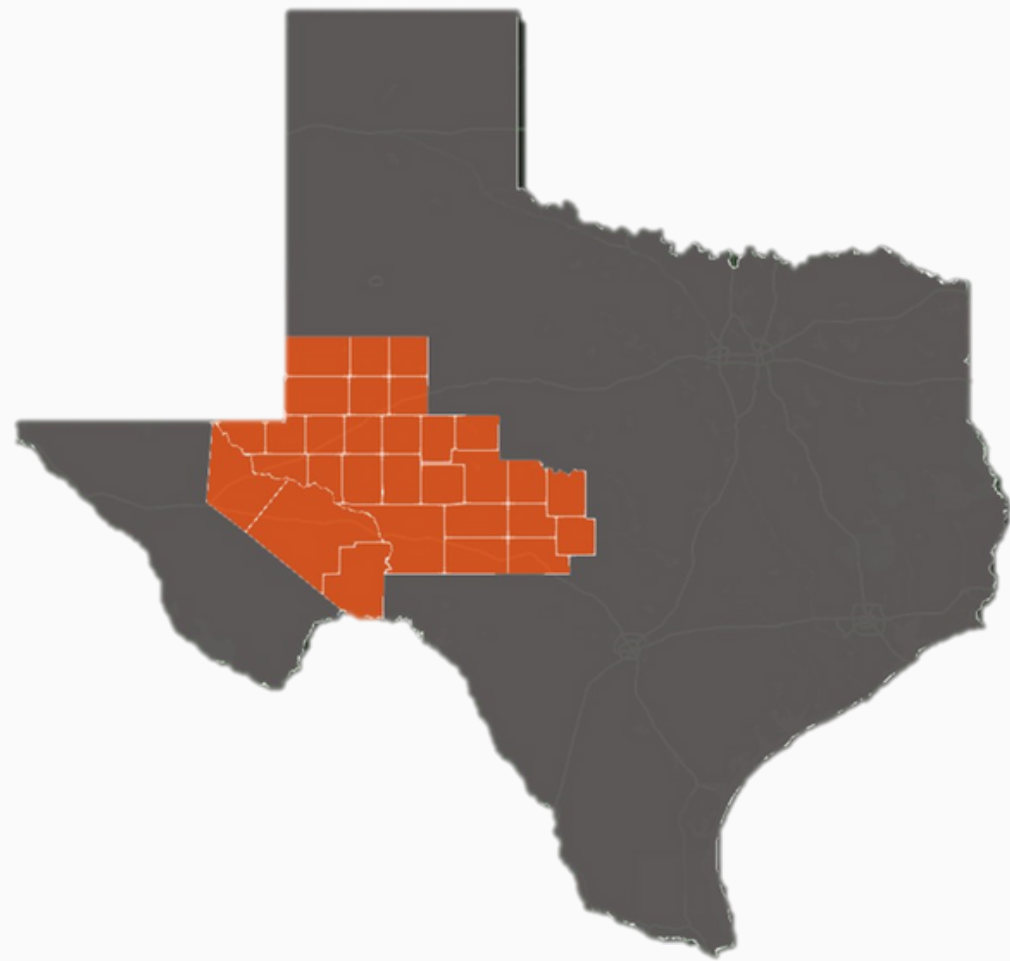
30 Counties in the region

Population
638,751

Median Income
\$63,488



SUMMARY: WEST TEXAS REGION



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30 Counties in the region

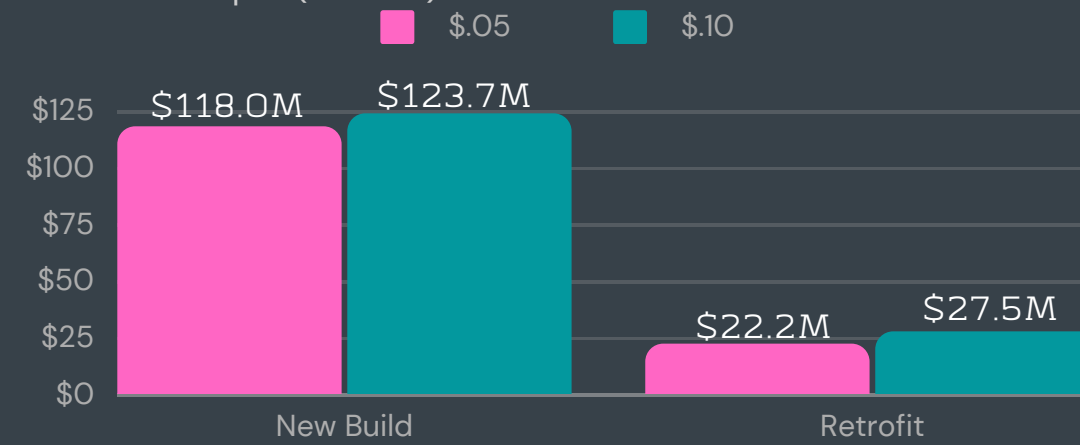
Population

638,751

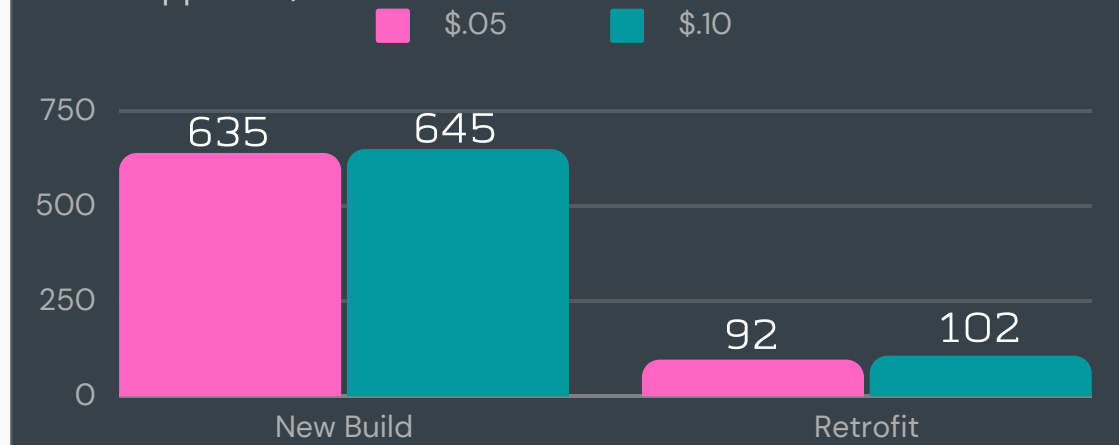
Median Income

\$63,488

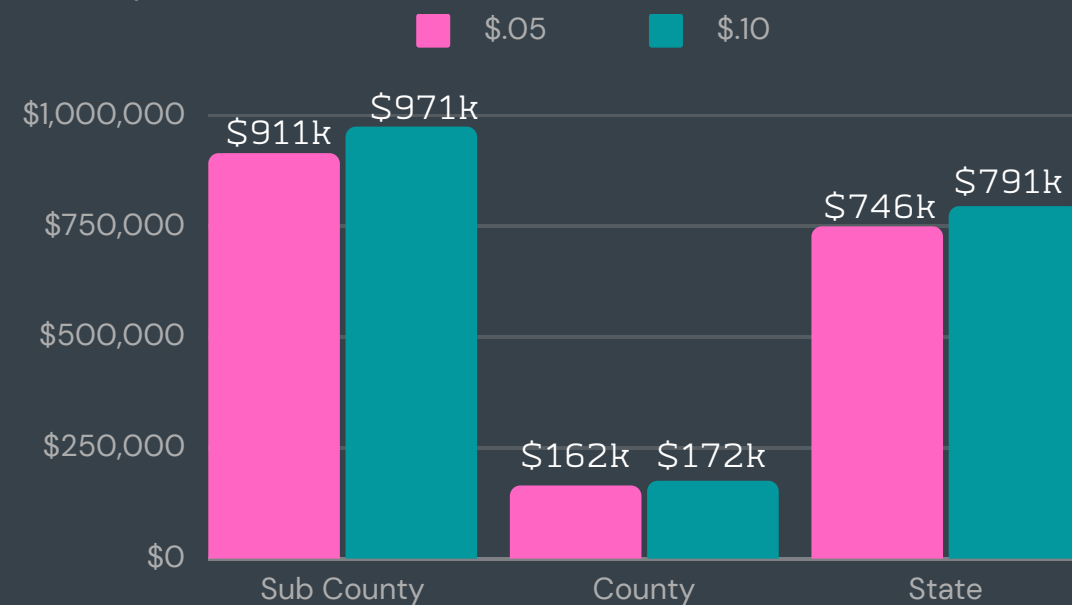
Economic Output (millions)



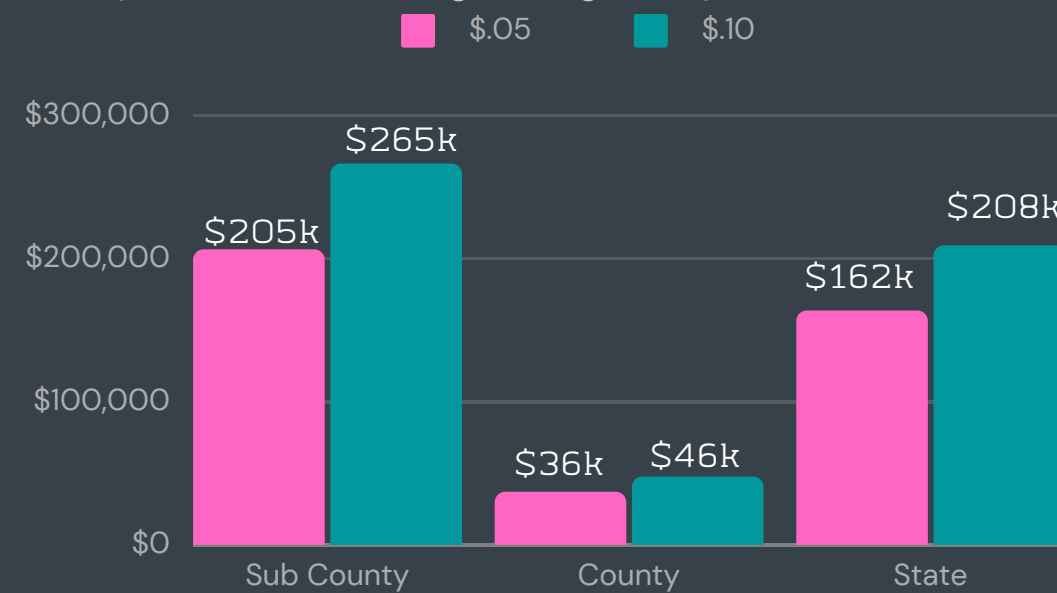
FTE's Supported/Created



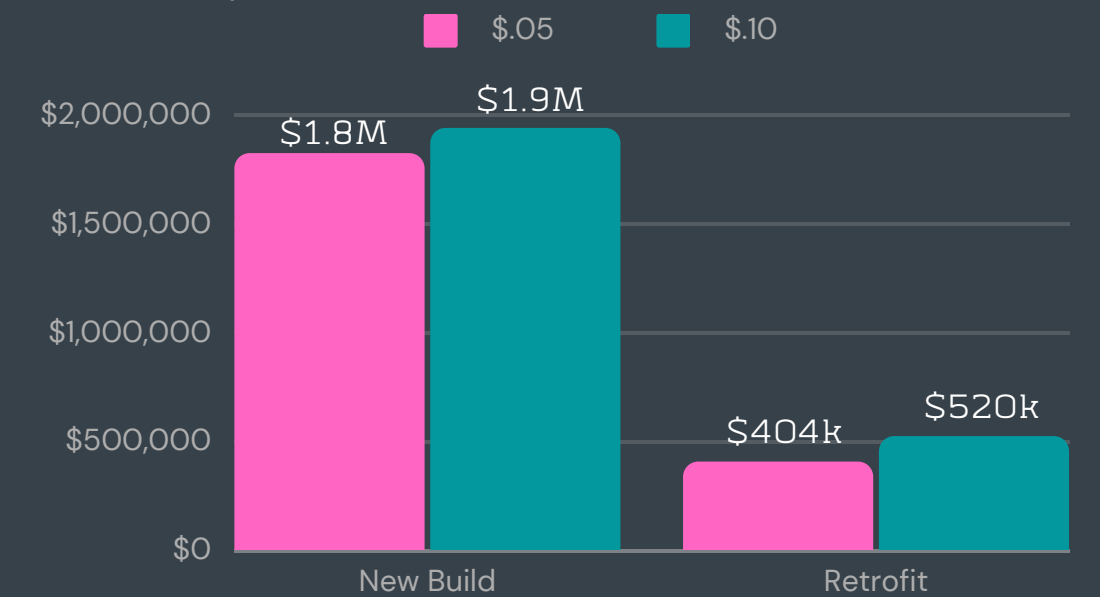
Tax Impacts with a New Build



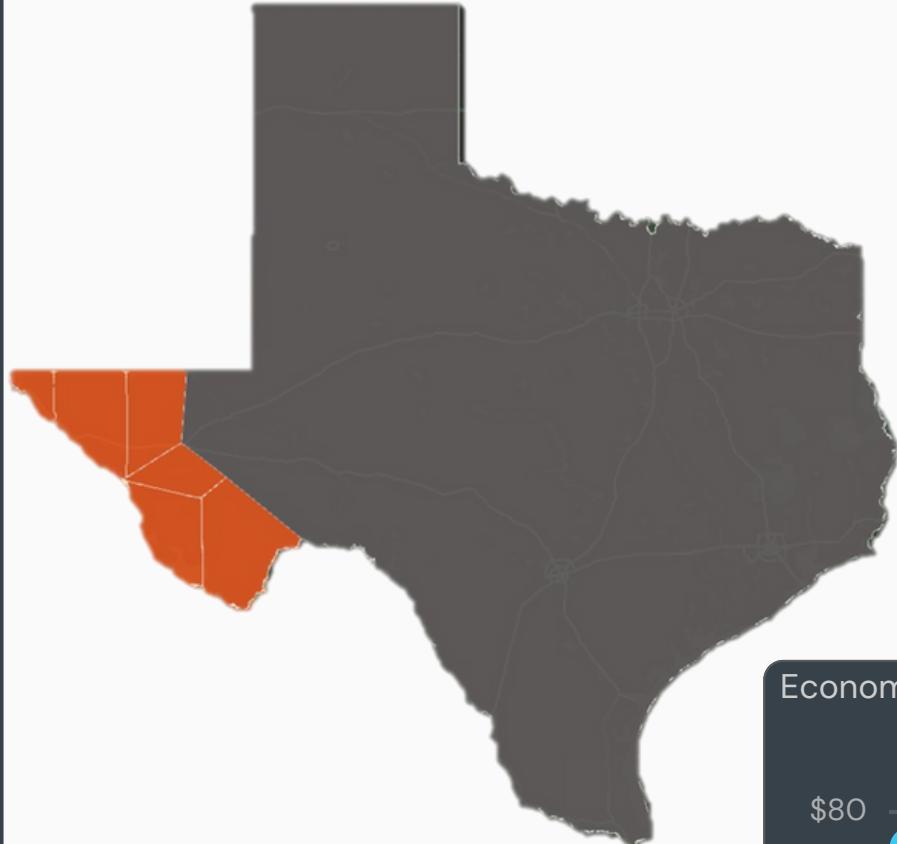
Tax Impacts with Retrofitting Existing Facility



Total Tax Impacts



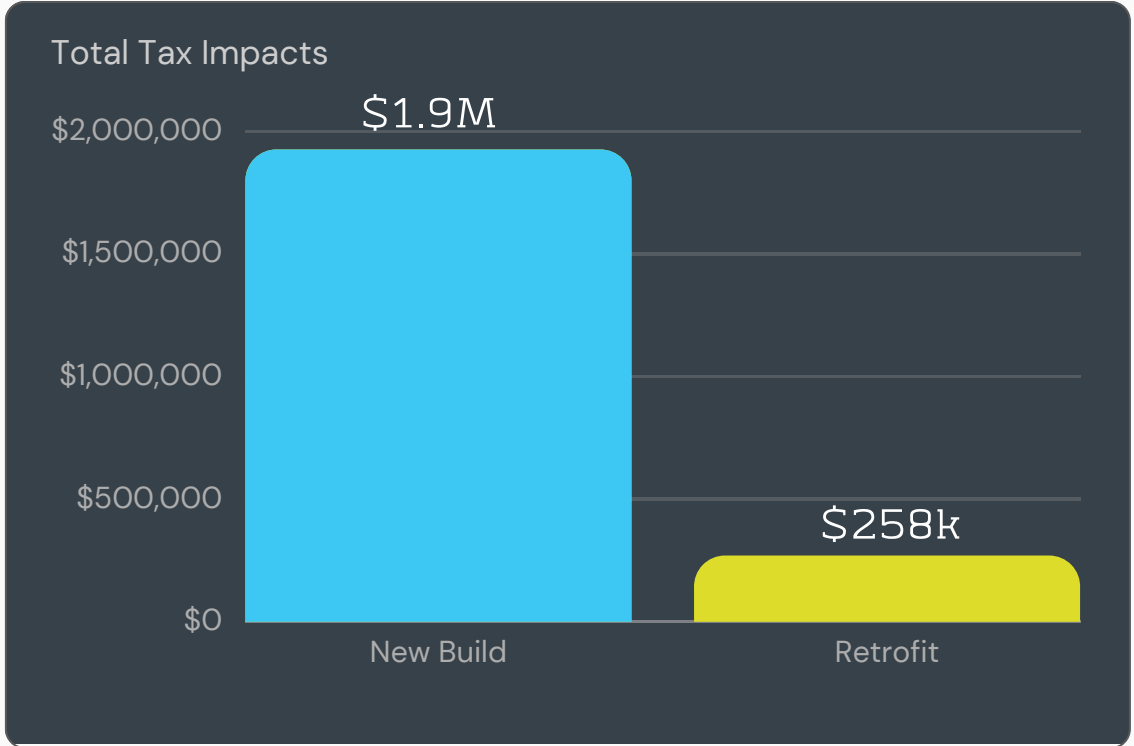
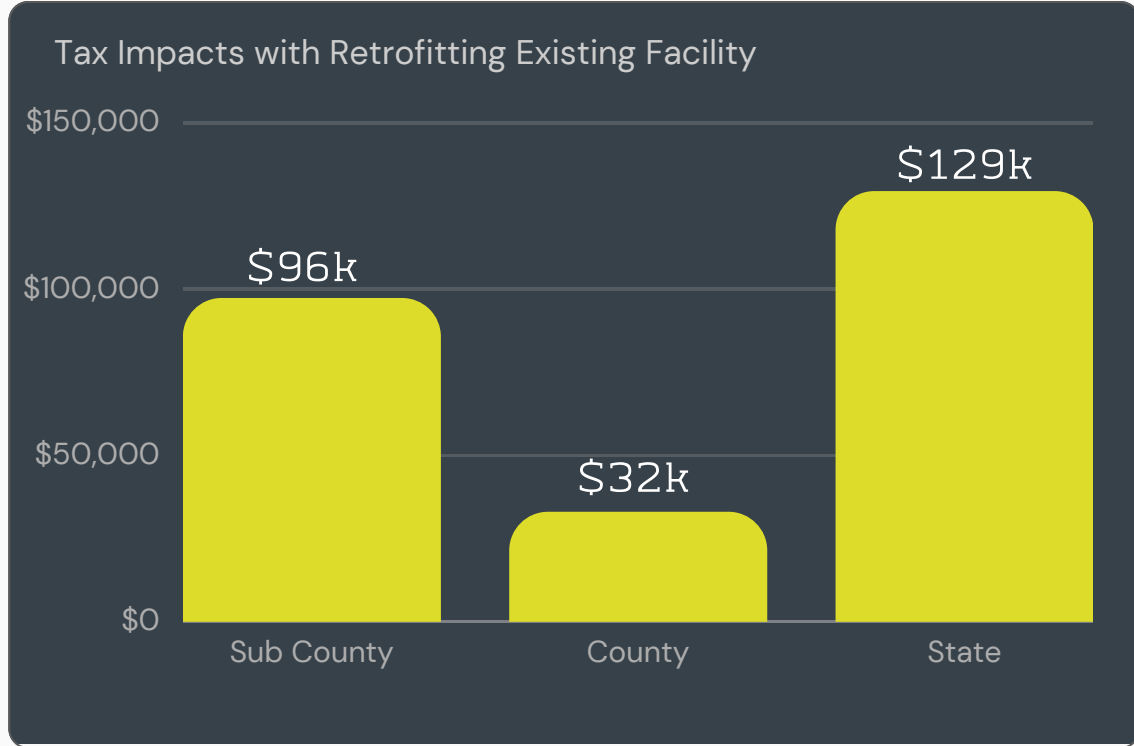
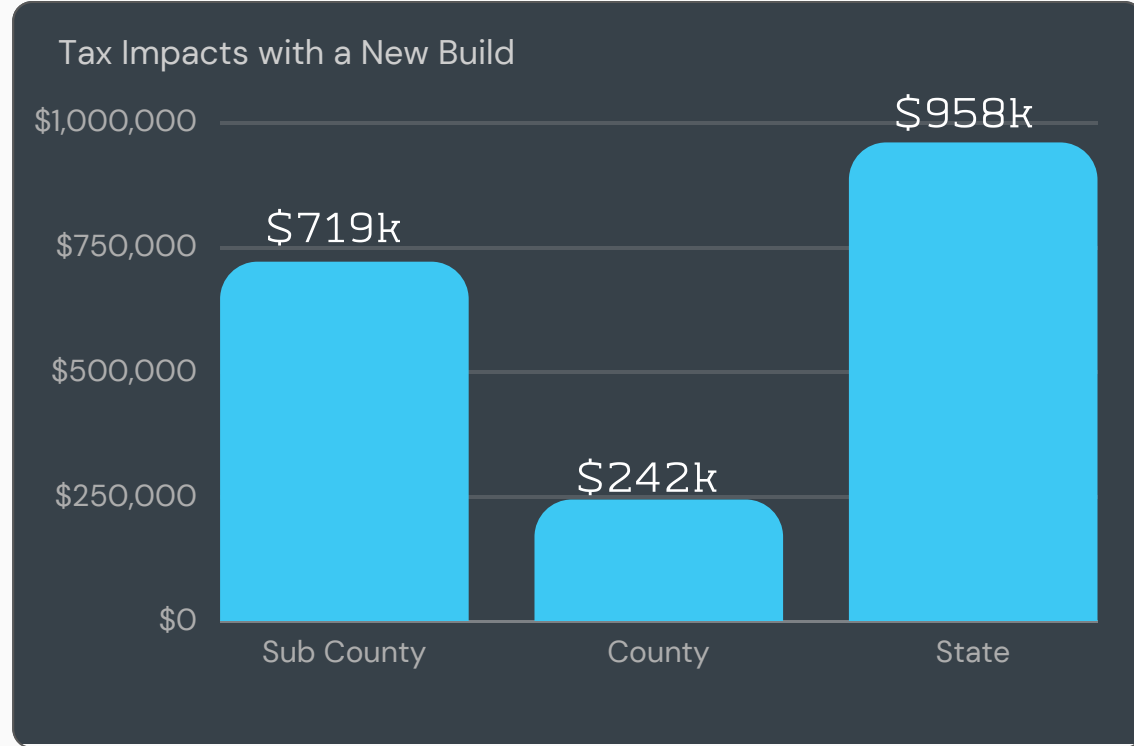
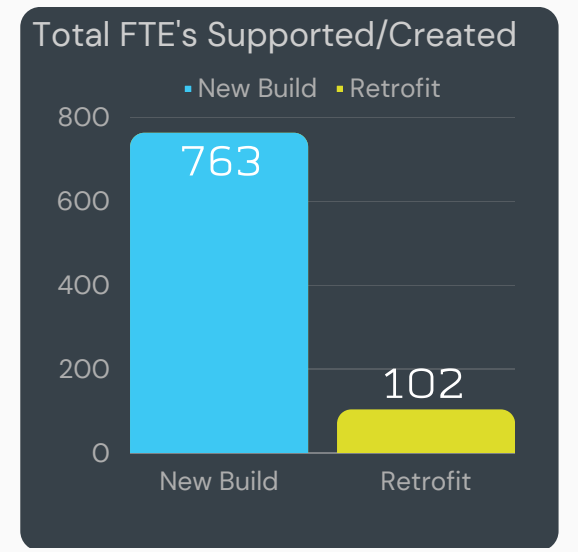
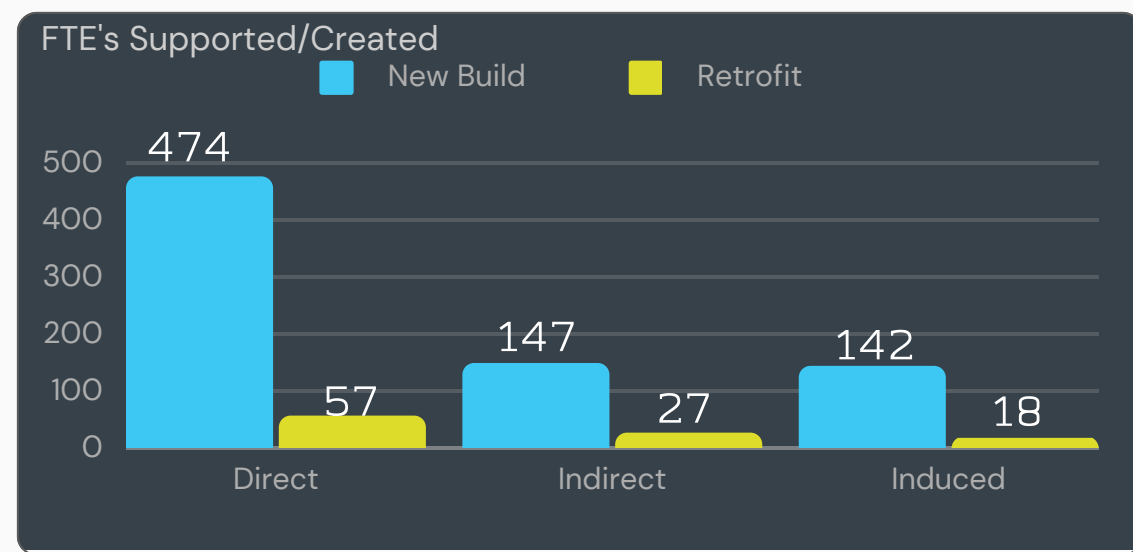
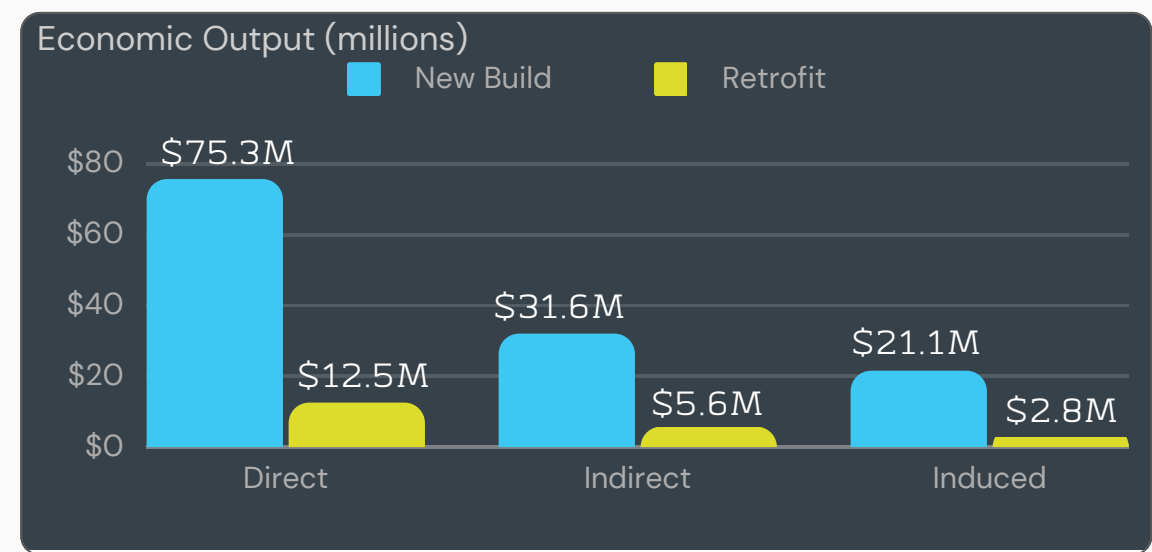
SCENARIO 2: UPPER RIO GRANDE REGION



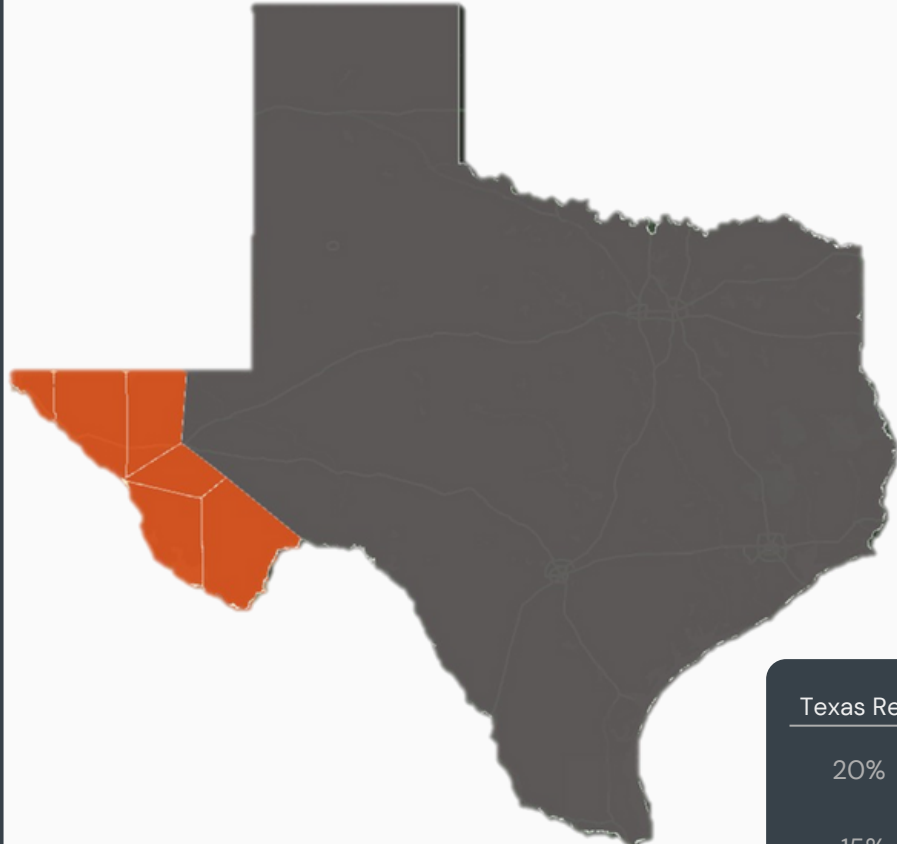
6 Counties in the region

Population
890,966

Median Income
\$46,626



SCENARIO 3: UPPER RIO GRANDE REGION

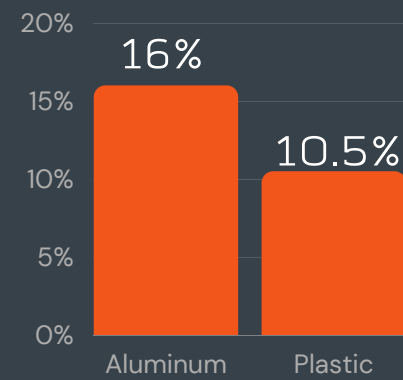


6 Counties in the region

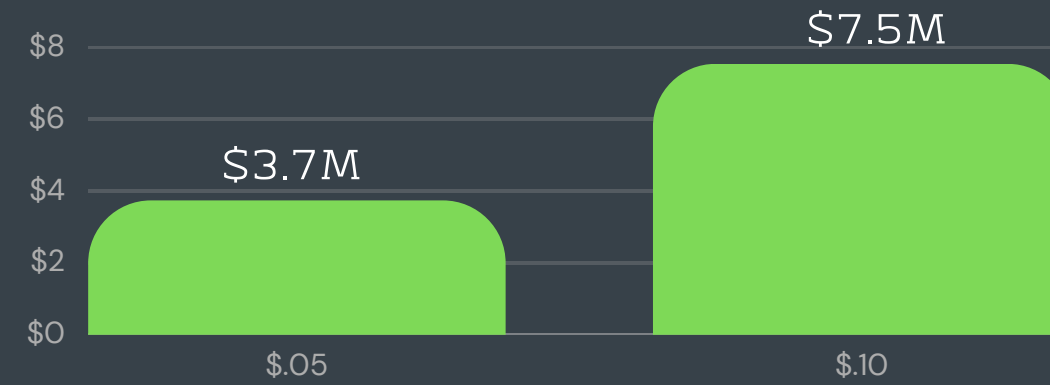
Population
890,966

Median Income
\$46,626

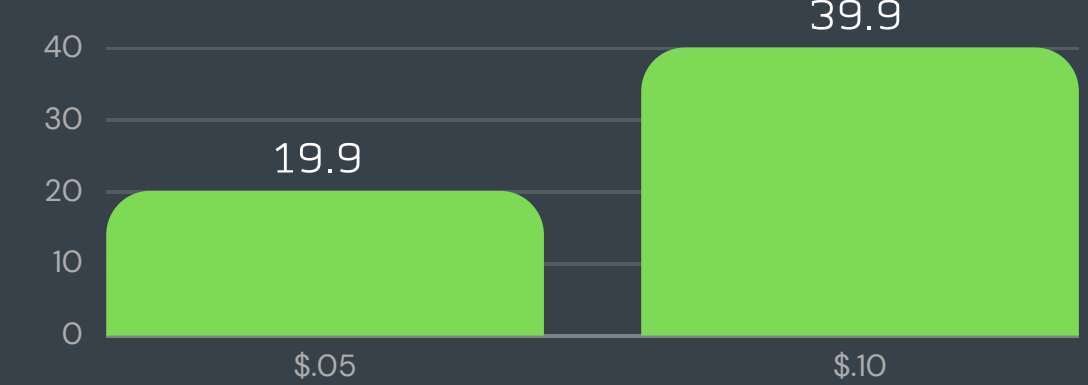
Texas Recycling Rates (2021)



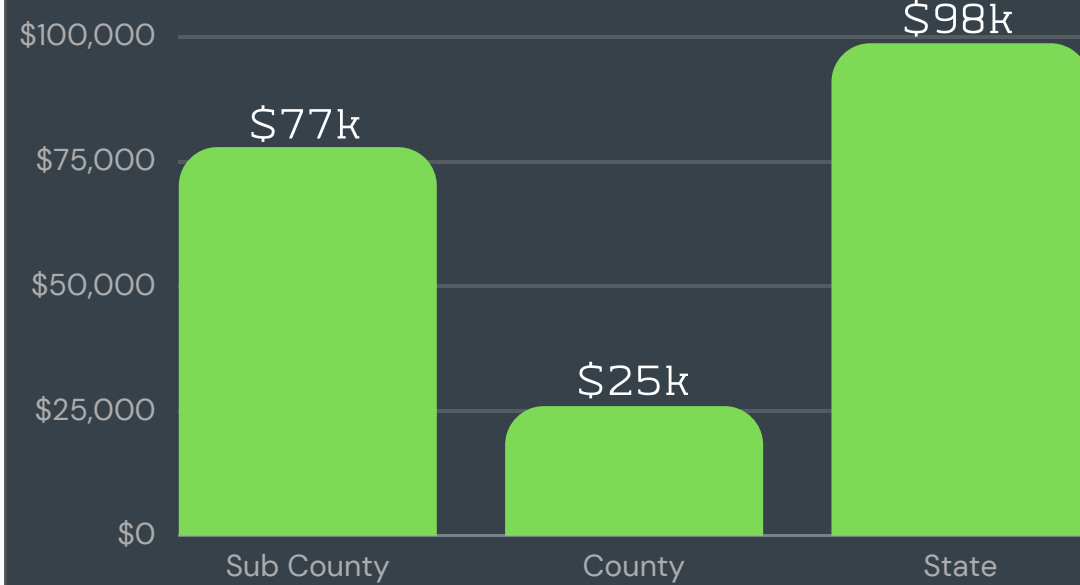
Additional Income with a Financial Incentive Bill (millions)



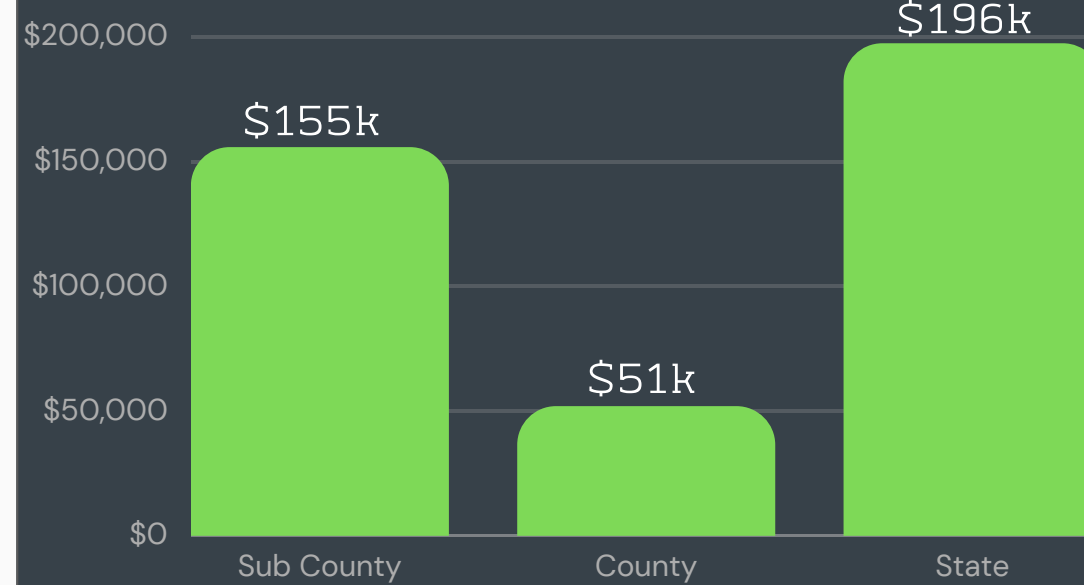
FTE's Supported/Created



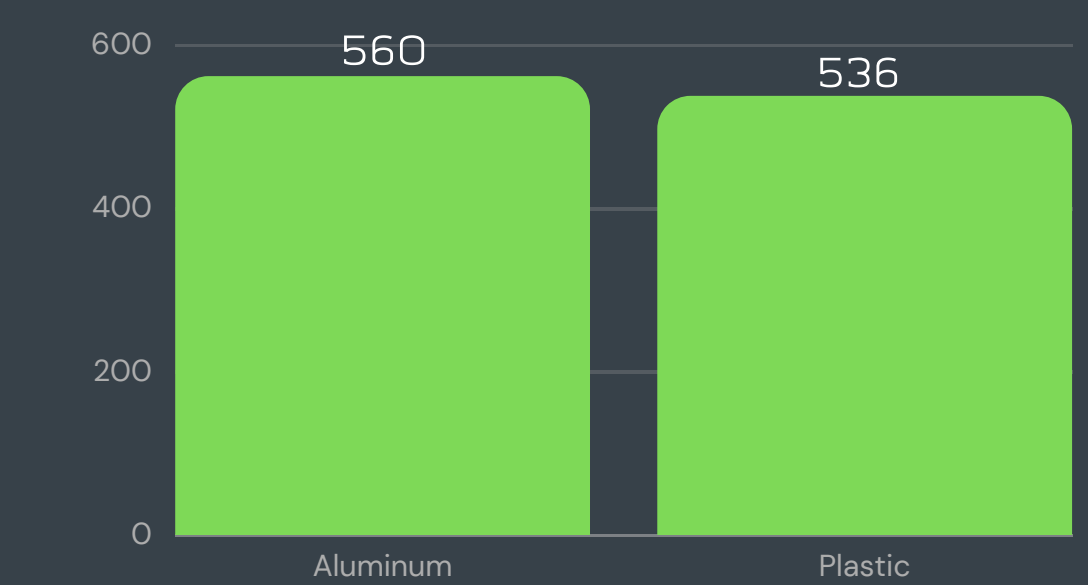
Tax Impacts with \$.05 Financial Incentive Bill



Tax Impacts with \$.10 Financial Incentive Bill



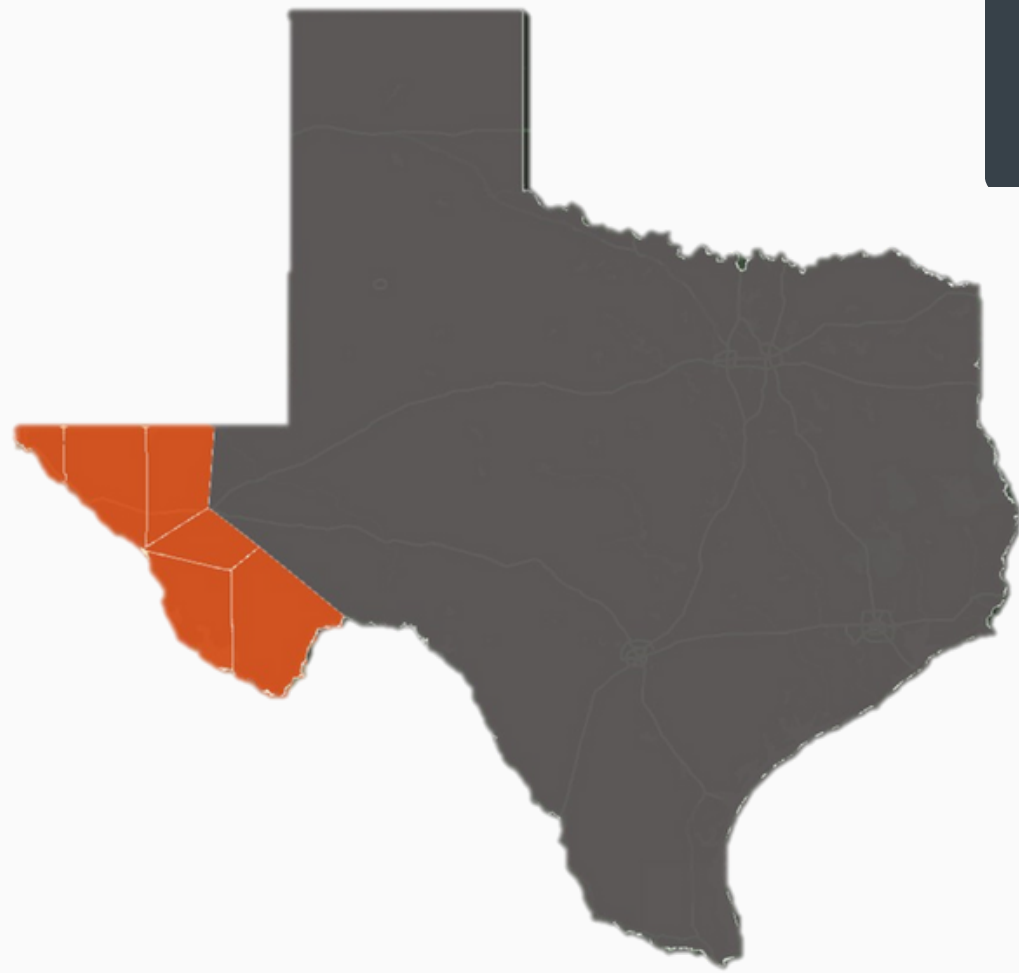
Tonnage Recycled



AE 2022

*CCPM includes all common containers and packaging materials, except cardboard

SUMMARY: UPPER RIO GRANDE REGION



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6 Counties in the region

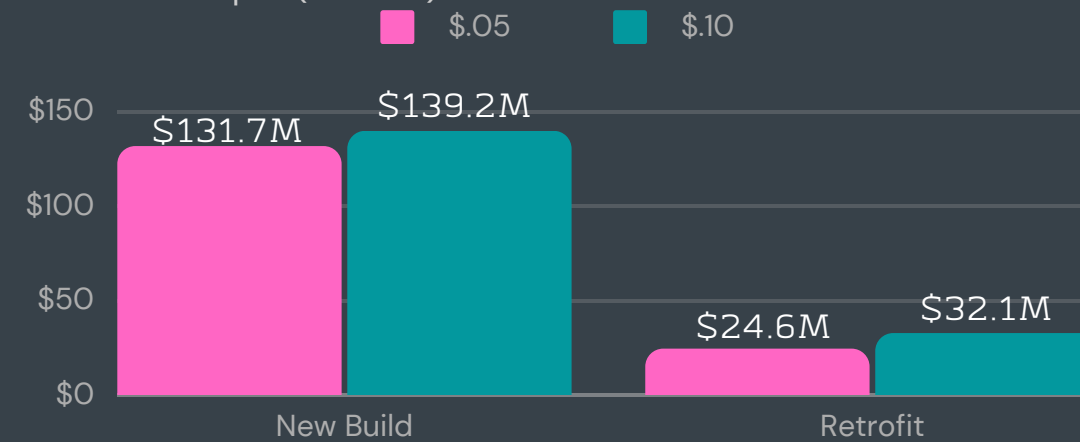
Population

890,966

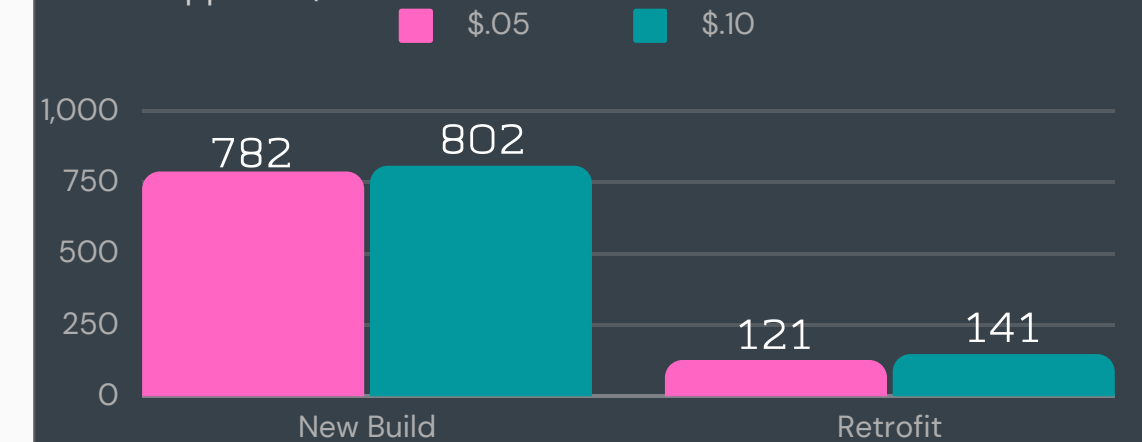
Median Income

\$46,626

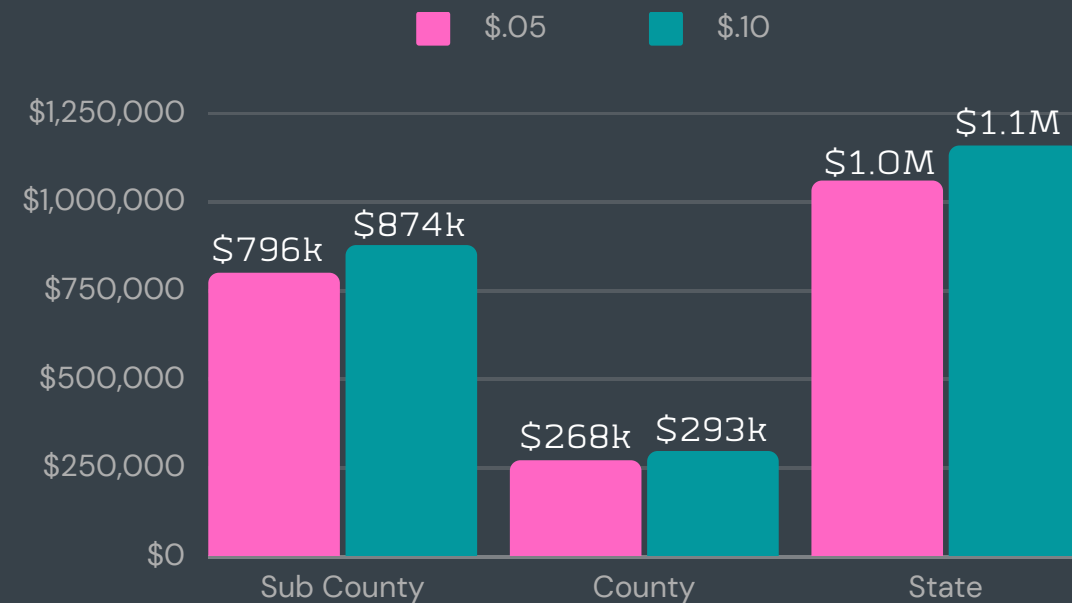
Economic Output (millions)



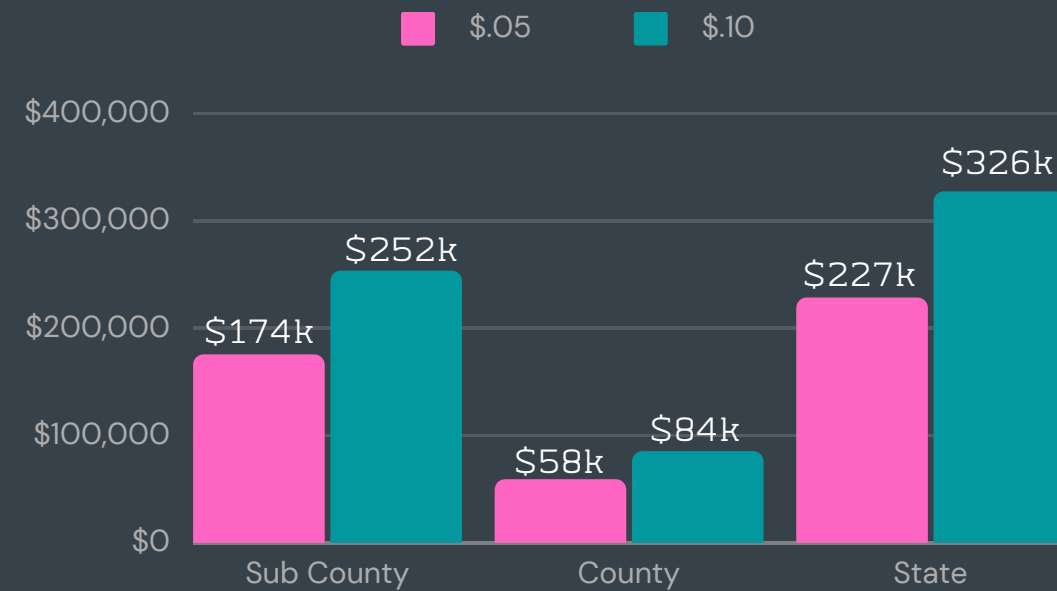
FTE's Supported/Created



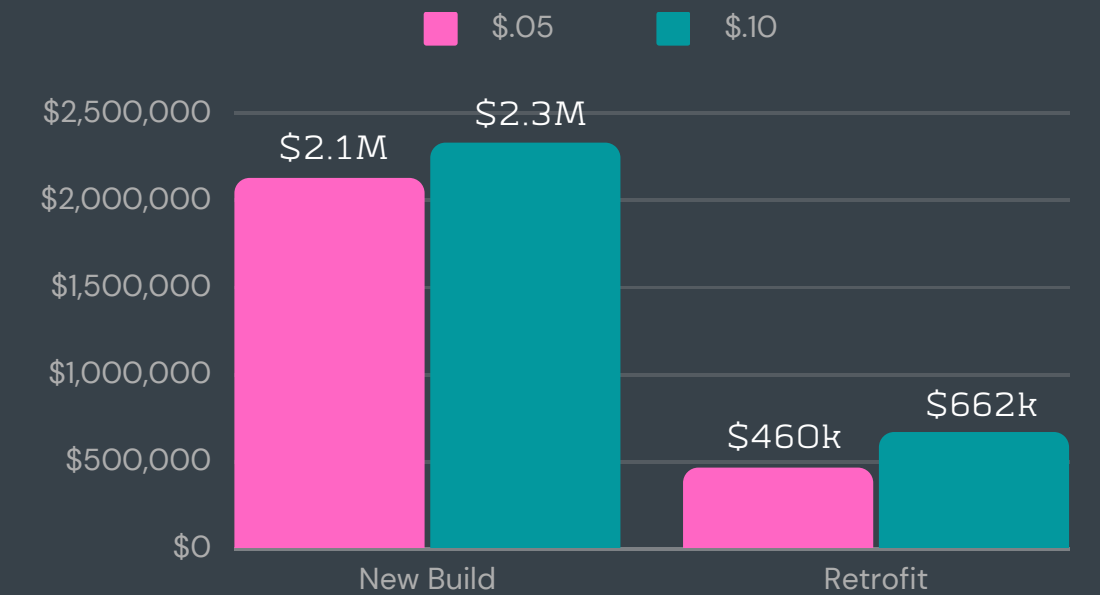
Tax Impacts with a New Build



Tax Impacts with Retrofitting Existing Facility



Total Tax Impacts



Conclusion

The economic development opportunities surrounding recycling-based financial incentive systems focus on job creation, tax generation, and infrastructure improvements. Hallmarks of a robust and strong economy, Texas has the opportunity to improve its transportation and recycling infrastructure across the state, and do so in a way which encourages more businesses to expand in Texas and relocate to Texas. Additionally, experts within the recycling industry anticipate increased international trade should Texas implement a recycling-based financial incentive system.

AT 2021 RECYCLING RATES:

A bag drop hub-and-spoke system could lead to:

\$258.6M to \$1.6B in economic activity

1,176 to 9,176 FTEs created or sustained

\$4.9M to \$26.0M in new local and state tax revenues.

A more aggressive, recycling-based financial incentive system

would create an additional:

\$124.1M to \$248.6M in increased disposable income

741 to 1,482 jobs

\$7.5M to \$14.8 in new tax revenues.

These recycling-based financial incentive systems have the capacity to grow and increase economic growth throughout the state of Texas as more and more people recycle. As recycling rates increase, the economic activity generated from recycling-based financial incentive systems will increase.



TEXANS FOR CLEAN WATER

Sources

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Special thanks to Byron Geiger, Eric Winter, Laura Hennemann, Liz Donohue, Megan Lane, and Sarah Bloomquist for their specific insights into the waste and recycling industries.