STRAWBERR MANSION

A Community First Preservation Plan

HSPV 701 PRESERVATION STUDIO | FALL 2017

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The pattern of vacant lots, typical of Strawberry Mansion. Photography taken from Hollingsworth Street.

STUDIO DETAILS

This report was assembled during the 2017 Fall semester by a team of students in the Graduate Program of Historic Preservation at the University of Pennsylvania School of Design, working under the guidance of studio advisor Randall Mason.

ACKNOWLEDGEMENTS

We would like to thank the Strawberry Mansion community, who took the time to share their stories and their neighborhood with us.

GRAPHICS

Unless otherwise stated, all photographs, maps, and graphics were produced by team members for the purpose of this report.

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EXECUTIVE SUMMARY

SCOPE OF PROJECT

The North Philadelphia neighborhood of Strawberry Prioritizing how current residents engage and interact Mansion possesses a charismatic and rich history that with both their tangible and intangible heritage, we has long been jeopardized by disinvestment - resulting developed a Community-First Preservation Plan. in deteriorating historic building stock, elevated levels of The plan recognizes that the need to preserve the poverty, and a disconnect from development happening neighborhood's existing social fabric is as essential to in the city's central core. Decades of this practice have that of its physical fabric. The Strawberry Mansion left the community grappling with the challenges of Community Development Corporation, a local and active widespread unemployment, high land and building neighborhood non-profit, served as our entry point into vacancies, and a dearth of community resources. Today the neighborhood; we adopted their approximate service the neighborhood is facing a new threat to its historical area as the boundaries for our study, fully recognizing and cultural identities, gentrification. that to many residents, the physical demarcation of Strawberry Mansion is more fluid than fixed.

The following report represents an in-depth study of Strawberry Mansion, conducted by a team of graduate Through extensive interviews, in depth research, students from the University of Pennsylvania's program community engagement, neighborhood surveys, in Historic Preservation. It utilizes preservation and mapping, and documentation, a plan was developed that protects existing residents' homes, culture, social planning analyses to assess the full range of issues and opportunities facing the neighborhood to propose networks, and sense of place, while still encouraging a means of mitigating redevelopment in order to inclusive growth and development. By prioritizing strengthen its assets. Traditionally, the preservation both the intangible and tangible heritage of Strawberry profession has concentrated its work on architectural Mansion, this plan seeks to enable the neighborhood's form, historical value, and the physical protection of the existing community to pursue equitable revitalization built environment. However, conscious of Strawberry that balances the necessity for affordable housing, Mansion's concerns over displacement and inequitable market rate housing, and commercial development with development, our preservation approach focused on the preservation of its rich, beautiful, and meaningful social factors, balanced with environmental concerns, built environment and cultural identity. to mitigate change for the neighborhood as a whole. Ensuring that the community is defined not only by its buildings and parks, but by its people and stories as well.



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CONTEXT AND CONDITIONS



Fig. 1.1: Aerial photograph calling out the defined boundary of the Strawberry Mansion neighborhood.



Figure 1.2: Looking west down Firth Street towards Thomas FitzSimons High School, one of the few buildings in the neighborhood formally designated on the National Register of Historic Places.

INTRODUCTION

DESCRIPTIVE ANALYSIS

Strawberry Mansion is a vibrant community in the northwest corner of Philadelphia's Lower North District, approximately three miles north of the city's downtown. The sprawling green of East Fairmount Park defines the neighborhood's western edge, while train tracks cutting diagonally from the southwest to the northeast, give the neighborhood its characteristic triangle shape. Lehigh Avenue, to the north, is Strawberry Mansion's most porous boundary.

Though the neighborhood has been laid out in accordance with the city-wide grid system, multiple stages of development have created a network of broad and narrow streets, many only a few blocks long. Ridge Avenue, a vestige of the pre-industrial roads, slices crosswise through Strawberry Mansion's grid on its meandering path from Old City out to the country.

It is clear from the historic fabric that Strawberry Mansion was once a suburban enclave. Though a small cluster of commercial spaces sits buried within the neighborhood core, row upon row of residential housing extends as far as the eye can see. The majority of these homes are rowhouses, with the occasional twin facing Fairmount Park. Like most of Philadelphia, houses are two- and three-stories tall, with only a handful of structures rising above; the neighborhood is intimate. There are trends and rhythms in the built fabric: larger, taller houses along major streets; smaller, shorter houses filling in narrow alleyways over time (Fig. 1.4).

Vacant land where rowhouses once stood create gaps in the built fabric that are, at times, three or four blocks deep. A fair number of these vacant lots have been cultivated and adapted as recreational space, both formally by the Pennsylvania Horticultural Society's Landcare program, and informally by individual community members: playgrounds have been installed, community gardens planted, and murals painted. However, many lots still sit untended, a harsh reminder of the widespread demolition that has plagued the neighborhood for decades. Houses have been torn down at an unsettling pace in Strawberry Mansion; the neighborhood's percentage of parcel vacancies is nearly three times that of the city average (Fig. 1.3).

These vacant lots, along with the buildings that remain, tell a story of the diverse communities that have inhabited Strawberry Mansion over the years. In the early stages of its historic development, Strawberry Mansion was a thriving Jewish enclave. Hints of this previous identity can be teased out in the iconography of historic synagogues, today most commonly repurposed



Figure 1.4: The small scale of streets and homes, resulting from the subdivision of larger blocks, on Patton Street.



Figure 1.3: A string of vacant lots in the southern section of Strawberry Mansion.



Figure 1.5: Local residents who have spent most, if not all, of their lives the Strawberry Mansion neighborhood are frustrated with continuous disinvestment and recent development trends.



Figure 1.6: The building that is today the Cornerstone Baptist Church on 33rd Street originated as a synagogue.

as churches (Fig. 1.6). In the mid-19th century, the community began to shift from from majority-white and Jewish to majority-African American and Christian. At present the neighborhood is 95% African American



Figure 1.7: One of many signs placed by predatory developers around the neighborhood

(one of the many deeply segregated neighborhoods in Philadelphia). This community has imbued Strawberry Mansion with new culture and new art, layered on top of the vestiges of residents-past.

Strawberry Mansion has a widely publicized reputation for high crime rates-which community members acknowledge is an issue, but are quick to note is inflamed by media coverage that reports far more bad than good. This perception is only intensified by the prevalence of vacant lots and deteriorating buildings.

The present population, though dwindling, is tight knit (as Philadelphia experienced a citywide population increase of 2.5%, Strawberry Mansion's population dropped a staggering 17.5%). There are many legacy families in the community, and an estimated 40% of households own their homes-a high figure for an economically distressed neighborhood.

Unfortunately, for the multi-generational families who have called Strawberry Mansion home, there is a growing unease in the neighborhood. For better and for worse, Strawberry Mansion is poised for transformation. Predatory development is already underway—neon signs offering to buy homes are tacked to telephone poles on nearly every block (Fig. 1.7). Pressures of gentrification

existing residents (not only within the neighborhood, and unrestrained new development are creeping into the but in their existing historic houses), a management plan community most predominantly from Brewerytown, the for the neighborhood's high quantity of vacant land, rapidly developing neighborhood that sits at Strawberry and the preservation of the community's intangible Mansion's southern edge, though Temple University's heritage. With these concerns in mind we explored the eastern presence, looming closer each year, is decidedly experiences of comparable urban communities, and took palpable. into consideration recent development trends affecting Philadelphia neighborhoods, in order to identify the These pressures necessitate strong, preemptive interventions, something several organizations positive changes while preventing unwanted ones. in Strawberry Mansion are working toward. The

role that historic preservation can play in stimulating local Community Development Corporation and The report concludes with several specific proposals, Neighborhood Action Center work tirelessly, aiding designated to support the equitable development of residents with housing, health, and employment Strawberry Mansion through the preservation of the concerns in addition to advocating for responsible, community's tangible and intangible heritage. equitable development.

While much work remains to be done, Strawberry Mansion has not lost its charisma. On any given afternoon, neighbors gather together on porches, stoops, and street corners; the newly refurbished Bus Barn bustles with activity; horses graze in the fenced off pasture of the Fletcher Street Riding Club; and in the summertime, kids gather at Mander Recreation Center pool to play, their peals of laughter carrying across 33rd Street.

SCOPE OF PROJECT

To construct a Community-First Preservation Plan we used the neighborhood's existing assets as our foundation. These assets were identified through documentation, research, and interviews. Our work began with the documentation of Strawberry Mansion's built fabricnot simply its buildings, but its streets and open spaces as well-through mapping and photography. Historical research and informal conversations added depth and richness to this documentation process, providing an understanding of the multiple waves of development and population changes which moved through the neighborhood over its centuries of existence, as well as insight into the social networks and cultures valued in Strawberry Mansion today.

Through strategic analysis we prioritized three critical issues to concentrate our efforts on: the retention of



Figure 1.8: Community members repairing a house in the neighborhood's northern section.



ENABLING ENVIRONMENT

The possibilities for preservation and equitable development in Strawberry Mansion are influenced by the enabling environment. This includes the political, legal, economic, and organizational factors that influence decision-making in the neighborhood. Outlining how these institutions influence the neighborhood and how they interact with each other assists in gauging the neighborhood's capacity for growth, development, and preservation.

Strawberry Mansion has a small, albeit dedicated group of advocates working on behalf of the neighborhood and its residents. These advocates include volunteers, activists, and politicians.

Several local representatives, including Donna Bullock, a State Representative, and Darrell Clarke, Philadelphia's current City Council President and 5th District Representative, work closely with Strawberry Mansion residents and advocate on their behalf. However, despite the current work of these political leaders, decades of decisions made regarding preservation, planning, and development without community input have taken their toll. The results of this are visible throughout the neighborhood; vacant lots are reminders of the city's repeated plans to demolish historic homes to attract new development. Unfortunately, these plans, crafted and managed by officials outside of the neighborhood, never spurred the investment they promised, and the

vacant lots remain. Community members are reasonably Philadelphia2035, completed in 2011, is the city's current suspicious of interventions crafted by outside agencies comprehensive plan. As part of this, the Planning Commission is in the process of producing eighteen without input from longtime residents. district plans that will focus on the conditions particular to each district in greater depth. The Lower North plan, The local Community Development Corporation (the Strawberry Mansion CDC) works to provide help with completed in 2014, offers recommendations for priority housing, employment, and other essential services, but areas; in the Lower North District, these include high vacancy levels and struggling commercial districts, two its passionate staff is at capacity. Sparse funding has made it hard for the CDC to expand, or to provide all of areas that are addressed in the preservation plan within the services and aid the neighborhood needs, nor should this report.

it be required to shoulder this burden alone. Years of disinvestment and a shrinking population have resulted in deficiencies in the community's organizational capacity. With little time or money to advertise its services, many neighborhood residents are unaware that the CDC exists, let alone what services it could offer to help.

ENABLING ENVIRONMENT | 17



Stakeholders were defined as either primary or LOCAL NON-PROFITS: Local non-profits are secondary, based on how closely they were tied to the critical to the revitalization of Strawberry Mansion, but neighborhood. A Community-First Preservation Plan the few organizations that exist in the neighborhood are recognizes primary stakeholders--longtime residents, currently underfunded and at capacity. This means that local institutions, and local non-profits--as the most while local non-profits act on behalf of their perception significant stakeholders, and advocates for their needs of the community's best interests, they struggle to meet first. all the needs of Strawberry Mansion residents.

PRIMARY STAKEHOLDERS

CURRENT RESIDENTS: All too often, homeowner are prioritized over renters. In a neighborhood with an equal percentage of homeowners and renters, equitabl development should include the needs of both group of residents.

LOCAL INSTITUTIONS: Strawberry Mansion ha many local institutions that play a prominent role is the neighborhood. These include the wide variety o religious organizations and schools



STAKEHOLDERS

Current nonprofit organizations include:

rs	»	Strawberry Mansion CDC
in	»	Neighborhood Action Center (NAC)
le ps	»	Strawberry Mansion Learning Center
	»	Strawberry Mansion Faith-Based Coalition
	»	Fletcher Street Urban Riding Club
as in of	»	John Coltrane Cultural Society
	»	Mander Recreation Center Groups
	»	East Park Revitalization Alliance

SECONDARY STAKEHOLDERS

Secondary stakeholders include partner nonprofits, the city of Philadelphia, and regional developers.

PARTNER NONPROFITS: In partnership with local nonprofits, outside organizations can also establish a stake in the neighborhood, working together for the betterment of the community. Possible partner nonprofits include:

- Philadelphia Preservation Alliance »
- Mural Arts Program »
- Temple University »
- Philadelphia Downtown Center (official PA State » Coordinating Program for Main Street)

THE CITY OF PHILADELPHIA: Several governing entities are under the purview of the City. These include who most affect Strawberry Mansion and its sense of place. Government entities include:

- City Planning Commission »
- Department of Commerce >>
- Department of Licenses and Inspections »
- Department of Public Health »
- Department of Streets >>
- Division of Housing & Community Development
- Fair Housing Commision »
- Historical Commission »
- Philadelphia Housing Authority
- Philadelphia Housing Development Corporation
- Philadelphia Land Bank >>
- Philadelphia Parks & Recreation
- Philadelphia Redevelopment Authority
- » SEPTA

DEVELOPERS: Developers play an important, though fraught role in the future of Strawberry Mansion. To both revitalize and preserve the neighborhood, investment from developers is essential, but developers are driven by economic motives that have historically been harmful to the health and vitality of existing communities.

There are three prevalent types of developers in Strawberry Mansion: small, local developers that mostly rehabilitate neighborhood homes; predatory developers that buy houses at low cost (or obtain houses with tangled titles), renovate the houses, and sell them for high profits; the Philadelphia Housing Authority that develops new subsidized and marketrate housing, but does not consider the context of the existing housing stock (building out of place, a-contextual homes).

CONCLUSION: Involving secondary stakeholders is key to achieving preservation, equality, and development goals. Secondary stakeholders bring important resources into the neighborhood; however, they need to respect the needs and goals of primary stakeholders.



Figure 1.9: A recent mural of former Strawberry Mansion resident John Coltrane, installed by Mural Arts on the corner of 29th and Diamond Streets.



The maps on the following pages were produced through in-person survey work, data from OpenDataPhilly and the City of Philadelphia, and historic maps, among other sources.

BUILDING TYPES: Observed through Google Street View.

BUILDING CONSTRUCTION YEARS: Data obtained from historic Hopkins (1875 and 1884), Bromley (1888, 1895, and 1910, and 1922), and Smith (1908) maps, as well as newspaper articles, historic register nominations, and Google Street View.

HISTORIC REGISTER LISTINGS: Shapefiles from OpenDataPhilly (for local register listings) joined with tabular data from the National Park Service (for national register listings).

OPEN SPACE: Data obtained from Office of Property Assessment shapefile and spotchecked through site visits.

NEIGHBORHOOD ASSETS: As observed during site visits and learned about through interviews with community members.

PUBLIC PARCEL OWNERSHIP: Data obtained from cleaned Office of Property Assessment and Philadelphia Water Department shapefiles. Some data may not be accurate, as these records often conflict.

BUILDING AND LAND VACANCY INDICATORS: Citywide L&I data, with Strawberry Mansion outlined in white.

BUILDING DEMOLITIONS: By L&I and by private owners/contractors, showing a higher concentration of L&I demolitions and a lower concentration of private demolitions in Strawberry Mansion compared with elsewhere in the city.

UNOCCUPIED UNITS NOT FOR SALE OR RENT: Density map of census tract-level ACS data (2012-2016) showing a higher rate of unoccupied units not for sale or rent in Strawberry Mansion compared with elsewhere in the city.

MAPS





And				
				a construction and and a construction and a constru
		Year:		
	1888–1910 1910–1949 1950–1979 1980–2009 2010–present			









City-Owned Parcels (built and unbuilt)

SEDGLEY

- Department of Public Property (228 parcels)
- Philadelphia Housing Authority (607 parcels)
- Philadelphia Housing Development Corp. (21 parcels)
- Philadelphia Land Bank (62 parcels)
- Philadelphia Redevelopment Authority (283 parcels)
- Other City-owned (168 parcels)







 Building Demolitions by Private Owners/Constractors, 2007–present









Unoccupied Units not for Sale or Rent



Higher

- Lower

ACS 2012-2016

HISTORIC NARRATIVE



Figure 1.10: 1850 reprint of a 1752 map of Philadelphia and its environs. Source: N. Scull and G. Heap, A map of Philadelphia and parts adjacent (repr. 1850 by David Lobach).

COUNTRY ESTATES

The area to the north of present-day Center City was included in William Penn's plan for Philadelphia as land that was to be set aside for early property owners within the city proper. Farmsteads and country estates that were concentrated along the banks of the Schuylkill River dotted the landscape. Lemon Hill, constructed around 1770 and located to the south of Strawberry Mansion, played an important role in the mid-nineteenth century establishment of Fairmount Park. Summerville, Judge William Lewis's estate, became known as Strawberry Mansion by the late nineteenth century, when it served as a restaurant and picnic destination within the recently created East Fairmount Park.

AN EARLY SUBURB

The 1836 creation of Laurel Hill Cemetery immediately to the north of Summerville, and the establishment of Girard College and Eastern State Penitentiary, also in Philadelphia's northern hinterlands around the same time, contributed to the development of Strawberry Mansion as a residential suburb. As part of a larger trend of the 1830s and '40s, members of the upper-middle class traveled from the surrounding area to visit the cemetery, which served as a place of leisure. Laurel Hill Cemetery received 30,000 visitors over nine months in 1848, and the cemetery's guidebook from that year invited visitors to tour the grounds of the nearby mansions along the Schuylkill River.¹

By this time, Judge William Lewis's 1789 estate had been converted into a dairy that sold strawberries and cream, inspiring the nickname that would later be given to both the estate and the neighborhood: Strawberry Mansion. Samuel Breck, the director of the Pennsylvania Horticultural Society, led tours of the private gardens associated with estates along the Schuylkill River, bringing visitors to the area.²

The consolidation of Philadelphia in 1854 brought increased investment in infrastructure, including the creation of the Ridge Avenue streetcar and of the Pennsylvania Connecting Railroad, whose tracks form the southeastern boundary of Strawberry Mansion today.³ Additionally, as part of the treaty, the grid was extended northward towards Strawberry mansion. East Fairmount Park was established in 1868 as an addition to the newly created park system and also shifted Strawberry Mansion's relationship with other parts of the city: an 1870s extension of a road running along the river from Lemon Hill and the Water Works strengthened the connection between that neighborhood, Strawberry Mansion, and East Fairmount Park.⁴ Additional roads extending from Park Street (now Diamond Street) and



24, 1908

Major real estate developers, architects, and builders, including Pemberton & Co., John Stafford, and Sauer & Hahn had a strong impact on the physical character of the area, building on several whole blocks at a time.⁶ The blocks between Norris and Susquehanna Streets, and up to York Street at the western end of the neighborhood (near the streetcar depot), were densely built by 1895. At this time, the northeastern part of Strawberry Mansion contained a mix of empty lots, twins, and partial blocks of rowhouses. The entire stretch of 33rd Street, which faces the park, remained undeveloped until the 1900s. However by 1910, there were only a few scattered empty parcels remaining in Strawberry Mansion.⁷

Dauphin Street into East Fairmount Park connected Strawberry Mansion to a surrounding network of neighborhoods. Although the streetcar's presence along Ridge Avenue directly contributed to the area's development, its fare was prohibitively high for members of the working class, who continued to walk to work, for instance, in Brewerytown. However, these new streetcar lines allowed upper-middle class residents to live in Strawberry Mansion and travel to work and recreational activities away from their immediate neighborhood.⁵

RAPID GROWTH

In 1880, the area bounded by 29th and 33rd Streets to the east and west, and by Lehigh Avenue and the By the mid 19th century, new construction, concentrated railroad to the north and south, was home to 1,800 along Ridge Avenue, along the cemeteries north of the residents. This included large numbers of people Strawberry Mansion, and around the trolley depot at working for the streetcar system or in the building Dauphin Street, continued steadily. The area north trades, many as stonemasons for tombstones. By 1900, of Lehigh Avenue, however, did not develop until the the neighborhood's population had increased to 9,000 turn of the century. In the 1880s, many of the blocks residents and demographics shifted. The percentage of in Strawberry Mansion were subdivided into thirds to German-born residents declined from 20 to 8 percent. allow for greater densities of rowhouses. There was also sharp increase in sales and clerical jobs

Figure 1.11: Streetcar to Strawberry Mansion. Source: John Gibb Smith Trolley Car Collection, Free Library of Philadelphia, Print #4991, February



Figure 1.12: 1895 (this page) and Figure 1.13: 1910 (facing) Bromley maps of Philadelphia, with Strawberry Mansion outlined in blue. George W. & Walter S. Bromley, Civil Engineers, Atlas of the City of Philadelphia (Philadelphia: G. W. Bromley and Co., 1895 and 1910).

and a decline in the portion of the population working in transit and in the building trades (from 54 to 43 percent).8

The area's industrial development of the mid-nineteenth century, driven in large part by the railroad presence between Ridge Avenue and the Schuylkill, allowed this part of northwest Philadelphia to maintain dominance in several industries into the mid-twentieth century. In 1930, Ward 28, which included the northern portion of Strawberry Mansion, had an especially high concentration of bakeries and businesses associated with the garment industry.⁹

SHIFTING DEMOGRAPHICS

Changes in the ethnic and racial backgrounds of Strawberry Mansion residents accelerated in the twentieth century, as the German population declined and a strong Jewish community took hold. Whereas only one Eastern European surname appeared in the neighborhood in the 1900 census, 80 percent of surnames in the 1930 census were likely Jewish.¹⁰ Despite this sweeping change, which was accompanied by high rates

of residential turnover, socioeconomic levels remained relatively stable.¹¹

The Jewish community of Strawberry Mansion relied on the streetcar system for connectivity to other communities and associated services elsewhere in the city. Within the neighborhood, synagogues like Temple Beth Israel, which moved to 32nd Street and Montgomery Avenue in 1908, served as an anchor for the community. Other synagogues included B'nai Jeshurun, which moved to a new building at 33rd Street between Diamond and Susquehanna in 1925 to accommodate a growing congregation.¹² Additionally, scattered throughout the historic commercial corridor along Ridge Avenue, social spaces that supported the particular needs of the Jewish community flourished, such as Kosher butchers and bakeries.

Although the Jewish community would remain strong until the 1960s, the neighborhood's African American community began to grow in the 1930s. In fact, Columbia Avenue (now Cecil B. Moore Avenue) and Ridge Avenue, immediately to the east of the Strawberry Mansion neighborhood, served as a center of jazz in the city. Civic



and religious institutions active at this time reflect the marked many residences in the neighborhood as ineligible different communities in Strawberry Mansion: in 1965, for mortgages (due largely to the high percentage of the neighborhood contained more than eighty churches African Americans, and, to a lesser extent, Jews, in the neighborhood).¹⁵ A Philadelphia Housing Authority (primarily Baptist, but also several other denominations) and three synagogues. development on the site of the former Glenwood Cemetery, along the eastern edge of the railroad tracks,

STRUCTURAL DISINVESTMENT AND COMMUNITY ACTION

Riots and protests following an incident of police brutality in the summer of 1964 are often charged with prompting rapid white flight from North Philadelphia. This was, however, the continuation of earlier trends. The opening of the Broad Street subway in 1928 shifted the direction of growth in Lower North Philadelphia; until this point, growth and commercial development had been centered along Ridge Avenue.¹³ High levels of transit connectivity throughout the Lower North meant that residents were much more likely to live farther from their workplaces than they had at the turn of the century. By the 1930s and 1940s, fewer residents worked within walking distance of their homes.¹⁴

Figure 1.14: John Coltrane House, 1511 N 33rd Street. Source: Historic More importantly, structural, government-driven American Buildings Survey, HABS PA,51-PHILA,756 discrimination further accelerated residential change. The 1930s Home Owners' Loan Corporation survey





Figure 1.15: In the 1940s and '50s, the Philadelphia Housing Authority developed residences for African Americans along the eastern edge of the railroad track, immediately to the east of Strawberry Mansion. Source: James Wolfinger, Philadelphia Divided (Chapel Hill: University of North Carolina Press, 2007).

was met with resistance by whites who thought that the land was too valuable to house African American residents.¹⁶

By the 1940s and '50s, Lower North Philadelphia had become an early target of the city's redevelopment efforts.¹⁷ This trend continued at a heightened rate into the second half of the twentieth century: 85 percent (10,000 units) of all housing demolitions in Philadelphia occurred in this section of the city between 1950 and 1962.¹⁸ The neighborhood went from being 87 percent white and 13 percent African American in 1940, to 60 percent white and 40 percent African American in 1950, to 8 percent white and 92 percent African American in 1960.¹⁹

Community groups and activists drew attention to continuing job and housing discrimination throughout this time. In 1963, the NAACP picketed the construction site of Strawberry Mansion High School to protest job discrimination throughout the Philadelphia school system.²⁰ Although progress has occurred, including through federally regulated affirmative action hiring policies, Strawberry Mansion residents remain concerned about discriminatory hiring practices to this day.²¹

Parts of Lower North Philadelphia were included in the Model Cities Program of 1969-1975, which brought investment to social programs in the area. While this facilitated some positive change, it did not ameliorate the negative effects of past and continued disinvestment. Even as loans were being made available to homeowners, the Planning Commission continued to clear land (demolishing homes left vacant because of foreclosure and sometimes seizing homes through eminent domain) in the hopes of attracting developers.²² In response, the North Philadelphia Block Development Corporation encouraged families to move into properties vacated because of mortgage foreclosures as a way to seize control of the situation.²³



Figure 1.16: The NAACP picketed in front of Strawberry Mansion High School in 1963 to protest discriminatory hiring practices throughout the Philadelphia school system. Source: Matthew J. Countryman, Up South: Civil Rights and Black Power in Philadelphia (Philadelphia: University of Pennsylvania Press, 2006), collection of Urban Archives, Temple University Libraries.

In 1985, hundreds of historic homes were demolished Mayor Street's 2001-2007 Neighborhood Transformation and a large swatch of land was cleared to develop Initiative (NTI), which has often been compared to Strawberry Square, a shopping center in the center of urban renewal, led to increased building demolitions the neighborhood, at 29th and Dauphin Streets. At throughout the city. This data-driven program used the time, this was seen as a sign of coming investment bonds issued over a period of five years to reduce the in the neighborhood; the center was well-received by number of vacant buildings in the city from 26,000 to local residents and business owners, many of whom had 9,600, and to construct or rehabilitate 16,000 residential grown up in the area and witnessed the decline of the units. More recently, growing interest in Brewerytown neighborhood. Although Strawberry Square has long has led to increased concern about impending housed the neighborhood's sole grocery store, it has displacement. Already, the percentage of white residents struggled to support a sufficient number of additional in the neighborhood has increased from 0.6 to 5 percent businesses. Today, many storefronts are vacant and since 2000, at a time when the city's percentage of white deteriorating. residents has decreased.



Housing Policy Debate 17, issue 3 (2006): 530-531.

Figure 1.17: The Reinvestment Fund's market analysis of Philadelphia, produced for the Neighborhood Transformation Initiative, 2001. Strawberry Mansion's approximate boundaries are outlined in blue. Reproduced in Stephen J. McGovern, "Philadelphia's Neighborhood Transformation Initiative: A Case Study of Mayoral Leadership, Bold Planning, and Conflict,"



02

SIGNIFICANCE

STATEMENT OF SIGNIFICANCE

Since its inception, Strawberry Mansion has housed several distinctive communities. Once a Jewish neighborhood, it is now home to a predominantly black community. This community's cultural identity is expressed in both the tangible and intangible assets throughout the neighborhood, layered in and around vestiges of residents-past.

Generations of residents have preserved Strawberry Mansion's significant tangible and intangible assets despite the litany of detrimental forces (disinvestment, demolition, etc.) weakening the urban and social fabric of Strawberry Mansion. The neighborhood's historical, social, cultural, and economic value can be seen most readily in the following areas:

BUILT FABRIC

The historic urban fabric reveals Strawberry Mansion's change over time. The neighborhood is considered to be one of Philadelphia's first true suburbs-it was developed as a predominantly residential area for the working and middle class.¹ The architectural styles and street patterns are typical of other residential development in and around Philadelphia at the end of nineteenth century. Several largely-intact housing blocks in Strawberry Mansion preserve the image of a typical Philadelphia rowhouse neighborhood at that time.

The historic fabric is the foremost visual reminder of Strawberry Mansion's history. The neighborhood's rowhouses, twin-houses, and multi-family complexes housed generations of disparate communities. The various ways these structures have been preserved or modified reveal the changing needs and means of the residents of Strawberry Mansion over time.

In addition, historic civic buildings speak to the changing identities of residents and the various religious and ethnic groups to which they belonged. Churches, synagogues, historic corner-stores, and retail are markers of the overlapping (often times, interacting) Jewish and Christian religious heritage in Strawberry Mansion. Many Jewish synagogues, now used as churches by the current community, display a unique convergence of religious styles and iconography.² They illustrate the succession of communities that have laid claim to different places in the neighborhood.

The historic built environment is significant in its own right; but, it is also significant for the social and cultural life that it supported and continues to sustain in Strawberry Mansion.

OPEN SPACE

Another defining feature of Strawberry Mansion is the abundance of open and public spaces. These spaces are a means for residents, both past and present, to socialize and to enjoy the outdoors. Strawberry Mansion's proximity to Fairmount Park has always been one its foremost assets. But there is also ample open space tucked in and around the entire neighborhood (a greater number today than in the past due to demolition). These spaces range in size from small plots to block-long community gardens; some are maintained by the city or unofficially claimed and tended by individual residents. But, they all serve a similar purpose: bringing the community together and strengthening the social ties that have persisted across generations.

Many of these open spaces feature murals-some informal, others commissioned by organizations like the Mural Arts Program. These murals and the spaces



Figure 2.1: Colorful rowhouses on Patton Street.

they preside over commemorate and celebrate collecsignificant in their own right. However, the collection tive memories that are not visibly present elsewhere: of vacant, untended lots constitute an opportunity for lost loved ones, local artistic legends, or demolished future development (market-rate or subsidized), and buildings that once served as social loci. Neighborhood they can draw development pressures away from other heros, residents that have passed, jazz greats, and black claimed and tended land. The community can leverage cowboys are all memorialized in murals around Strawthese spaces to protect other significant areas of their berry Mansion, usually on walls facing tended, public environment. spaces, serving as spots for contemplation and remem-SOCIAL TIES brance. These open spaces, while more inconspicuous than the historic built fabric, are significant for the history and culture they harbor.

Strawberry Mansion's historic buildings and public spaces were locations where social life bloomed and Another defining characteristic of Strawberry Manwhere it continues to prosper today. The neighborhood sion's landscape is the untended lots-unclaimed and is notable for this vibrant close-knit community which overgrown. These lots are a reminder of the neighdeveloped as a result of multi-generational and longborhood's change over time-in many cases a painful time residency. Families and their relatives tend to stay vestige of the city's failed attempts at urban renewin the same neighborhood, contributing to community al (including their seizure of private property, their culture and furthering a sense of belonging. Walking demolition of historic structures, and their failure to through the neighborhood, one sees this vibrant social build replacement infrastructure in the wake of demlife playing out on people's porches, in parks, in corner olition). These lots are characteristic of the look and stores and barber shops (known as "third spaces"), and feel of the neighborhood, but few would consider them on the street.



Community organizations and religious groups, such the urban riders in Strawberry Mansion. as the CDC, NAC, Strawberry Mansion Learning The Fletcher Street Urban Riding Club is notable not Center, East Park Revitalization Alliance, and only for its history but also for the positive impact it has Strawberry Mansion Faith-based Coalition, augment on the neighborhood as a program for at-risk youth. The this, strengthening community life. In addition to club is an avenue for kids to learn about horsemanship these organizations, there are a number of churches and take on all of the responsibilities involved in caring in Strawberry Mansion, ranging in size from small for horses. This program has kept many kids away storefront churches to grand edifices. Some of these from crime, and these kids are preserving the heritage churches have closed, or struggle with dwindling tradition of urban riding in their neighborhood. congregations, but others remain widely attended, drawing in worshippers from outside of Philadelphia-In addition to the tradition of black urban cowboys, family, friends, or past residents that have moved away, Strawberry Mansion also has a vibrant jazz history. The but return each week for services and socializing. Both legendary jazz saxophonist John Coltrane resided in community organizations and religious institutions Strawberry Mansion from 1952-1958, the time in which bolster Strawberry Mansion's neighborhood ties. he gained national recognition as a musician. Owners of Coltrane's house at 1511 33rd Street have struggled with Strawberry Mansion's vibrant social network, and the upkeep and maintenance in recent years, but a historic organizations that support it, rival the significance of marker denotes the significance of the building.

the built environment. It is as essential to preserve this historically cohesive and close-knit community as it is to preserve the historic physical structures.

CULTURAL HERITAGE

In addition to the built environment and the vibrant social life it supports, Strawberry Mansion has a wealth of unique, intangible cultural assets-from jazz history to urban cowboys.

One of Strawberry Mansion's more notable assets is the As a residential Philadelphia neighborhood with a Fletcher Street Urban Riding Club. In the early 1900s, long and fascinating history, Strawberry Mansion has Fletcher Street Riding Club was one of many urban evolved through several historical periods and distinct riding clubs in Philadelphia. While there used to be more ethnic groups. The tangible and intangible assets in than fifty stables in the city, now only a few remain. Strawberry Mansion-from the layered, historic built This century-long tradition of urban horsemanship has environment to the longstanding cultural traditionspersisted in Strawberry Mansion, despite disappearing are evidence of the neighborhood's significance. elsewhere. Strawberry Mansion's is a vibrant neighborhood, with historical, social, cultural, and economic value; it is a The Fletcher Street Urban Riding Club has obtained neighborhood worthy of recognition, protection, and national recognition, attracting notable photographers, preservation.

filmmakers, and artists. It been featured in an array of publications and exhibits including Time Magazine, The Atlantic, NPR, The Getty, The Barnes Foundation, and the Rudimental & John Newman music video. People far and wide, within the neighborhood and across the world, have recognized the significance of

Nowadays, many cultural activities, including film screenings and jazz concerts, are organized in and around Strawberry Mansion in remembrance of John Coltrane and the impact he had on the neighborhood. These events keep the neighborhood's jazz legacy alive and play a significant role in fostering cultural identity and pride-of-place.

SUMMARY OF SIGNIFICANCE

CHARACTER DEFINING ELEMENTS

CLEAR PHYSICAL BOUNDARIES

For the purposes of this study, the neighborhood of Strawberry Mansion is defined by East Fairmount Park to the west, the tracks of the former Pennsylvania Connecting Railroad (now the Amtrak rail corridor) to the southeast, and Lehigh Avenue to the north. While these boundaries have been chosen for their physical presence in the landscape, conversations with residents and other stakeholders indicate that they are more porous than they appear.

A fence around the reservoir in East Fairmount Park strengthens the separation between the neighborhood and the park in this section. Roads that connect Strawberry Mansion to neighborhoods to the east cross over the railroad tracks in the southern portion of the neighborhood, and under them in the northern portion; these bridges and tunnels form strong physical boundaries in this area.

into three character areas, each with its own distinct qualities, and each facing somewhat different pressures. The lower section, which is located to the south of Diamond Street, borders Brewerytown. Here, development is moving northward into Strawberry Mansion, including as new PHA housing along 33rd Street. Due to these nascent changes, the lower section of Strawberry Mansion is likely to see an increase in market-rate development before other areas.

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The middle section of the neighborhood, from Diamond to Dauphin Streets, includes the broadest mixture of uses. It features historic housing, recent residential development, schools, and open space, in addition to the neighborhood's main retail areas of Strawberry Square and Ridge Avenue.

The upper section has the highest levels of owner-occupied houses, and feels more purely residential in character, with houses that are set back Lower Section from the street and have more trees.

THREE SUB AREAS

The neighborhood can be divided







0.4

0.1

0.2



Figure 2.2: Two story rowhouses line North Patton Street between Berks and Norris Streets

URBAN STRUCTURE

A hierarchy of street types characterizes the neighborhood's spatial structure. Major residential streets, including 33rd and Diamond Streets, accommodate grand three-story rowhouses and twins. Narrower streets, including those formed when city blocks were subdivided in the 1880s, have smaller houses that abut the sidewalk and create a more intimate relationship with the street.



Figure 2.3: Houses along North 33rd Street, a wide residential thoroughfare.

Ridge Avenue, which runs diagonally through the neighborhood, and Lehigh Avenue, which forms the northern boundary, contain most of the commercial activity. Until the 1970s, a trolley depot occupied the location that is now Strawberry Mansion High School.

This superblock has historically been a center of the neighborhood's social life; today, the high school, bus depot, and a large community garden continue this legacy along Ridge Avenue between 31st and 33rd Streets.



Figure 2.4: Ridge Avenue, an historic commercial and transportation

Modern shopping centers, including Strawberry Square, are located farther east in the neighborhood's middle section. Both York Street and Sedgley Avenue historically served as industrial areas in the neighborhood, and therefore have their own distinct character.

PUBLIC LIFE, COMMUNITY ASSETS. AND CULTURAL RESOURCES



Figure 2.5: Front porches serve as social spaces in the neighborhood

Residents of Strawberry Mansion spend time in public and semi-public spaces: on their front porches and stoops, in the formal and informal parks and open land throughout the neighborhood, and in third spaces, including eateries and barbershops. Block parties play a central role in the neighborhood's identity and cohesion. Much of this active public life is connected to the presence of long-term residents, and of extended families that live near one another. These social networks form the core of the neighborhood.



Figure 2.6: Open spaces are temporarily claimed for gatherings.

Churches, schools, community organizations and centers, parks, and other informal gathering spaces located throughout the neighborhood provide resources

and strengthen community ties. In East Fairmount Park, historic houses, athletic facilities, and institutions provide additional programming, although some of these resources are utilized more by residents of the other neighborhoods of Philadelphia.

HISTORIC ARCHITECTURE

The neighborhood's architecture includes a range of residential building types, mostly constructed from the 1880s through the 1910s. Residential buildings dominate, with many blocks containing rowhouses punctuated by mixed-use corner stores. Historic churches and synagogues are some of the neighborhood's most charismatic buildings.

The neighborhood's few designated historic sites include residential blocks, historic schools and religious



Figure 2.7: Few areas are purely residential or purely commercial. Here, an historic religious building exists alongside rowhouses. A school is located across the street from the church, and Fletcher Field is nearby.

buildings, and the homes of the jazz musician John Coltrane and the painter Henry Ossawa Tanner. East Fairmount Park contains many additional buildings that are listed on the National Register of Historic Places.

A 1992 nomination for Strawberry Mansion South Historic District offers an argument for designating the area south of Diamond Street and between 31st and 33rd Streets for its significance as an example of turn of the century speculative housing in Philadelphia. While this district was not ultimately designated, we believe that smaller areas within Strawberry Mansion are eligible for designation on the Philadelphia Register of Historic Places under the following criteria:

Criterion A: Has significant character, interest or value as part of the development, heritage or cultural characteristics of the City, Commonwealth or Nation;

Criterion C: Reflects the environment in an era characterized by a distinctive architectural style;

Criterion J: exemplifies the cultural, political, economic, social or historical heritage of the community.



Figure 2.8: The Henry O. Tanner House is one of two National Historic Landmarks in the neighborhood.



Figure 2.9: Buildings exist in various states of disrepair and demolition.

VACANCIES AND DEMOLITIONS

Once a densely built neighborhood, Strawberry Mansion's physical fabric now contains high levels of land vacancy. Long-term disinvestment on the part of the city, paired with changing demographics and family sizes, has led to the deterioration of many buildings. Particularly along grander streets, large rowhouses and twins have faced additional challenges, as they require more maintenance than their more modest counterparts elsewhere in the neighborhood.

About 28 percent of the neighborhood's residential units are unoccupied. Of these, 90 percent are neither for sale nor rent, meaning that they are unlikely to be receiving regular maintenance. Structures adjacent to demolition sites experience additional threats to their physical conditions, as their party walls are exposed.



Figure 2.10: A large single-story building at the southern tip of the neighborhood was demolished in fall 2017.

OPEN SPACES

About one quarter of all parcels in the neighborhood are unbuilt, although this number fluctuates as additional structures are demolished and new development takes place. These unbuilt parcels include both tended and untended land, claimed by both individuals and the larger community. Some spaces exist as gardens, gathering spaces, or personal side yards, while others remain largely unused.



Figure 2.11: Men renovating a building in Strawberry Mansion.





Figure 2.12: About one quarter of the neighborhood's parcels are unbuilt.

BUILDING AND LAND TYPOLOGY

Residential Types

About 75 percent of the buildings in Strawberry Mansion are residential. These include two and three story rowhouses and twins, mid-sized apartment buildings (up to five stories tall) and contemporary freestanding, attached, and semidetached townhouses.

Commercial and Mixed-Use Types

While mixed-use buildings are scattered throughout the neighborhood, mostly at the ends of residential blocks, there are very few purely commercial buildings. Those that do exist include contemporary shopping centers and gas stations.









Two-story Rowhouses

Three-story Rowhouses

Twins



Apartment Buildings



Contemporary Residential





Contemporary Commercial Centers



Corner Stores





Bus Stations



Altered Residential/Mixed-use Rowhouses

Industrial Types

Industrial buildings are concentrated along Sedgley and York Avenues, at the neighborhood's historical industrial core. Smaller industrial buildings appear throughout the neighborhood.



Warehouses

Garages

Open Space Types

Open spaces accounts for one quarter of the neighborhood's parcels. They are diverse in both appearance and use.



Side Yards

Personal Parking

Institutional Types

Religious buildings include several former synagogues, constructed in the first quarter of the twentieth century. Two schools in the neighborhood, both listed on the National Register of Historic Places, were built by Irwin T. Catherine, who was the chief architect of the Philadelphia public school system from 1920 to 1937.



Religious Buildings





Services and Community/Recreation Spaces





Green Spaces (not maintained by the LandCare program)

Untended/Overgrown





Green Spaces (maintained by the LandCare program)



Paved Public Parking



Figure 2.13: The three major issues present in Strawberry Mansion that a community first preservation plan is poised to address.

COMPARABLES

Analyzing comparables in different neighborhoods that have similar characteristics and use-values as Strawberry Mansion, proved useful in determining example driven approaches to the unique questions posed within the neighborhood. Five neighborhoods were selected as comparables because of their similarity to Strawberry Mansion: Point Breeze, Philadelphia; Shaw, Washington, D.C.; Dudley Street, Boston; Englewood, Chicago; and Anacostia, Washington, D.C (Fig. 2.14). Each of these neighborhoods has suffered from disinvestment in the recent past, and has faced or will soon face the pressures of gentrification.

Each of these neighborhoods has employed a variety of interventions (some successful, some not) to stave off rising prices and displacement. To determine interventions that might be applicable in Strawberry Mansion, we examined how each comparable neighborhood managed the following issues:

- · Retain existing residents-not only within the neighborhood, but in the historic houses in which they reside
- Manage a surplus of vacant land



Degree of similarity to Strawberry Mansion



Figure 2.14: Analysis of key similarities between the selected comparables and Strawberry Mansion.



Figure 2.15: A break down of the issues for which each comparable provided the most insight.

· Preserve existing social networks, cultural activities, and other intangible heritage

Each comperable had their own successes and failures, and provided valuable insights in determining what might work within the context of Strawberry Mansion (Fig. 2.15).

POINT BREEZE

Point Breeze is an example of runaway development without proper protections in place for longtime residents. Less than a decade ago, Point Breeze looked similar to Strawberry Mansion in terms of demographics, income, destruction of historic residential fabric, and housing prices, but unchecked development has resulted in skyrocketing property values and the displacement of long-time residents who could not afford the higher cost of living.

In addition, in many close-knit communities like Point Breeze, extended families pass their houses down without formally registering a change in ownership. This results in tangled titles, where there is not clear delineation of ownership for the property. Tangled titles often prohibit low-income residents from accessing homeimprovement loans or other financial assistance because they cannot prove ownership of their property. To complicate matters, many developers target properties with tangled-titles for acquisition-their lack of clear ownership means they are generally cheaper and easier to procure.

Point Breeze has implemented a few small initiatives to ward off these predatory development practices and to lessen other gentrification pressures. Equal Access Legal Services, a nonprofit that seeks to assist low-income residents, was recently established in the neighborhood. In addition, the city zoning board recently approved a plan for the construction of 33 new affordable apartments and townhomes in the neighborhood.

However, for many residents these interventions have been too little, too late. Already, many longtime

residents have been pushed out of the neighborhood, and others struggle to hang on. In order to avoid a similar situation in Strawberry Mansion, residents must have access to support early and often. Residents would benefit from financial assistance (access to existing resources or to brand new funding streams), free or low-cost legal services, and educational programs on owner- and renter-rights. While the Strawberry Mansion CDC provides some of these resources, the CDC staff is currently at capacity, administering most of the services and aid in the neighborhood. New nonprofit organizations could work in conjunction with the CDC to augment existing services and/or to advocate to local leaders for inclusive, affordable housing.

SHAW

Washington, D.C.'s Shaw neighborhood is well known for its rich history and vibrant culture. The area was developed during the Civil War and became an African American enclave shortly after when freed slaves were housed in Union army camps nearby. Despite challenges throughout the years, the neighborhood has historically been and remains today a thriving hub of black business and culture.

In 2003, the construction of a new convention center just south of Shaw spurred property tax increases, and long-term Shaw residents worried about their ability to continue living in the neighborhood. To protect existing residents, Shaw enacted tax caps on owneroccupied homes and designated four historic districts to prevent the demolition of single-family houses and small apartment buildings. Shaw also passed several policies to prevent renters from being forced out of their homes: the right for renters to return to the new building that replaced their demolished rental building; the right for residents to select which developers could purchase their buildings; and the opportunity for residents to continue living in renovated buildings without rent increases (either through building-wide subsidies or housing vouchers).

Because of Shaw's stringent and progressive affordable authorities, and wealthier neighbors. In 1984, residents housing policies, many older, working-class community created a Community Land Trust, the Dudley Street members have remained; however, much of the character Neighborhood Initiative, in collaboration with the of their neighborhood has changed: legacy businesses Riley Foundation. replaced, gathering spots transformed, and historic culture diminished. While longtime residents welcome Dudley Street Residents weren't interested in solving many of the benefits they've seen-new investment, immediate problems only. They developed a long-term new jobs, decline in crime—they struggle with the loss of framework for future planning and development too. their community's character and their lessened political The residents were gathered together through a shared vision and how to progress towards it through short and influence. long-term strategies.

As Strawberry Mansion looks to address similar issues through policy initiatives, they must also look for ways The Dudley Street Neighborhood Initiative (DSNI) is to preserve the community's "sense of place"—it's a nonprofit community organization that empowers cultural assets, social life, and social loci (community residents to implement neighborhood initiatives, centers, religious centers, public space, and third spaces acquire land, and develop affordable housing. The like corner stores and barber shops). Some initiatives DSNI inventories and acquires local properties. In won that would help preserve these unique assets are: the right to use the city's power of eminent domain in increased funding for community nonprofits that work a 60-acre core area to take blighted land from private to protect these assets, subsidies for legacy businesses, owners and redevelop it. It is one of the first and only and community events or educational initiatives that community-run organizations to gain the power of celebrate local heritage (to name a few). These initiatives, eminent domain. They have created over 225 units of in combination with similar policy protections seen in permanently affordable housing. Shaw, would help Strawberry Mansion retain its unique sense of place and preserve residents' sense of identity Currently, the DSNI has a 35-member board of directors and ownership within the community.

DUDLEY STREET

By the 1960s, the Dudley Street area of Roxbury, opportunities and development. Massachusetts was badly deteriorated, with over 20% of land vacant. It had a high rate of poverty and an ever-The grassroots effort instilled a long lasting sense of increasing number of vacant lots, many used as illegal ownership and accountability within the community. dumping grounds for toxic waste.

Neighborhood goals were identified and campaigns Seeing the neglect and lack of attention by government were created accordingly to advocate for them. and financial institutions, Dudley Street residents realized the need to take control themselves. The neighbors had full realization of their artistic Community members decided to undertake the process potential and cultural diversity. This gave birth to of restoring the neighborhood. Community members Fairmount Cultural Corridor which is a creative understood that the process of change needed to placemaking initiative combining various artists, come from within, so they embarked on a grassroots community member, organization, and businesses to revitalization effort-the only viable approach given create a local, vibrant, and lively neighborhood. The the lack of interest by financial investors, development

whose makeup reflects the diverse racial and ethnic backgrounds of residents (black, white, Latinx, and Cape Verdean). The DSNI promotes civic participation, community engagement, organizational empowerment, economic opportunity, and diversity. Currently, DSNI's main strategic focus is on community empowerment, sustainable economic development, and youth

community draws upon its cultural assets and encourages cultural economic activities via art murals, public art installations, open markets, and musical festivals etc.

ENGLEWOOD

Englewood is a neighborhood on Chicago's South Side that has struggled many of the same issues as Strawberry Mansion: poverty, high rate of vacancy, and a high crime rate, to name a few.

The neighborhood of Englewood suffers from a land vacancy rate on-par with levels in Strawberry Mansion. Englewood has attempted to rectify this through participation in in Chicago's "Large Lots" and "Green Healthy Neighborhoods" programs. Large Lots sells select city-owned vacant parcels for \$1 to residents who agree to care for the properties and maintain ownership for a minimum of five years. LISC-Chicago helped to start this program with a number of other partners (funding from the Knight foundation and Boeing Corporation). DataMade, a local non-profit, mapped land vacancies and made the Large Lots website. DataMade came out of Open City, a volunteer group that creates civic apps with open data to improve transparency and understanding of the government in Chicago.

Green Healthy Neighborhoods utilizes larger swathes of vacant land to create new park spaces and add major streetscape improvements in the hopes of luring private investment and new development to the South Side. The initiative has been gaining notoriety for its utilization of empty space for urban agriculture, as well as championing of green/sustainable energies. The GHN devotes a section of its plan to Historic Preservation; the section is small but nonetheless a vital aspect of a green-centered neighborhood revitalization effort. Beyond designating the more compelling buildings in Englewood, the GHN plan also stresses the reuse of existing building stock (converting single family homes into apartments or duplexes to f it changing housing needs or trends) instead of building anew.

Englewood's gained national attention in the last five years when artist and urban planner Theaster Gates made great strides re-energizing the neighborhood. Instead of more traditional means-policy, public or private investment, community land trusts-Gates used a creative-led approach, highlighting the community's vibrant art and culture.

One of his most notable initiatives was creating the Stony Island Arts Bank. Gates purchased the dilapidated, historic Stony Island State Savings Bank, in 2013 for \$1 from the City of Chicago. He beautifully restored the building and turned it into a free community space with a library, art gallery, and museum. Through his work, Gates aims to show that culture can and deserves to thrive in his neighborhood.

ANACOSTIA

The demographics of Anacostia changed drastically from predominantly white to African-American in the post-war years, a process that was accelerated by white flight and urban renewal initiatives. The neighborhood had long seen a dearth of commercial activity and was a victim of disinvestment, isolated from the heart of Washington, D.C. by the Potomac.

Today, Anacostia is the site of the District's 11th Street Bridge project-a pedestrian crossing that links the neighborhood with the Capitol Hill district across the river. The 11th Street Bridge is akin to New York City's Highline; although the project has yet to be completed, Anacostia has seen a rise in property values due to the investment. Recognizing how destructive such charismatic infrastructure projects can be to low-income neighborhoods, an equitable development plan was created as a component of the 11th Street Bridge project through a partnership with LISC-DC. This equitable development plan aims to minimize the displacement of long-time Anacostia residents through education campaigns, affordable housing initiatives, job training, and the creation of a community land trust.

Education campaigns were widespread and designed to ensure that community members had the opportunity to participate in the equitable development plan, should they chose. This was accomplished through community meetings and the formation of partnerships with existing nonprofits active in the neighborhood. Affordable housing initiatives made use of these partnerships but also called for a re-working of the District's comprehensive plan to be more inclusive of affordable housing options (both renter- and owner occupied). The equitable development plan includes job training and the fostering of strong small-business networks in order to ensure that long-time residents will prof it from the new development and investments flowing into their neighborhood.

It is too soon to tell whether this seemingly comprehensive and community-engaged initiative will allow the intangible heritage and culture of Anacostia to weather the coming development; nevertheless, as Strawberry Mansion hopes to spur investment, it is vital to lay out guidelines for how to do so equitably. Anacostia's dedication to a community education initiative can be directly translated to Strawberry Mansion, where a lack of knowledge and adequate access to resources are crucial hurdles to overcome before wider community programs can be initiated. Revitalizing Strawberry Mansion's historic commercial corridor of Ridge Avenue is also essential to the development and growth of the community. Empowering long-time residents to take part in this revitalization is a key component of equitable development.
SWOT ANALYSIS

VIBRANT LACK OF **INTANGIBLE** RESOURCE HERITAGE **AWARENESS GREEN SPACES** CHALLENGING HOUSING CONDITIONS HISTORIC BUILDING STOCK LACK OF COMMERCIAL LONG TERM RESIDENTS VACANCY (BUILDING + LAND) EOUITABLE DEVELOPMENT GENTRIFICATION (RISING HOME PRICES, DISPLACEMENT, HIGHER HOUSING RESOURCES PROPERTY TAXES) INFORMATION LOSS OF INTANGIBLE COMMUNITY HERITAGE PARTNERSHIPS NON-CONTEXTUAL COMMERCIAL DEVELOPMENT CORRIDOR

Figure 2.16: Graphic summarizing the priority issues in Strawberry Mansion, according to our team's analysis

SWOT analysis was a means of synthesizing the information we gathered in our interviews, research, and on-theground building conditions surveys. The SWOT analysis helped us to prioritize the myriad issues in the neighborhood and determine the focus of our preservation plan (Fig. 2.16). While there are many real and immediate threats to the neighborhood, Strawberry Mansion is still a vibrant neighborhood. In our plan, we wanted to address the community's struggles, but also celebrate and leverage it's best assets.

Below are the areas that were in the scope of our project, and that we deemed priorities to address:

STRENGTHS

- » Vibrant intangible heritage that unifies th neighborhood
- » Widespread green spaces that serve as gatherin spots and social loci for the community
- » Historic building stock that's one of th defining characteristics of the area
- » Long-term residents and a closely-kn community

OPPORTUNITIES

- » Disseminating information about availab housing resources to residents so they can tal full advantage of the programs and aid the already exist
- » Preserving intangible heritage by protectin the spaces and organizations to which they a tied
- » Cultivating vacant land, preserving some for residents' use, and using others to attract ne investment
- Developing a commercial corridor to serv » local consumers' needs and provide jobs
- Creating partnerships with local organization to augment the CDC's current efforts (robus but at capacity)

WEAKNESSES

ne	»	Challenging housing conditions, such as
ıg		tangled titles and maintenance struggles, that threaten residents' security and staying-power
0	»	Lack of widespread information about the
ne		housing programs and resources available in the neighborhood
it	»	Rampant building vacancy and untended land within the neighborhood, adding to the
		appearance of disinvestment
	»	A lack of a commercial space that meets residents' needs and provides local jobs
le		residents needs and provides iocar jobs
ke		
at	IH	IREATS
	»	Gentrification, including rising home prices,
ng		displacement, and higher property taxes
re	»	The loss of intangible heritage that changes the "sense of place" in Strawberry Mansion
or		and isolates longtime residents in their own
W		neighborhood
	»	Non-contextual development that distorts the
ve		"sense of place" and existing historic housing stock that defines the neighborhood
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03

PRESERVATION APPROACH

PRESERVATION PHILOSOPHY

Too often, preservation professionals focus on the built form first, divorcing the built environment from the people who inhabit it. We, however, believe that people-their social networks, their culture, and the meaning they ascribe to the places they inhabit—are just as important as the physical environment, if not moreso. In Strawberry Mansion, the loss of the existing community and their culture would greatly alter and harm the neighborhood, regardless of which physical assets were left standing.

A comprehensive preservation plan must preserve not only the built environment, but also the community and the web of connections which constitute their social and cultural identities. We have termed this approach "communityfirst preservation."

PRESERVATION PLAN

Community-first preservation undergirds our Preservation Plan.

To address the threats and opportunities facing Strawberry Mansion we encourage the preservation of its current housing stock, social and cultural heritage, and public space and also encourage new, equitable development, building wealth within the community. To address these issues, we sought to answer the following:

- » How to preserve people's homes by preventin homeowner and renter displacement and insur resident's aren't overly burdened by housing cost (maintenance, rising property taxes, etc).
- » How to preserve the community's rich cultura heritage, such as Strawberry Mansion's urban hors riders.

PROPOSED INTERVENTIONS

- Utilize existing **HOUSING POLICIES** to strengthen the existing community. >>
- Create a unified **DESIGN APPROACH** for new construction. >>
- Prioritize the safeguarding of INTANGIBLE HERITAGE. >>
- Preserve GREEN NETWORKS throughout the neighborhood. >>
- Focus on the COMMERCIAL REVITALIZATION of Ridge Avenue. >>

ng	>>	How to preserve public space-both informal and
ire		formal gathering spaces and streetscapes.
sts		
	>>	How to revitalize a once thriving commercial
		corridor using a preservation-based commercial
al		revitalization approach to bring jobs, businesses,
se		and economic growth to the area.



04

INTERVENTIONS

HOUSING POLICY

HOUSING RESOURCES AND PROGRAMS

Strawberry Mansion has an abundance of historic housing. As development pressures continue to accelerate throughout the city, the need to protect and support the neighborhood's tangible and intangible assets is imperative. The Community-First Preservation Plan looks to protect existing residents' home, culture, social life, and feeling of community. In order to retain these unique characteristics of both people and place, policies and programs that encourage housing preservation and equitable development are a priority. Equitable development, a place-based strategy for creating and sustaining strong and livable communities, is designed to meet the needs of underserved communities through policies and programs that reduce disparities and build on existing assets, while fostering places that are healthy and vibrant.¹ To address the threats and opportunities facing Strawberry Mansion, as a high priority measure we encourage the preservation of the neighborhood's current housing stock and social fabric, as well as encourage new and equitable development.

Housing is one of the five strategies of the studio's Community-First Preservation Plan. Affordable housing is most directly preserved by keeping existing residents and families in their homes. This should be pursued through coordinated policies and programming that address the opportunities, barriers, and capacity needs of current residents. The factors needed to advance an equitable housing strategy for Strawberry Mansion are organized into four distinct but interconnected categories:

- Physical, addressing maintenance and repair, aging >> in place, and redesign;
- Financial, acknowledging rising property taxes and paths to homeownership;
- Legal, recognizing the challenges of tangled titles and the potential for a community land trust; and
- Access to information, which ties the target » categories together.

These four target categories are interrelated and should not be pursued in isolation from one another. For example, a policy that addresses aging in place may also address rising property taxes.







Figure 4.1: MEDIAN HOME VALUE Using 2012-2016 ACS data, this map shows that the neighborhood of Strawberry Mansion neighborhood has some of the lowest home values in Philadelphia. While home prices can be considered "affordable," they do not take into consideration the home-ownership burden rate.

Additionally, it is important to acknowledge that the decreasing average income over the past fifty years, there is a housing issue in Strawberry Mansion. Even the costs of maintaining a single-family home affect though housing is considered "affordable," there are housing quality and vacancy levels. other underlying problems that have the potential to instigate displacement. As Philadelphia continues to The need to address housing is vital in order to retain develop from the center outward, interventions are the community's most important characteristic, needed to reinforce the Community-First Preservation its people, and to reinforce the Community-First plan that looks to keep residents in their homes while Preservation plan. Longtime residents are concerned simultaneously promoting equitable development. about the ease with which the real estate market can Gentrification, a contested yet powerful term, has the erase a neighborhood's history and transform a once potential to abet tension and oppressively restructure vibrant place into a generic, virtual replica of other neighborhoods. However, after acknowledging the "renewed" neighborhoods. Therefore, maintenance and possibility of gentrification in Strawberry Mansion, repair of its existing housing stock is considered one these effects have been categorized into three tiers, or of the top priorities in Strawberry Mansion. The hope stages. In the initial stage, singular individuals move is that through the preservation plan, the cumulative into low-income neighborhoods and begin to renovate. resources will go beyond regulations to create a In the intermediate stage, change has already begun and more comprehensive look at the issues facing the both individuals and small-scale speculators purchase community today in order to secure practical solutions real estate. Vacancies decrease and displacement can for the future. The following recommendations pair historic preservation with public policy, zoning, and begin. Finally, in the advanced stage, developers are the prominent renovators, and the neighborhood economic development. By utilizing the following has demographically and financially shifted. At this tools, Strawberry Mansion can expand its capacity to time, sections of Strawberry Mansion are experiencing provide residents the assistance that they need to oppose partial transformation in the second stages, with the predatory developers and retain their homes. apprehension that a third and consequential stage could occur if the proper measures are not taken. The **1. EXISTING TOOLS:** hope is that by identifying the appropriate tools now, In Philadelphia, several organizations already exist that Strawberry Mansion residents will be well-informed help low-income residents fix their houses. With the and involved in change, able to retain and expand mission of improving housing quality, reducing health existing robust historic housing stock, and be able to and safety hazards, and increasing housing security, build social equity on the cusp of new development. organizations like the Healthy Rowhouse Project

(HRP) provide CDCs and residents financial options I. PHYSICAL (including deferred home equity loans, landlord assistance, or block grants) which then go to local While Strawberry Mansion has a robust historic housing contractors in order to assist in repairing older homes. stock, much of it has suffered from deferred maintenance Organizations such as these expand the set of resources available to property owners and can improve occupant or neglect. This, in combination with a high percentage health and the viability of their properties. They can of land and housing vacancy, has lowered area housing prices; the average value of an owner-occupied house in also help ensure a fair balance of public housing dollars Strawberry Mansion is \$43,000 (Fig. 4.1).² Additionally, between new construction and the rehabilitation of the neighborhood has a higher ratio of owners than existing homes. For example, HRP focuses on bringing together a diverse and expansive list of stakeholders to might be expected given its median income; 41 percent of housing units are owner-occupied (the city average push for a common cause, groups that share broadly is about 53 percent). Strawberry Mansion is a close-knit similar goals but may never have previously cooperated neighborhood where properties are likely to be passed on a project.² By doing so, they are able to leverage down from generation to generation. However, with diverse expertise and strategies. The Healthy Rowhouse

Project would be key to advancing any combination of the suggested strategies, however, we were not able to connect with them in great detail for this project at this time.

Recently, those who own aging homes in need of costly repairs could potentially find some relief. Starting this summer, the Philadelphia Redevelopment Authority will be launching a new home repair program for low-, moderate-, and middle-income homeowners.³ Stemming from a legislation that was passed in 2016, the Housing Preservation Loan Program (HPLP), will aim to give home repair loans to residents with low credit scores to repair anything from leaky roofs to installing wheelchair ramps.

In addition to existing institutions, there are tools available at both regional and national levels:

(1) The Basic Systems Repair Program (BSRP): Long waiting-list, and restrictions on both resident characteristics and home qualifications.

(2)Home Improvement Loans: Non-predatory loans issued by Urban Affairs Coalition and The Pennsylvania Housing Finance Agency. However, loans are difficult to obtain.

(3)PHFA Keystone Renovate & Repair Loan Program (R&R Loan): Prevent homeowners from becoming victims of unscrupulous lending practices (i.e., high interest rates and costs, more money borrowed than needed, prepayment penalties, etc.).

(4)Weatherization Assistance Program: Provides free weatherization and energy efficiency improvements to owner-occupied houses and tenant-occupied rental units in Philadelphia.

(5)Habitat Philadelphia's Home Repair Program: Habitat's traditional homeownership model using affordable payment options, sweat equity, and volunteer labor to serve current low-income homeowners who are struggling to maintain their homes, make necessary critical repairs, or pay their utility bills.

(6)Rebuild Together Philadelphia: Revitalizing communities by transforming vulnerable houses into safe, healthy and energy-efficient homes.

(7) National Park Service Information Maintenance Resources:

- Cleaning and Water-Repellent Treatments for Historic Masonry Buildings
- Removing Graffiti from Historic Masonry
- Appropriate Methods for Reducing Lead-Paint Hazards in Historic Housing
- Heating, Ventilating, and Cooling Historic **Buildings**
- Improving Energy Efficiency in Historic Buildings »
- Section 106

2. RECOMMENDATIONS:

The above-listed low-interest loan and repair programs are mostly for homeowners in Philadelphia. However, most have long waiting lists or exclude residents who are not in good financial standing, with no tax delinquencies and upkept bills. Additionally, partner organizations already work in neighborhoods to assist with home repairs but are limited in their organizational and financial capacity.

Deferred loans, on the other hand, have the capacity to assist both low and moderate income homeowners with payments. A revolving loan fund would have the capacity to assist with emergency situations or any needed repairs. A new concept of a sliding income scale for the Basic Systems Repair program or creating a community benefits agreement would identify and address the neighborhood's top priorities. Additionally, technical assistance with historic house repairs and design guidelines for both sensitive modification of existing historic stock as well as the mitigation of new development designs would ensure architectural cohesion.

While the need to retain affordable housing in Strawberry mansion is extremely important, to completely keep it affordable would be to ignore the opportunities that come with new development. If addressed equitably, new development could create opportunities for the creation and expansion of

resources for the residents of Strawberry Mansion. prices may rise. By considering policies and programs that assist with any additional monetary burdens, the Without its community members, the look and feel of Strawberry Mansion would drastically change and hope is to incentivize homeowners to remain in the it would greatly harm the rich characteristics that neighborhood. The financial policies and programs the neighborhood holds today, as well as displace its described in this section address rising property taxes residents. To address this, it is important to cultivate and paths towards homeownership. a mixed-use environment, while remaining cognizant to set the stage for mixed-used environments that **1. EXISTING TOOLS:** allow not only for coexistence but also for social and Pennsylvania has some of the highest property taxes public spaces to thrive. Shaw, Washington, D.C. is an in the nation. They account for about 30 percent of example of a neighborhood that took advantage of state revenue, including funding of public schools. strong policies that prevent renters from being forced Existing programs such as Longtime Owner Occupants out of their homes, including: the right to return to Program (LOOP), Real Estate Tax deferral program, buildings that replaced the demolished structures; the Homestead Exemption, Low-Income Senior Citizen right of residents to select which developers purchase Tax Freeze, and Hardship Payment Plans look to reduce their buildings; and the opportunity that residents have or freeze property taxes for homeowners in an effort to to continue residing in renovated buildings without an promote neighborhood stability, preserve character, increase in rent, either through building-wide subsidies and provide a dividend of sorts to those who have stayed or housing vouchers. While Shaw has been successful in through years of high crime, population loss, and keeping existing residents in the neighborhood, studies declining property values. Current discount programs have found that when mostly white millennials move for homeowners exist through tax exemption and the into traditionally African American communities, provision of payment plans that postpone tax payments the two groups interact minimally and frequently if real estate taxes increases by more than 15 percent experience tension. Because of Shaw's progressive from one year to the next. There are also organizations affordable housing policies, many older, working-class that assist first-time homebuyers with closing costs and community members have been able to remain. While payment plans. many welcome benefits such as a decline in crime, they resent giving up both their former political influence 2. RECOMMENDATIONS: and the character of their community.

However, stronger renter protections and rent control are needed, not only in Strawberry Mansion In addition to the policies mentioned above, but in Philadelphia as a whole. Protecting tenants' rights would encourage responsible rental practices organizations, community groups, schools, businesses, and residents have opportunities to build family assets through systematic enforcement which would promote through homeownership, to revitalize distressed investment rather than displacement. Additionally, neighborhoods, and to preserve racial and ethnic Community Development Block Grants, usually used to provide funds for housing rehab, could be re-defined diversity. or refined to focus their support towards intangible **II. FINANCIAL** programming and community social gathering spaces.

While development and diversity have been welcomed as indicators that the neighborhood is once again becoming economically viable, questions still remain There are approximately 2358 vacant (unbuilt) parcels about the long-term implications of this growth. in Strawberry Mansion.⁴ Land vacancies can occur for An acknowledgement of the financial burdens and a number of reasons; properties can be on the market opportunities in Strawberry Mansion recognizes that or off, buildings and parcels might be left behind after with new development and investment, housing sales, or because of foreclosures or tax-delinquency.

III. LEGAL

They can be in near-new condition or in deteriorating states. Property owner neglect, combined with careless disposal of trash and illegal dumping, provides optimal conditions for weeds and trash to accumulate, increasing the perception of blight in a neighborhood. Collecting data on empty parcels and vacant buildings can help a struggling neighborhood clean up and regain control of ownership in order to facilitate new residences. However, as is in Strawberry Mansion, where vacant parcels are ample and neighboring development pressures are rapidly expanding, developers eye the empty properties for future, for-profit development. [see map] While this development has the potential to socially and economically empower and uplift a lowincome community, if used insensitively, the data being collected can be manipulated to intentionally harm the existing community members. Conversations and meetings with Strawberry Mansion Community Development Corporation elucidated the alarming extent that predatory developers go to in order to obtain housing. A particular opportunity for predatory developers occurs through the presence of tangled titles, a term that refers to the problems related to legal ownership of real estate in which the person living in the property and claiming ownership is not actually listed on the deed.

1. EXISTING TOOLS:

There are few programs and policies that address tangled titles. The process of dealing with a tangled deed is to figure out who owns the property by conducting online searches and then obtaining legal assistance in order to clear it. However, this can be costly and confusing. Existing organizations that assist with the necessary community legal services on a pro-bono basis include:

- Community Legal Services
- Philadelphia Legal Assistance 2.
- Philadelphia VIP 3.

Additionally, the Tangled-Title Fund (TTF), a grant program funded by the Philadelphia Department of Housing and Community Development, helps prevent homelessness and urban blight. Through the program, grants are administered by Philadelphia VIP and are awarded on a monthly basis. The program is still active today but has eligibility restrictions such as, income, assets, and the ability to pay any extra costs.

2. RECOMMENDATIONS:

To better assist with the legal issues attributed to tangled titles, stronger connections between local institutions and organizations could be made. Strawberry Mansion's neighbor, Temple University, or perhaps the University of Pennsylvania, could develop programs to connect law students and recent graduates with individuals in need of pro-bono legal assistance. Additionally, by establishing a land trust, which would act as a connecting point between the properties that currently exist and future properties, would further mitigate any future legal issues.

(IV) INFORMATION

Access and awareness to information is an underlying problem between all of the target categories listed above; the connection between available resources and the potential user is essentially lost, in many cases. Organizations such as the Strawberry Mansion CDC provide access to these resources and are more than willing to provide information, although their capacities can have limits. Not only is a centralized comprehensive toolkit, available in person or online through a website, necessary but creative ways to spread and distribute information could further extend their reach. Strengthened connections with local businesses or the city would help improve the distribution of information, calendar events, or resources. Recommendations include: establishing new organizations or recruiting block captains to assist in making information accessible, and establishing a central information point to connect people to reputable professionals such as contractors or construction workers.



most noticeably higher in neighborhoods such as Strawberry Mansion.

Figure 4.2: HOUSING VACANCY RATES Using 2012-2016 ACS data, this map shows high vacancy rates throughout Philadelphia as a whole but



Design Approach is an important part of this its most significant characteristics: that of a closely-knit preservation plan because contextually sensitive design community. From a predominantly Jewish community is fundamental to preserving the neighborhood and to the existing majority-Black population, the neighborhood has retained its vibrant social and cultural ensuring its sustainability in the long term. New investment and development will come to Strawberry significance. Mansion at an increasing pace, but it doesn't not have The lives of the residents of Strawberry Mansion exist Approach is not to impose a strict set of rules, but rather to describe and illustrate a design ethos for new

to cost the neighborhood its existing character and outside the boundaries of brick and mortar. Their claim unique "sense of place." The intent with the Design on their public space is obvious through social clusters around stoops and open spaces. Some oft-used social housing that is respectful to the existing infrastructure spaces are the porch, which serves as an extension of the and assets in Strawberry mansion. home; the sidewalk, an extension of the porch; and the street, an extension of the sidewalk. While some blocks have defined hard edges, separating the private from Strawberry Mansion is no stranger to new development and housing. New development is taking place in public, most of the neighborhood has these distinct several pockets of the neighborhood already and is 'buffer' spaces that act as pockets of social activity. an important component in revitalizating the area. The boundaries of these pockets are nebulous, often melding into larger spaces and creating an intangible However, this development and future development social network that connects one neighbor to many. As should be supportive of the existing historic built fabric and the social and cultural values of the residents. In one walks the streets in the neighborhood, a smile from addition to policy interventions and other protections, the front steps and a wave from the porch are a constant reminder of the open nature of the residents and their design can be used as a means to build stronger and more sustainable communities, meeting resident's strong social ties with one another. While the landscape wide array of needs. Design can be used as a tool to of architecture in the neighborhood constantly changes elevate the community's goals and ideals, augment the from Philadelphia rowhouses to queen Anne style manors and modern block development, the social neighborhood's existing assets, and improve the longterm sustainability of the neighborhood. aspect of the neighborhood stays constant.

considered in any new development.

GOALS OF DESIGN APPROACH The following plan proposes a conceptual Design Approach to new housing construction as a complement The aim of the Design Approach is to: to extant buildings. While there is no right answer Establish key principles for new construction in (these are not guidelines), the plan aims to address the historic setting of Strawberry mansion for certain principles and design themes that should be contextually respectful design » Address Aging in Place through design; introduce **UNDERSTANDING THE BUILT ENVIRONMENT** ADA friendly construction that provides easy access

to residents with a wide range of abilities and ensure While Strawberry Mansion has experienced disinvestment and rampant demolition, it has not lost those additions are an integral part of the design

DESIGN APPROACH

- Provide a framework for new design in Strawberry » mansion by ensuring existing issues and concerns are well understood
- Introduce different housing typologies to attract a » diverse user network
- Inspire creativity and innovation in new construction » by setting a high standard for new design
- Address both private housing units and the public environment

The Design Approach will address current issues of blocks with vacant lots. Design concepts were inspired by the existing conditions seen in more intact parts of the neighborhood. The Design Approach intends to do the following:

- » Redefine the streetscape, particularly narrow oneway streets, to make them pedestrian and ADA friendly and encourage livelier street activity, engaging the neighbors and preserving existing street life
- Ensure infill construction and new development is contextual to the existing massing and form, maximizing the current space available
- Address the needs of long-term residents, including the need for ADA friendly accessibility without interrupting the current sidewalk layout
- Introduce a wider spectrum of housing sizes to attract a wide spectrum of residents with diverse needs; experiment with zoning height and FAR regulations to distribute residential density

AUDIENCE FOR DESIGN APPROACH

The Design Approach introduces a broad range of ideas and principles to initiate a dialogue amongst the stakeholders involved in design in historic settings, including:

- Architects and Designers »
- City Planners »
- Community Development Corporations (CDCs) »
- Developers and Clients »
- Residents of Strawberry Mansion (Homeowners) »
- Local Authorities »
- Other Interested Parties

DESIGN PRINCIPLES AND INTENTS

The Design Intent and Principles were developed in response to existing conditions, including the architectural language of the neighborhood and other tangible and intangible factors. It draws upon the value of street life and public spaces, helping guide new development (and modifications of extant buildings when suitable) to provide better housing opportunities and improved living conditions for residents. (each section will have its own illustration)

SHARED SENSE OF OWNERSHIP

Strawberry Mansion has a strong social fabric and new development should support that by introducing front porches or open spaces facing the street. These not only act as a gathering space, but become a transitioning space between the public and private, preserving the social dynamics of the community. Moreover, to improve the streetscape, design should incorporate front yards to provide a balance between soft and hard landscape

CLAIM THE REAR SIDE OF HOUSES

Many homeowners have renovated their rear yards, erecting fences or other barriers around the perimeter. This has resulted in snug alleyways, mostly used as dumping grounds, neglected. These alleyways could be cleared and used for ADA ramps to connect multiple houses, ensuring safe access for people with disabilities, particularly those in wheelchairs.

DEFINE THE STREET

Strawberry Mansion is characterized by three street types: major arterials, wider residential roads, and narrow streets. While traffic flows well on wider streets, narrow streets are often more congested, with minimal space for pedestrian activity. Narrow streets can be reworked to eliminate abrupt level changes-making them more ADA and pedestrian friendly-and to encourage more street activity like that seen on wider residential streets.

RESPECT THE CONTEXT

While developers tend to focus on large empty blocks, it is necessary to address single vacant lots as well. Infill construction on these properties should respect the surrounding context, such as rooflines, elevation

SHARED SENSE OF OWNERSHIP



CLAIM THE REAR SIDE









STREET DEFINITION





RESPECT THE CONTEXT



SOCIAL NODES



profiles, streetscape, social spaces, architectural EYES ON THE STREET language, fenestration placement, materiality, and Many residents sit on their porches or front steps, engaging with neighbors and passersby, contributing to a friendly and social environment. Currently, this exists on the street level, extending horizontally. Utilizing stacked levels in verticality creates added opportunities to socialize, strengthening social engagement between neighbors.

texture, to ensure a cohesive and complementary design. SOCIAL NODES The neighborhood has several forms of transitional private/public spaces connecting houses to the street, including stoops, steps, and front porches. New design should experiment with several types of stoops to provide varying degrees of privacy and engagement, in keeping with the social values of the neighborhood.

EYES ON STREET



PROTOTYPES

A nuanced understanding of the neighborhood's intangible landscape played a pivotal role in designing the following prototypes. These prototypes propose a menu of distinct design alternatives meant to fit the context of the neighborhood while remaining true to the existing "sense of place" in the neighborhood. These prototypes are not 'hard designs,' but rather, conceptual in nature they explore essential design themes that have been derived from the neighborhood itself. These prototypes are a result of inspiration gleaned from intact parts of the neighborhood. They highlight that contemporary needs can be met in a historic neighborhood through new construction while staying true to the existing context.

The prototypes account for the varying sizes of vacant parcels and incorporate the needs of a wide array of residents to support the existing social fabric, both in public and private spaces. The prototypes cluster lots together, when possible, for maximum utilization of space (vertical and horizontal) for residential and public uses.

The prototypes are respectful of and reflect the community's social character, contemporary needs, urban fabric, and socio-economics while utilizing modern building techniques. They can serve as compelling prototypes for use by relevant authorities or developers.

Note: The prototypes are conceptual in nature addressing those issues to which potential solutions can be provided through design. They have been derived from a study of existing conditions. The illustrations do not suggest Architectural Style, Form, Massing, Materiality, Texture or Dimensionality.

PROTOTYPE ONE:

SUITABLE FOR FULL BLOCK CONSTRUCTION

- Utilizes multiple lots to create larger dwellings with » increased FAR by constructing vertically.
- » Introduces mixed housing types to accommodate wider range of residents and providing varying degrees of privacy.
- Creates levels of stoops that act as gathering spaces » for diverse social activity.



STREET FACING BALCONY FRONT FACING EXTERIOR SPACES VISUALLY CONNECTED WITH ADJACENT BACLONIES

REAR SEMI PRIVATE SPACE

CREATING CONNECTIONS ON BOTH

SIDES OF THE BUILDING FOR MORE

SOCIALIZING OPPORTUNITIES

PROTOTYPE ONE

HOUSING DESIGN | 93

PROTOTYPE TWO:

SUITABLE FOR TWIN LOTS

- » Utilizes twin lots and increases the height to develop a greater number of dwellings.
- » Defines a wider street profile by pushing back the frontage to make space for stoops to generate interaction.
- » Creates levels of stoops to act as gathering spaces for diverse social activity.
- Allows for bi-level dwellings to house a greater » number of residents.



PROTOTYPE THREE:

SUITABLE FOR MULTIPLE LOTS

- Utilizes multiple lots between constructed buildings » to develop mixed dwellings with varying heights.
- » Creates individual levels of stoops to act as gathering spaces for diverse social activity.
- Engages side-yards to create added open space. »

Strawberry Mansion has a rich architectural language ranging from large Queen Anne-style townhouses to smaller, simpler Philadelphia Rowhouses. Decades of disinvestment and demolition have left Strawberry Mansion with widespread land vacancy; however, despite the large number of vacant lots, Strawberry Mansion retains its distinct "sense of place."

Strawberry Mansion needs investment and new development, but developers and designers must be sensitive and respectful of the existing character of the neighborhood. New development should respect the core values and principles of residents, protecting their vibrant tangible and intangible heritage.



PROTOTYPE THREE

INTANGIBLE CULTURAL HERITAGE

The cultural heritage of Strawberry Mansion encompasses both tangible and intangible heritage - buildings and landscapes, stories and traditions. The abundant intangible cultural heritage shapes residents' cultural identities and creates pride of place, and its preservation contributes to the wellbeing and quality of life of the community. Moreover, Strawberry Mansion's intangible heritage constitutes an organic part of Philadelphia's neighborhood story and is highly valuable in the city's narrative as a city of neighborhoods. However, the community's way of life and unique traditions are at risk, given the threat of gentrification, the national evolution of memory, and shifts in population. Since the community-first preservation plan places social and cultural values at its forefront, this section will focus on intangible heritage and strategies to advance its preservation.

The intangible cultural heritage in Strawberry Mansion includes jazz, a close-knit community, and a horse riding tradition, to name a few. However, traditional preservation tool doesn't address intangible heritage realm well. For instance, considering that the community



Figure 4.3: Mural art "Why We Love Coltrane" by Ernel Martinez, located at in Strawberry Mansion. (Source: Steve Weinik)

supported the legendary saxophonist John Coltrane, Strawberry Mansion contributed to Philadelphia's jazz scene during its golden age.⁵ Preserving only the physical fabric of John Coltrane's House doesn't capture and promote the value of jazz culture. The city's rich tradition of jazz continues with the support of nonprofit groups, local clubs, musicians and fans.⁶ Nowadays, many jazz activities, including film screenings and jazz concerts, are organized around the neighborhood and its immediate surroundings in respect for John Coltrane's connection to this area.



Figure 4.4: Strawberry Mansion residents on the porch

Strawberry Mansion has developed a close-knit community through its multi-generational and longtime residency. Social activities occur at people's stoops, porches, open spaces, and on the street; stories of the neighbors past and present and the charming history of the community are told throughout the neighborhood.⁷ To preserve this vibrant community life, local residents' claims to their homes - whether owned or rented - should be protected, as should gathering spaces; these concerns are addressed in the sections of housing policy, design approach and green network.

The urban riding tradition is a unique representation vacant land located on West Fletcher Street, is the center of Strawberry Mansion. Although the urban riding of the neighborhood's horseriding presence. Stables community has received a great deal of national and immediately to the north of Fletcher Field, and others international attention, preservation actions have not scattered around the neighborhood, house the horses when they are not being exercised.⁹ been taken towards the urban riding community, which remains exposed to risks. Despite the many aspects of intangible cultural heritage in Strawberry Mansion, Generations of residents have grown up with horses

this section will focus on the preservation of its horse around. They have watched riders and their horses in riding community as an example for the unconventional the neighborhood since they were kids. Today, some approach of preservation, given the urban riding youth help care for privately-owned horses in exchange community's rich history, and its potential to mitigate for riding privileges. And when the kids grow up, they neighborhood violence and help disadvantaged youth. become the new generation of riders. They keep their own horses, which again gives the next generation the BACKGROUND opportunity to be exposed to horses in their childhood. In this way, the riding tradition has passed through generations.¹⁰ Ellis Ferrel, a 78-year-old horse owner, The horse riding tradition was brought by African founded Fletcher Street Urban Riding Club around Americans from rural south to the urban north during 2005. With the vision to mitigate neighborhood violence the Great Migration. Given its proximity to Fairmount through equestrian activities and mentoring, he and Park, a large African American population dating to the his family teaches kids to ride and to take care of the mid-twentieth century, and high rates of open space, horses. It's proven that horses have kept many kids out it's not surprising that horse culture has thrived here of trouble.¹¹ in Strawberry Mansion.⁸ Fletcher Field, a full block of



Figure 4.5: Young rider stopping by friends' house. (Source: Ann Sophie Lindström)

COMPARABLES FOR PRESERVING URBAN HORSE CULTURE

Although not common, urban horse culture can be found in other neighborhoods in Philadelphia and other cities in the United States. Some of these other examples demonstrate successful strategies to preserve urban horse culture, from which useful lessons can be drawn for Strawberry Mansion's riding community.



Figure 4.6: Malik Divers, the head of a urban stable close to the Schuylkill. (Source: Tiffany Pham)

In Southwest Philadelphia, a group called Concrete Cowboy is organized by Malik Davis, owner of several horses. He provides a stipend for disadvantaged youth in the neighborhood in exchange for their care for the horses, and he also sells rides to neighbors.¹² Similar to Fletcher Street Urban Riding Club, Davis also regards horse riding as a way to mitigate neighborhood violence. After he lost the site for his stables due to the rising rent, Batram's Garden reached out to him and promised to provide space for the horses and to support the stable's vision. The Garden is building new stables for him on an available land.¹³

Lesson: Partnership with existing organizations is helpful in sustaining the small riding group.

A more formal riding program with a similar vision is Work to Ride (WTR) program housed in Chamounix Equestrian Center in Fairmount Park. It "aids



Figure 4.7: Junior Varsity polo team members in Work to Ride program. (Source: Work-to-Ride)

disadvantaged urban youth though constructive activities centered on horsemanship, equine sports and education."14 The program founded the first African American polo team that participates in national competitions. However, the program does not have enough the spots for kids who need help, and many applicants are on waitlist. Apart from WTR, Chamounix Equestrian Center offers various profitable programs, including riding lessons and horse camps. The success of WTR is based on the financial and management support from the organization.

Lesson: Robust organization is important in sustaining and achieving its mission.



Figure 4.8: David Silver (right one) and the kids in the summer camp standing with a horse. (Source: Detoit Horse Power)

Similar to Work-to-ride program, Horses in the Hood program in Los Angeles and Horse Power in Detroit use horse riding as a way to help disadvantaged youth. The major activity of the two organizations is horse camps. What's special about Detroit's Horse Power program is

that the founder, David Silver, views building equestrian facilities as a way to revitalize the vacant land in urban Detroit. He believes that the repurposed vacant land will "contribute to the city's renewal and be a center for community events and equestrian services."15

Lesson: Equestrian activities can be a solution for vacant land.

THREATS TO STRAWBERRY MANSION'S RIDING COMMUNITY

Although horse riding is still a frequent sight in Strawberry Mansion, the tradition is currently exposed to several threats. Personal interviews revealed that the riding community is loosely bound, and that the majority of horse owners are not members of the Fletcher Street Urban Riding Club.¹⁶ As indicated by the comparables, a robust organization can play an important role in the success of these communities. If the individual horse owners and riders were to come under the umbrella of an organization, such as the existing Fletcher Street Urban Riding Club, more resources and protection could be leveraged to sustain the riding community.

Furthermore, the properties occupied by the riders are under threat. In 2008, agents of the Pennsylvania In order to sustain the unique urban riding tradition, Society for the Prevention of Cruelty to Animals raided the Strawberry Mansion riding community needs the Fletcher Street stables because a dead pony was to be prepared for future challenges. The first and found near the site. Shortly thereafter, the Department foremost recommendation is to establish an integrated of Licenses and Inspections shut down a number of organization for the riding community. Instead of Fletcher Street stables.¹⁷ Moreover, the corrals and creating a new organization, utilizing the existing outbuildings erected by the Fletcher Street Urban Riding Fletcher Street Urban Riding Club may be a more Club on Fletcher Field were demolished. Currently the viable option. However, the scale of the current club riders, are still using this land to exercise horses, but it is is not large enough to provide strong support for the a real threat that the land is owned by the Philadelphia community. More riders should be included in the club Redevelopment Authority and that the riders have no to pool the physical and human resources. With an control over what will happen to it. The risk is urgent integrated organization, the community will have more since this large area of open space, which occupies an potential in fundraising, partnership, and resource entire city block, is an easy target for developers. sharing. Through the organization, the community will be able to tackle the three most important preservation issues facing the riding community: that of the riders, the land, and the stables.







Figure 4.9: Aerial photo pre demolition in 2007 (Source: Google Earth)



Figure 4.10: Aerial photo post demolition in 2017 (Source: Google Earth)

PRESERVATION RECOMMENDATIONS

Keep Riders in the Community

It's impossible to preserve the riding tradition without passionate riders. For the tradition to continue, it is important to promote pride that horseback riding carries, and its important role as an asset to the community. This can be achieved through well-organized cultural activities. For instance, in 2014, artists collaborated with the riders to hold an equestrian event called "Horse Day" on Fletcher Field, where the riders rode their horses with special-designed armors. Such cultural programming can be effective in raising the awareness and visibility of the riding community, and n fostering a love for horses in the community.



Figure 4.11: Still from the video of Horse Day, 2015. (Source: Mohamed Bourouissa)

Another issue is that horse riding in Strawberry Mansion is a male activity. Women are not found around stables and the riding community has a reputation for being a masculine environment. To preserve the riding tradition, the effort of and support from the whole community is needed. If the riding community is not inclusive for all people, its pool is limited to half of the community. Therefore, another recommendation is to involve women in the riding community.

Preserving Fletcher Field

To preserve the use of Fletcher Field for horses, three potential solutions are proposed:

I. Designating the land as a local historic site,

Based on the criteria (a), (h) and (J), Fletcher Field is eligible for local designation as a historic place. If Fletcher Street were designated as historic site, its development would be prevented. However, there is no precedent to designate a vacant land without archaeological value.

2. Purchase the land.

The Fletcher Street Urban Riding Club is a 501(c)(3)nonprofit organization. The money required to acquire the land could be obtained through fundraising. Apart from the financial needs, leadership and management skills are also required for the organization to maintain the land if it were successfully acquired.

3. Turn the field into a horse park.

An effective way to manage Fletcher Field is similar to the mechanism of dog parks. Turning the field into a horse park would ensure the function of the field as an exercise ground for horses. The transformation should begin with the transfer of ownership of the land from Redevelopment Authority to the Department of Parks and Recreation. Compared with the previous two solutions, a horse park has more possibilities in terms of cultural programming and obtaining financial benefits, as the riders could sell rides to neighbors and visitors as a source of income.

Improving Stable Conditions

One of the lessons learned from the incident in 2008 is that it is important to follow the rules and regulations so that no fault can be found in the stables. Shutting down the stables would be devastating for the riding community. To be prepared for potential threats, the current stables should be upgraded and more stables that meet standards are needed. Abandoned industrial buildings around Fletcher Field could be good candidates for adaptive reuse as horse stables and clubhouses.

The above recommendations are based on the condition of the Club developing sufficient management capacity to operate as the protector for the urban riding community. Although efforts have been made to contact the Club, we were unable get in touch with the person in charge. Therefore, knowledge about the Club has been obtained through interviewing riders, online articles, documentaries, and investigating the Club's website and Facebook page. The next step would be to conduct a deeper study of the organization's capacity. Based on the information we have gathered thus far, we believe that, with a more solid structure, the Fletcher Street Urban Riding Club has the potential to become the organization that provides services for both disadvantaged neighborhood youth and the larger urban riding community. To expand its capacity, the organization could consider recruiting new members from the riding community, writing a strategic plan, and



Figure 4.13: Inside the stable on Fletcher Street. (Source: Ann Sophie Lindström)

developing partnerships with large organizations, such as Fairmount Park.

It is acknowledged that we, as outsiders and by ourselves, don't have the most accurate view of the neighborhood's intangible heritage and traditions. A more comprehensive plan for intangible heritage preservation would be based on a better understanding of the stories and traditions valued by the community. Therefore, deeper ethnographic study and collecting oral histories through conversations about the heritage of the neighborhood are expected to be the next steps.

CONCLUSION

Urban riding has been thriving in the neighborhood for over a century. This form of intangible cultural heritage is significant for local residents because it has become part of their cultural identity and pride-ofplace. As a community struggling with disinvestment, drug, and violence issues, urban riding has become an alternative to provide an outlet for neighborhood youth. Therefore, the culturally and socially valuable tradition merits immediate preservation by promoting the practice and securing its property. To achieve this goal, an integrated organization would be able to implement the programing, fundraising, partnership, and upgraded facilities needed to carry this tradition on for generations to come.



Figure 4.14: Houses running on the Fletcher Street Field..

GREEN NETWORKS

Strawberry Mansion's parcel vacancy rate is nearly three times that of the city average. Voids, where homes once stood, extend throughout the neighborhood, carving networks of open space across its built fabric. It is easy to see these vacancies as problems, and perhaps easier still to prioritize new development as the solution, but such a philosophy is one dimensional - it prioritizes the economic value of the open spaces while disregarding the historical, social, and environmental values that they embody. These scars of demolition are real components of Strawberry Mansion's history and cultural identity. They are an acknowledgement of the widespread and systemic disinvestment that has plagued the neighborhood's shrinking, yet resilient, community since the mid-twentieth century.

Preserving aspects of the present landscape through a system of green networks would not only retain the



Figure 4.15: Mural of John Contrail on the corner of 29th and Diamond Street.

legibility of the neighborhood's recent history, but provide opportunities for equitable and sustainable development, key components of successful community revitalization. These networks would prioritize the preservation of select open spaces for three distinct purposes: active community space, urban agricultural space, and passive green space.

Even where new construction is the desired outcome for presently vacant parcels, development won't happen all at once (nor completely). In these cases the creation of green networks can function as a interim preservation strategy, providing community benefits and opportunities that will help support new development.

ACTIVE COMMUNITY **SPACES**

Strawberry Mansion is a tight-knit community, prideful of its culture and close relationships. These values, threatened by development, can be preserved and fortified through the creation of community-centered green spaces.

Active community spaces are areas that promote communal ownership and provide a physical space in which to express the intangible heritage and culture of the neighborhood. Recently, organizations have begun to utilize Hatfield House (an historic property owned by the Fairmount Park Conservancy) as a venue for community arts events. While this has been a positive development for the community, Hatfield house is located on the southern periphery of Strawberry Mansion, not within the neighborhood itself, and highlights a need to develop similar community spaces that are more centrally located for Strawberry Mansion residents. The neighborhood also possesses two recreation centers (Mander and Cecil B. Moore) that

plots falling victim to developers and city inspectors. help provide gathering spaces, but they are likewise The proposed green network would work to preserve located on the periphery of Strawberry Mansion. and expand the neighborhood's remaining community gardens. Not only does gardening promote physical and These community spaces can be utilized for a wide mental wellbeing, it is a vital component of Strawberry array of activities: recreation, play, public art, public Mansion's twentieth century heritage. Providing a performances, gathering hubs, market spaces, and formal structure to support and connect instances of memorials. By proposing a network of smaller green urban agriculture increases community access to fresh spaces, no single location would meet all of these produce and creates educational opportunities, which community needs. They can instead be dispersed teaches young residents not only where their food comes throughout the neighborhood, widening the spectrum from, but where they themselves come from as well.

of community members who are connected to open spaces and engaging in community activities.

URBAN AGRICULTURAL SPACES

Passive green spaces encompass the creation of green infrastructure that promotes both environmental Urban agriculture in Strawberry Mansion, as in many sustainability and connectivity within Strawberry Philadelphia neighborhoods, has its roots in the Second Mansion. This includes storm water management, Great Migration. African Americans who came north through the establishment of rain gardens and green during this period brought with them southern traditions parking alternatives, as well as walking paths that of farming; traditions they adapted for use in their new connect agricultural and community nodes to form larger communities. In recent decades Strawberry Mansion networks. These smaller green spaces also functions as has seen a reduction in its gardens, many informal parklets, open to all residents for recreational uses.



Figure 4.16: Pathway through vacant land on York Street.

PASSIVE GREEN SPACES



Figure 4.17: A typical example of the high volume of open space in Strawberry Mansion. These lots have the potential to be activated for environmental and community improvements.

SITE SELECTION

Not all vacant land is meant to be incorporated into these networks; larger swaths are more suitable for new development, and single parcels, for privatelyowned side yards or infill construction. This proposal seeks to identify clusters of moderately sized open spaces (around two to five parcels in width) that can be cultivated to provide equitable access to green spaces in ways that positively impact both the community and the environment.

These networks are not designed to compete with East Fairmount Park, but rather to complement it. East Fairmount Park possesses a great sense of ownership within the community, and as large-scale improvements get underway in the park, such as Rebuild Philadelphia and the Discovery Center, there is a continuous move towards inclusivity regarding Strawberry Mansion residents and programming within East Fairmount Park. But no matter its size, a single park located on the periphery of the neighborhood does not create equitable access to green space, nor does it promote economic development and environmental sustainability throughout the community.

To illustrate how a network of green spaces would be designated and organized, three zones of focus were identified within Strawberry Mansion. The fist zone resides in the southern section of the neighborhood; it was elected because of the increased gentrification pressures being felt in the area. The second zone is located around the recently constructed Gordon Street Apartments, selected to compliment Philadelphia Housing Authority's investment and encourage more revitalization efforts. The third and final zone is centered on southern portion of Ridge Avenue, the area designated for commercial revitalization (this is discussed in depth in the following section of this report).

The selected sites are intended to evolve over time, as they make room for new development and adapt to community needs. First, the best land with which to create a network is identified (primarily based on size, location, and ownership). Next, the identified lots are evaluated and designated as either active community space, urban agriculture, or passive green space (based on immediate residents' needs and lot size). Finally, the maintenance and improvements of the identified lots are undertaken collectively, to produce a cohesive and identifiable network. These networks are designed to evolve over time-to make room for new development, and to adapt as community needs change.



Figure 4.18: The three zones explored for green networks in Strawberry Mansion.

ZONE ONE





green network.



Based on current conditions and input from immediate residents, designate the key lots for use as either active community space, urban agricultural space, or passive green space.



Through wayfinding and continuity, create a compelling pathway to link major nodes in the green network. Prioritize which lots will be maintained long term, and which will cycle out of the green network after a few years to promote new development that positively interacts with the community's green spaces.

PASSIVE NEW DEVELOPMENT CONNECTORS

Identify the key open lots that will serve as a

ZONE TWO

KEY OPEN

LOTS



AGRICULTURE

ACTIVE

COMMUNITY

PASSIVE

CONNECTORS

NEW

DEVELOPMENT





Identify the key open lots that will serve as a green network.

Based on current conditions and input from immediate residents, designate the key lots for use as either active community space, urban agricultural space, or passive green space.



Through wayfinding and continuity, create a compelling pathway to link major nodes in the green network. Prioritize which lots will be maintained long term, and which will cycle out of the green network after a few years to promote new development that positively interacts with the community's green spaces.

ZONE THREE







NEW DEVELOPMENT



Identify the key open lots that will serve as a green network.

Based on current conditions and input from immediate residents, designate the key lots for use as either active community space, urban agricultural space, or passive green space.

Through wayfinding and continuity, create a compelling pathway to link major nodes in the green network. Prioritize which lots will be maintained long term, and which will cycle out of the green network after a few years to promote new development that positively interacts with the community's green spaces.

POSSIBLE PARTNERS

The following is a list of partners that Strawberry Mansion can look to for inspiration and assistance in creating green networks; it is meant to demonstrate that this or similar projects can be implemented incrementally. The creation of community-centered green networks does not need to be reliant on a single entity or source of funding. Instead, such a project can leverage different relationships and opportunities to achieve portions of the plan, one section at a time.

These highlighted partners also serve the purpose of showing that investments in green infrastructure means so much more than just park space. Green spaces shape community identity, they preserve heritage, provide education and employment opportunities, foster community expression and engagement, promote improved health and wellbeing, and, when wellmaintained and programmed, have measurable economic impacts on the surrounding community.

- » Discovery Center
- East Park Revitalization Alliance »
- » Fairmount Park Conservancy
- » Mural Arts:
 - > Porch Light
 - > Community Murals
 - > Restored Spaces
- Philadelphia Horticultural Society >>

- » Philadelphia Department of Water
- » Philadelphia Orchard Project
- » Philadelphia Redevelopment Authority
- » Philadelphia School District
- » Temple Medicine
- » The Village of Arts and Humanities
- » The William Penn Foundation:



COMMERCIAL REVITALIZATION

REVITALIZATION THROUGH RETAIL

There are countless benefits to revitalizing a neighborhood commercial corridor. Revitalization efforts in a commercial corridor help to strengthen existing businesses, attract new businesses, and create new jobs for residents. In addition, commercial revitalization can lead to increased tax revenue for the neighborhood. When residents travel outside of their neighborhood to purchase goods and services, muchneeded revenue escapes. Providing basic goods and services that residents need within the neighborhood, keeps spending local, benefiting local businesses, local workers, and generating tax revenue that can go towards local improvements.

In addition, commercial corridors are usually located on major arterials, and improvements along these ofttraveled throughways can be the first sign to outsiders that the neighborhood is improving. This not only draws in outside consumers, but can make the neighborhood a more attractive place to live and work in the long-term, stemming the outflow of existing residents.



Figure 4.19: Commercial buildings along Ridge Avenue

COMMERCIAL NODES

Historically, Strawberry Mansion had three commercial nodes: Lehigh Avenue between 24th and 29th Street; Strawberry Square bounded by 27th Street, Dauphin, 29th Street, and York; and Ridge Avenue between Sedgley and Diamond Street (Fig.4.19). In interviews, many longtime residents recalled that they used to be able to purchase everything they needed within their own neighborhood. Unfortunately, only fragments of these commercial areas remain, many of the historic commercial structures were demolished or repurposed into residential buildings. Sadly, the historic structures within the historic Strawberry Square were razed to make room for a large shopping center and sprawling parking lot.

Thankfully, Lehigh Avenue and Ridge Avenue remain largely intact. Most of the extant buildings are still commercial (whether vacant or currently in use) and would readily support continued commercial use today. While both of these could be candidates for revitalization, Ridge Avenue is the stronger option. Lehigh Avenue is far removed, on the periphery of the neighborhood; Ridge Avenue, by contrast, is centrally located, extending from the southeastern edge (bordering neighborhoods with increasing investment) into to the core of Strawberry Mansion.

In interviews, several Strawberry Mansion residents hoped to see Ridge Avenue restored as a commercial hub. The director of the CDC, Tonnetta Graham and a small developer in Strawberry Mansion, Julia Choseed, agreed that Ridge Avenue was the best and most likely spot for revitalization. This is due in large part to development plans underway along Ridge Avenue south of Strawberry Mansion. The Sharswood/Blumberg Choice Neighborhoods Transformation Plan outlinesalong the commercial corridor. As this area of Ridgethe city's plan for the revitalization and developmentAvenue fills up, development will likely extend beyondof Ridge Avenue between 21st Street and Cecil B Moorethe boundaries of these zones. Commercial revitalizationAvenue. This strip was designated as a Philadelphiaalong Ridge Avenue in Strawberry Mansion would be aEmpowerment Zone and Keystone Opportunity Zone,natural extension of the work already underway to thesouth (Fig. 4.20).



Figure 4.19: Historic commercial nodes on the 1962 Land Use Map, Works Progress Administration for PA, 1962. Lehigh Avenue is to the north; Strawberry Square in the center; and Ridge Avenue to the southeast.



Figure 4.20: Buffers around each commercial node (circled in red) equate to a 5-10 minute walk (differs based on pace). The arrow shows the direction that development will likely expand from the Sharswood/Bloomberg Choice Neighborhood Transformation Plan.

STRATEGIES FOR REVITALIZATION

There are multiple strategies for commercial revitalization: government-led strategies, market-led strategies, and public-led strategies. Government-led revitalization usually includes direct financing or tax incentives from the government. While this investment is often badly needed, interventions can be slow and insensitive to local context as they are managed by outside agencies (government-led revitalization can include eminent domain seizures, demolition, and a-contextual development).

Market-led revitalization relies on market demand: when there is sufficient demand (and evidence of other successful businesses flourishing in that market), new investment will flow into the neighborhood. Unfortunately, this model requires a robust, extant market. There must be existing consumers, unmet consumer demand, and ideally, other businesses that have proven successful in that market. For communities suffering from decades of disinvestment, this is rarely the case; the neighborhood struggles to attract private investors.

Many commercial corridors remain stuck in a state of disrepair, lacking the interest of either government or private entities. Thankfully, there is a third model: public-led revitalization.

Public-led revitalization is a grassroots effort that is used to overcome employment and investment obstacles. It uses "soft" activities, like small-scale improvements, safety, cleanliness, and small business assistance to attract private-sector development. It relies on local residents and community partners (merchants, property owners, local nonprofit organizations, and other stakeholders) to coordinate a long-term strategy for revitalization and enact changes incrementally over time.



Figure 4.21: Mixed-use building on the corner of Ridge and Sedgley Avenue.

THE MAIN STREET APPROACH IN STRAWBERRY MANSION

The Main Street Model is perhaps the most well-known public-led revitalization model. Main Street uses a four point approach to revitalization: organization, design, promotion, and economic vitality. The Main Street Model and the four point approach would work well for the Ridge Avenue commercial corridor in Strawberry Mansion.

Strawberry Mansion could also look to organizations outside the neighborhood to help with funding **POINT 1:** Organization: Public-led revitalization or guidance: Philadelphia Downtown Center (the starts with coordinating residents and community official State Coordinating Program for Main Street), partners (merchants, property owners, local nonprofit Philadelphia Commerce Department, Preservation organizations, and other stakeholders) to develop a Alliance of Greater Philadelphia, Citizens Planning shared vision for the future of the commercial corridor. Institute, Community Design Collaborative, and Coordinating stakeholders to develop a long-term Temple University (which has been extending strategy requires a dedicated Main Street Manager and development to the west towards Strawberry Mansion). a volunteer Board of Directors. These leaders can then Dedicated Strawberry Main Street leaders could work coordinate the input and efforts of other community with these community groups to determine resident organizations for the commercial corridor. needs and create a shared vision for the future of the commercial corridor.

Thankfully, Strawberry Mansion has a close-knit community and strong community partners. The

following organizations could help create the long-term plan for Ridge Avenue, and they could aid with funding or volunteer effort to help achieve short-term goals:

Strawberry Mansion CDC
Neighborhood Action Center (NAC)
Widener Library
Strawberry Mansion Learning Center
Strawberry Mansion Faith-Based Coalition
Fletcher Street Urban Riding Club
John Coltrane Cultural Society
Mander Recreation Center
Fairmount Park Conservancy
East Park Revitalization Alliance
Fairmount Park Discovery Center
Historic Strawberry Mansion
Woodford Mansion
Mural Arts Program
Local churches
Local schools
Block captains
Local developers

POINT 2: Design: Public-led commercial revitalization can be achievable for communities with tight budgets if they employ targeted, affordable improvements and make use of existing infrastructurechoosing rehabilitation and reuse over demolition whenever possible. Revitalization begins with small, incremental improvements that are achievable on a tight budget and with volunteer effort: painting, landscaping, cosmetic repairs to building facades, installing inexpensive lighting, etc. As these smaller repairs add up, the improved look and feel of the downtown attracts new public and private investment to the area.

Public-led revitalization should make use of existing infrastructure (rely on new development second, and demolition as a last resort). This enables improvements be made incrementally as money and volunteer effort becomes available, and preserves the existing historic structures to retain the corridor's unique "sense of place" (in market terms, the differentiating factor that draws consumers to the area). Strawberry Mansion should adopt a preservation ethos for their commercial corridor before more buildings are lost. Already, some demolition and new construction has eroded the historic look and feel of the corridor. While the new Dollar General on Ridge and Sedgley Avenue has brought much needed investment to the area, additional demolition and a-contextual construction threatens the corridor's unique "sense of place."

POINT 3:

Promotion: A public-led strategy for revitalization relies on promoting the commercial corridor and the new improvements being made. Promotion can happen through word of mouth or organized campaigns (mailers, radio interviews, ads, etc). This helps existing residents and outside consumers learn about the changes happening in the neighborhood and about the new businesses or products they should try.

In addition to promotion, community partners can use events to bring people into the corridor. Strawberry Mansion is lucky to have both an attractive historic commercial corridor and unique cultural assets. Community leaders can organize events to celebrate local culture within the commercial corridor (in the street or

on one of the many large lots along Ridge). These events can be enjoyable activities for local residents, and draw people to local business, boosting sales.

POINT 4:

Economic Revitalization: Responsible revitalization includes strengthening existing businesses, growing local entrepreneurs, and employing local residents. First and foremost, Strawberry Mansion should look to protect and strengthen existing businesses. Current businesses have survived because they have found a consumer base and are meeting consumer needs. These business owners have persevered despite a challenging economic environment. Community leaders should determine what, if anything, these businesses need to sustain themselves or to grow-repairs, financial tools (storefront grants, improvement loans, regulatory relief), or training/workshops (classes on payroll, taxes, advertising, social media, succession planning, etc).

With local businesses strengthened, community leaders can look to attract new businesses (either help grow local entrepreneurs or incentivize existing businesses to move or expand). Strawberry Mansion should look to achieve a robust business mix. This is a mix of businesses that avoids cannibalization (e.g. too many of one type of business can mean no single business achieves necessary sales thresholds) and meets market demand. Community leaders should start by assessing what businesses already exist along Ridge Avenue. Then, Strawberry Mansion can determine market demand using both an on-theground community needs survey (conducted by local leaders) and a market study (Fig. 4.22).



Figure 4.26: Commercial buildings along Ridge Avenue.



MARKET STUDY

We carried out a market study for the Ridge Avenue Commercial Corridor. This study examined the viability of nine different business types. First, the Primary Trade Area was identified. This is the area within which consumers will travel to shop (industry standards are 1 - 1.5 miles). For this market study, Fairmount Park and the Schuylkill River were regarded as hard boundaries: boundaries that consumers are unlikely to cross to shop. The PTA includes the four zip codes that fit into the 1.5mile buffer, east of Fairmount Park: 19121, 19122, 19130, and 19132 (Fig. 4.23).

A profile of the PTA revealed this area to have a total population of 119,107 residents and an average growth rate of 0.2% from 2000 to 2010. On average the population is much younger than Philadelphia and the U.S. as a whole. For example, there are 13.7% 20-24 yearolds and 15.4% 25-34 year-olds in the PTA,

Figure 4.22: There are already a number of thriving businesses, including several salons, restaurants, and storefront churches.



Figure 4.23: The Primary Trade Area—1 mile radius is show in light pink; 1.5 mile radius in dark pink. The four zip codes included in the PTA are: 19132, 19121, 19122, and 19130.



Figure 4.24: Vacant commercial buildings along Ridge Avenue

compared to 7% and 13.3% in the U.S., respectively. In addition, the PTA has less families and husband-wife only households and far more single-parent and singleperson households. Lastly, fewer of the residents in the PTA area are homeowners (43% in the PTA vs. 65% in the U.S.) and they make, on average, much less (\$35,584 vs. \$53,889 median household income).¹⁸

These insights can be used to determine what products and services, and ultimately what businesses, would best suit the needs of residents with the PTA.

An Understore/Overstore Retail Gap Analysis reveals undersupply in at least eight areas and oversupply in at least one area:¹⁹

*See appendix for additional information

	Yearly Expenditures /Per Capita	Unmet Demand	Additional SQFT Opportunity
Supermarkets/ Grocery Stores	\$ 1,420	\$ 89.6 million	207,768 ft²
Pharmacies/ Drug Stores	\$ 839	\$ 79.7 million	121,704 ft²
Full-Service Restaurants	\$ 448	\$ 39.9 million	264,081 ft²
Limited-Service Restaurants	\$ 475	\$ 37.6 million	179,282 ft²
Women's Clothing Stores	\$ 232	\$ 21.5 million	93,212 ft²
Gift, Novelty, and Souvenir Stores	\$ 36	\$ 3.7 million	40,053 ft²
Used Merchandise Stores	\$ 2.4	\$ 1.5 million	25,740 ft²
Children's Clothing Stores	\$ 18	\$ 0.7 million	3,958 ft²

Community leaders can use this market study in the needs of this type of business. A pro forma was put combination with an on-the-ground community needs together to assess the viability of reusing the existing survey to determine the ideal business mix for the Ridge structure at 2800 Ridge Avenue for a supermarket, and Avenue commercial corridor. the results suggest it would be a profitable project (see appendix). The numbers within the pro forma can be used by community leaders to test the profitability of other types of projects in other locations along Ridge. The market study revealed one business type with Ultimately, these decisions should be driven by residents significant unmet demand: Supermarkets and Other what they need.

PRO FORMA

Grocery Stores (NAICS 45100) have an estimated yearly unmet demand of \$89.6 million per year within the PTA.²⁰ A Focused Competitiveness Analysis (see appendix) shows a sample of the spread of small, medium, and large food markets in the primary trade area, and while there are two supermarkets of comparable size within the PTA (Save-A-Lot and Aldi), there market study suggests consumers need more.

Given the results of this market study and the nature of the commercial corridor in which this parcel lies, a supermarket may be one (of many) viable businesses for the Ridge Avenue commercial corridor. The vacant warehouse on 2800 Ridge Avenue could adequately suit



CONCLUSION

The myriad benefits of commercial revitalization along Ridge Avenue will directly support an overall equitable development strategy. Hopefully these guidelines can help community leaders begin that process, using a public-led Main Street Model and implementing the four-point approach. The market study and pro forma make the case that new, thriving businesses are viable along Ridge Avenue. Grassroots, incremental efforts can help improve the look and feel of the neighborhood, bolster existing businesses, and eventually attract muchneeded public and private investment.

Figure 4.21: The vacant warehouse at 2800 Ridge Avenue, across the street from the new Dollar General at Ridge and Sedgley Avenue.



APPENDICES

05

STRAWBERRY MANSION TIME LINE

1682: William Penn's plan for Philadelphia established 10,000 acres to the north of the city as land allocations for early investors.

mid-1700s: Country estates established along the Schuylkill River.

1789: Summerville (now Strawberry Mansion) built for Judge William Lewis. The neighborhood would take its name from this residence in the mid-1800s.

1829: Eastern State Penitentiary founded to the north of the Philadelphia.

1833: Girard College founded (the campus's buildings would not be complete until 1848).

1836: Laurel Hill Cemetery established to the north of Strawberry Mansion.

1854: Consolidation of the City of Philadelphia.

1868: East Fairmount Park established.

1850s-'70s: Transportation infrastructure developed through the establishment of the Ridge Avenue Streetcar, the PA Connecting Railroad, and extensions of roads through the newly-created Fairmount Park.

Late 1880s-1910: Most of the neighborhood's physical development occurred during this time period.

1920s and '30s: Strawberry Mansion was one of the largest Jewish communities in Philadelphia. Large monumental synagogues were constructed throughout the neighborhood beginning at the turn of the century.

1930s-1960s: The second Great Migration and the development of Ridge Avenue as a prominent jazz corridor.

1940: The James Weldon Johnson Homes (a PHA development) was opened on the site of the former Glenwood Cemetery, along the eastern edge of the railroad tracks that form the neighborhood's southeastern boundary. Ninetyfive percent of initial residents were African American.

1944: Union employees of the Philadelphia Transportation Company organized a wildcat strike against the hiring of African Americans in skilled positions.

1946: Philadelphia Redevelopment Authority established.

1948: The City Planning Commission designated the area surrounding Temple University as blighted, leading to federally-mandated urban renewal and displacement in this area.

1950: The Philadelphia Housing Authority acquired Odd Fellows Cemetery, located along the eastern edge of the railroad tracks near the James Welden Johnson Homes. It built a development on the site.

1963: The NAACP picketed a construction site at Strawberry Mansion High School, in protest of the school board's racially discriminatory hiring practices.

1964: Police brutality and race riots in North Philadelphia contributed to white flight, and particularly, to the exodus of much of the Jewish community.

1967: The U.S. Department of Labor adopted the Philadelphia Plan, a program that required federal contractors to hire nonwhite employees.

Late 1967: Norman Bloomberg public housing apartments constructed on a superblock in Sharswood.

1969–1975: Parts of Lower North Philadelphia were included in the Model Cities Program.

1985: Strawberry Square shopping center, seen as a sign of reinvestment in the neighborhood, opened at 29th and Dauphin Streets.

1988: The North Philadelphia Revitalization Plan was developed.

1990s: Increased federal funding for affordable housing and homeownership accompanied by large amounts of affordable housing developed in the neighborhood's central section.

2001-2007: Neighborhood Transformation Initiative (NTI), funded by \$295 million in bonds, led to increased demolitions throughout the city.

2013: Strawberry Mansion High School was one of 37 schools slated for closure, although it ultimately remained open.

2015: Philadelphia Land Bank acquired its first properties.

2016: The Sharswood-Bloomberg Transformation Plan, using a Choice Neighborhoods Funding Grant from HUD, used eminent domain to demolish buildings in nearby Sharswood, including ones in fair condition.

2017: Mander and Cecil B. Moore Recreation Centers included on Rebuild Philadelphia's preliminary list of parks, recreation centers, and libraries to receive funding. Council President and Fifth District Representative Darrell Clarke working with residents to survey the neighborhood and plan for change.

STRAWBERRY MANSION DEMOGRAPHIC DATA

		1940			1950			1960	
	Strawberry	Lower North	Philadelphia	Strawberry	Lower North	Philadelphia	Strawberry	Lower North	Philadelphia
	Mansion	District		Mansion	District		Mansion	District	
Population	61831	264997	1931334	64447	283794	2071605			
% White Alone	77.3%	68.5%	86.9%	60.4%	51.7%	81.7%	7.9%	24.2%	73.2%
% Black or African American Alone	22.7%	31.3%	13.0%	39.5%	48.1%	18.2%	91.9%	75.5%	26.5%
% Other race	0.0%	0.2%	0.1%	0.1%	0.2%	0.1%	0.1%	0.3%	0.3%
% Occupied	95.0%	93.5%	95.1%	97.6%	96.8%	97.5%	95.2%	92.1%	94.9%
% Vacant	5.0%	6.5%	4.9%	2.4%	3.2%	2.5%	4.8%	7.9%	5.1%
% for sale or rent	97.6%	97.3%	95.7%				76.7%	71.6%	67.2%
% other vacant	2.4%	2.7%	4.3%				23.3%	28.4%	32.8%
% Owner Occupied	29.4%	24.5%	38.9%	48.8%	35.0%	56.1%	53.6%	40.1%	61.9%
%Renter Occupied	70.6%	75.5%	61.1%	51.2%	65.0%	43.9%	46.4%	59.9%	38.1%
White Ownership Rate	34.6%	32.0%	43.1%				63.2%	53.8%	68.0%
Black Ownership Rate	10.2%	7.2%	10.2%				52.2%	35.0%	43.0%



		Census 2000			ACS 2012-2016	5
	Strawberry Mansion	Lower North District	Philadelphia	Strawberry Mansion	Lower North District	Philadelphia
Total Population	23,151	95,155	1,517,550	26,400	110,559	1,559,938
% White	0.6%	8.4%	45.0%	5.0%	23.9%	41.3%
% Black or African American	97.7%	78.6%	43.2%	90.3%	60.8%	42.9%
% Asian	0.2%	1.0%	4.5%	1.7%	3.2%	6.9%
% All Other Races (including two or mo	1.48%	11.97%	7.30%	3.04%	12.22%	8.98%
% Hispanic or Latino, any race	0.9%	14.9%	8.5%	4.0%	18.6%	13.8%
Households	8,712	32,679	590,071	10,168	38,495	582,594
% Family households	62.7%	63.0%	59.7%	50.3%	48.7%	53.3%
% Married family	26.6%	28.1%	53.7%	30.4%	30.4%	51.7%
% Male, no wife	10.6%	10.9%	9.0%	12.9%	11.7%	10.1%
% Female, no husband	62.8%	61.1%	37.3%	56.8%	57.9%	38.2%
% Nonfamily households	37.4%	37.1%	40.3%	49.7%	51.3%	46.7%
% Male headed	40.8%	45.5%	43.9%	44.3%	46.7%	45.2%
% Female headed	59.3%	54.5%	56.1%	55.7%	53.4%	54.8%
Total Number of Housing Units	11,124	42,670	661,958	13,877	50,065	671,125
% Occupied	78.3%	80.6%	89.1%	72.7%	78.9%	86.8%
% Owner Occupancy	53.7%	46.7%	59.3%	42.7%	39.1%	52.4%
% Renter Occupancy	46.3%	53.3%	40.8%	57.3%	60.9%	47.6%
% Vacant	21.7%	23.4%	10.9%	27.3%	23.1%	13.2%
% for sale or rent (out of vacant)	14.3%	19.5%	34.6%	12.3%	19.3%	33.8%
% other vacant (out of vacant)	85.7%	90.6%	65.4%	87.8%	80.7%	66.2%
% other vacant (out of all housing un	18.6%	18.9%	7.1%	24.0%	18.7%	8.7%
Average of median owner-occupied house value (2010 dollars)	\$45,685.15	\$56,245.88	\$109,658.86	\$60,486.96	\$104,768.88	\$163,153.6





Strawberry Mansion, 2012–16

TABLES: MARKET STUDY FOR RIDGE AVENUE BETWEEN SEDGLEY AND DIAMOND STREET; PRO FORMA FOR 2800 RIDGE AVENUE

		Pro	ofile of the Prin	nary Trade Are	a		
Zip Code	19130	19121	19122	19132	Total	US	Notes
SqKm	3.18	5.33	2.88	4.99	16.38		
Population 2000	22874	34935	19589	41709	119107	281421906	
Growth Rate to 2010	8.7%	4.7%	10.5%	-13.0%	0.2%	10%	Much slower growing
Population (2010)	24870	36572	21653	36268	119363	308745538	
20-24	12.0%	18.2%	16.7%	8.7%	13.7%	7.0%	Many more
25-34	30.7%	11.0%	11.7%	11.3%	15.4%	13.3%	Slightly more
35-44	13.7%	9.0%	8.7%	11.9%	10.8%	13.3%	Less
45-54	10.2%	12.0%	9.0%	15.5%	12.2%	14.6%	Slightly more
55-64	10.0%	8.4%	7.2%	11.7%	9.5%	11.8%	Slightly less
65+	11.8%	8.9%	8.9%	12.4%	10.5%	13.1%	Less
Median Age (Years)	32.9	24.5	22.6	36.5	29.1	37.2	Younger
Households (2010)	13089	13097	6590	14085	46861	116716292	
Families households	33.0%	53.0%	54.6%	59.9%	49.7%	66.4%	Much less
Husband-wife only	22.1%	10.5%	18.4%	15.6%	16.4%	48.4%	Significantly less
Single-parent	11.0%	42.5%	36.2%	44.4%	33.4%	18.1%	Significantly more
Single person	47.2%	33.5%	31.1%	33.0%	36.8%	26.7%	Much more
Avg Household Size	1.8	2.6	2.6	2.5	2.4	2.6	Slightly less
Home owners (2010)	41.9%	33.2%	40.2%	54.4%	43.0%	65.1%	Much less
2015 Median Household Inco	m \$ 71,173.00	\$ 17,969.00	\$ 29,815.00	\$ 23,380.00	\$ 35,584.25	\$ 53,889.00	Significantly less

Sources:

U.S. Census Bureau, "Profile of General Population and Housing Characteristics" 2000 Demographic Profile Data, 2000, table DP-1, accessed November 14,

U.S. Census Bureau, "Profile of General Population and Housing Characteristics" 2010 Demographic Profile Data, 2010, table DP-1, accessed November 14,

U.S. Census Bureau, "Selected Economic Characteristics" Census 2000 Summary File 3 (SF 3) - Sample Data, 2015, table DP03, accessed November 14, 2017, https://factfinder.census.gov/faces/tableservices/jsf/pages/productview.xhtml?src=bkmk.

	Retail Gap Analysis: Calculation of Additional Supportable Retail Space													
		Annual Expeditures		r Capita enditure s	Es	timated Net Demand	Estimated Out- Leakage	Po	otential Gross Demand		milar Store Iles in PTA	Excess Demand	Gross Supportable Land Area (GLA)	Net Supportable Additional GLA
444130 - Hardware Stores	\$	58,764,704	\$	38	\$	4,510,615	20%	\$	5,412,738	\$	6,180,000	\$ (1,669,385)	489018	-13892
445110 - Supermarkets and Other Grocery St	\$	2,208,845,852	\$	1,420	\$	169,544,862	20%	\$	203,453,834	\$	79,962,846	\$ 89,582,016	5122989	207768
446110 - Pharmacies and Drug Stores	\$	1,304,184,640	\$	839	\$	100,105,584	20%	\$	120,126,701	\$	20,410,628	\$ 79,694,956	1991658	121704
448120 - Women's Clothing Stores	\$	360,144,263	\$	232	\$	27,643,672	20%	\$	33,172,406	\$	6,161,732	\$ 21,481,940	1562697	93212
448130 - Children's and Infants' Clothing Stor	r \$	27,644,928	\$	18	\$	2,121,948	20%	\$	2,546,337	\$	1,430,670	\$ 691,278	158282	3958
453220 - Gift, Novelty, and Souvenir Stores	\$	56,608,970	\$	36	\$	4,345,147	20%	\$	5,214,176	\$	627,000	\$ 3,718,147	609815	40053
453310 - Used Merchandise Stores	\$	37,103,936	\$	24	\$	2,847,995	20%	\$	3,417,594	\$	1,366,017	\$ 1,481,978	644439	25740
722511 - Full-Service Restaurants	\$	697,218,127	\$	448	\$	53,516,524	20%	\$	64,219,828	\$	13,614,058	\$ 39,902,466	4614306	264081
722513 - Limited-Service Restaurants	\$	738,603,609	\$	475	\$	56,693,158	20%	\$	68,031,790	\$	19,096,356	\$ 37,596,802	3522067	179282

Source: ESRI 2014, ArcGIS Desktop: Release 10, Redlands, CA: Environmental Systems Research Institute.

DEMAND	2015	2020F		Source
Population of Primary Trade Area	119363		129151	PTA Analysis
x Annual Per Capita Expenditures	\$ 1,420.41	\$	1,349.39	Total Sales (from ESRI Business Analyst)/Population
Estimated Net Demand	\$ 169,544,861.87	\$	174,275,163.51	PTA Pop * Per Capita Expenditures
Current Estimated Out-Leakage	20%		20%	Local Estimate
Potential Gross Demand	\$ 203,453,834.24	\$	209,130,196.21	Net Demand * (1+ Out Leakage Rate)
SUPPLY				
Similar Store Sales in PTA	\$ 79,962,846.00	\$	79,962,846.00	Sales within PTA (from ESRI Business Analyst)
NET MARKET SUPPORT				
Excess Demand (3-6)	\$ 89,582,015.87	\$	94,312,317.51	Estimated Net Demand (from above) - PTA Sales
[divided by] Sales per SQFT of GLA	\$ 431.16	\$	409.61	Total Sales/Total GLA (from Business Analyst)
Net Supportable Additional GLA	207768.09		230251.69	Excess Demand/Sales per SQFT of GLA

Source: ESRI 2014, ArcGIS Desktop: Release 10, Redlands, CA: Environmental Systems Research Institute.

F	ocused Cometitiveness Ar	nalysis: Re	tail	Space: NAICS 4	15110 Supe	erma	arkets &	Other Grocery Stores
Name	Address	Zip	201	4 Sales (ESRI)	SQFT	Sal	es/SQFT	Comments
SAVE A LOT STORE	2801 W Dauphin Ave	19132	ć	191,689.00	2755	ć	69 58	Large grocery store chain. Discount prices. Central location in Strawberry Square.
SAVE A LOT STORE		19192	Ļ	191,085.00	2755	Ļ	05.58	Small bodega. Located on commercial strip. Accepts SNAP. Deli counter. No fresh
CAROLINA MARKET	2952 Ridge Ave	19121	\$	117,333.00	6496	\$	18.06	fruits/vegetables. Small bodega. Corner store on residential block. Deli counter. No fresh
JEFFERSON FOOD MAF	RKE71501 N 29th St	19121	\$	200,000.00	2620	\$	76.34	fruits/vegetables. Midsize market. Small selection, but bigger than a bodega. Located on commercial strip. Small selection of fresh
BARNEY'S SUPPER MA	RKE 2449 Ridge Ave 51	19121	\$	360,000.00	7500	\$	48.00	fruits/vegetables Convenience store. Located on commercial strip. Deli counter. No fresh
RIDGE GROCERY	2700 Ridge Ave	19121	\$	200,000.00	2620	\$	76.34	fruits/vegetables

Source: ESRI 2014, ArcGIS Desktop: Release 10, Redlands, CA: Environmental Systems Research Institute.

DEMAND	2015	202	20F	Source
Population of Primary Trade Area	119363		129151	PTA Analysis
x Annual Per Capita Expenditures	\$ 231.59	\$	220.01	Total Sales (from ESRI Business Analyst)/Population
Estimated Net Demand	\$ 27,643,671.59	\$	28,414,930.03	PTA Pop * Per Capita Expenditures
Current Estimated Out-Leakage	20%		20%	Local Estimate
Potential Gross Demand	\$ 33,172,405.91	\$	34,097,916.03	Net Demand * (1+ Out Leakage Rate)
SUPPLY				
Similar Store Sales in PTA	\$ 6,161,732.00	\$	6,161,732.00	Sales within PTA (from ESRI Business Analyst)
NET MARKET SUPPORT				
Excess Demand (3-6)	\$ 21,481,939.59	\$	22,253,198.03	Estimated Net Demand (from above) - PTA Sales
[divided by] Sales per SQFT of GLA	\$ 230.46	\$	218.94	Total Sales/Total GLA (from Business Analyst)
Net Supportable Additional GLA	93211.99		101640.57	Excess Demand/Sales per SQFT of GLA

Source: ESRI 2014, ArcGIS Desktop: Release 10, Redlands, CA: Environmental Systems Research Institute.

	Focused Competitive	eness An	alysi	s: Retail Space: NAI	Clothing Stores			
Name	Address	Zip	2014 Sales (ESRI) SQFT			Sale	es/SQFT	Comments
								Central location in Strawberry Square. Large online retailer as well (so can return
RAINBOW 278	2301 N 29th St	191	32 \$	994,235.00	6496	\$	153.05	in store). Vintage store. Located on residential block Operated out of a house.No online
VINTAGE THRONE	2332 N Gratz St	191	32 \$	180,000.00	2660	\$	67.67	presence. Second-hand store. Located on busy commercial strip. Final sale only and
OUR PLACE	1509 Spring Garden St	191	30 \$	160,000.00	2246	\$	71.24	minimum purchase price. Small store, new clothing. Located on busy
CENTER STAGE	2639 W Girard Ave	191	30 \$	140,000.00	2305	\$	60.74	commercial strip. Mid-large thirft store. Bright and well-kept Good online reviews. Located on busy
THE WARDROBE BOUT	FIQUI 1822 Spring Garden St	191	30 \$	100,000.00	2246	\$	44.52	commercial strip.

Source: ESRI 2014, ArcGIS Desktop: Release 10, Redlands, CA: Environmental Systems Research Institute.

DEMAND	2015	202	20F	Source
Population of Primary Trade Area	119363		129151	. PTA Analysis
x Annual Per Capita Expenditures	\$ 474.96	\$	451.22	Total Sales (from ESRI Business Analyst)/Population
Estimated Net Demand	\$ 56,693,157.99	\$	58,274,897.10	PTA Pop * Per Capita Expenditures
Current Estimated Out-Leakage	20%		20%	Local Estimate
Potential Gross Demand	\$ 68,031,789.59	\$	69,929,876.52	Net Demand * (1+ Out Leakage Rate)
SUPPLY				
Similar Store Sales in PTA	\$ 19,096,356.00	\$	19,096,356.00	Sales within PTA (from ESRI Business Analyst)
NET MARKET SUPPORT				
Excess Demand (3-6)	\$ 37,596,801.99	\$	39,178,541.10	Estimated Net Demand (from above) - PTA Sales
[divided by] Sales per SQFT of GLA	\$ 209.71	\$	199.22	Total Sales/Total GLA (from Business Analyst)
Net Supportable Additional GLA	179282.17		196657.65	Excess Demand/Sales per SQFT of GLA

Source: ESRI 2014, ArcGIS Desktop: Release 10, Redlands, CA: Environmental Systems Research Institute.

Name	Address	Zip		2014	4 Sales (ESRI)	SQFT		Sale	s/SQFT	Comments
NEW HOPE PIZZA RESTAURANT	2821 N Broad St Ste A		19132	\$	83,000.00		1900	\$	43.68	Takeout pizza. No tables. Open 11am- 11pm. Located in commercial area near gas station and highway.
KING CHUN RESTAURANT	2530 W Lehigh Ave		19132	\$	45,000.00		2650	\$	16.98	Takeout Chinese. No tables. Open 4pm- 12am. Located on busy commercial strip. American fast food/drive through. Tables
CHECKERS DRIVE-IN RESTAURAN	J ⁻ 2329 N 29th St		19132	\$	611,251.00		4964	\$	123.14	outside only. Open 10am-3am. Located in central Strawberry Square. Soul food/BBQ. Local-owned. Online delivery available as well. Open Thurs-Sat 11am-8pm. Located on busy commercial
TWENTY NINTH ST GRILL	2017 N 29th St		19121	\$	150,000.00		2924	\$	51.30	
PLAZA PIZZA	1600 N Broad St Ste 10b)	19121	\$	460,000.00		3536	\$	130.09	Online delivery avaiable as well. Located i busy commercial area near Temple U.

Source: ESRI 2014, ArcGIS Desktop: Release 10, Redlands, CA: Environmental Systems Research Institute.

Pro Forma - 2800 Ridge Avenue

	Item			Source		Item			Source
Concept		Total	Leasable			Unit	sqft/mo	Yearly	
	Residential square footage	0	0	-Concept Plan	Rents &	Residential Rents	\$0.00	\$0	Market Study
	Retail square footage	67436	67436	Concept Plan	income	Retail Rents (Base)	\$6.94	\$5,616,070	Market Study
	Office square footage	0	θ	-Concept Plan		(Net Effecitive) Office Rents	\$0.00	\$0	Market Study
	Parking spaces	16	16	Concept Plan		Other Residential Income		\$0	Market Study
	► Total square footage	67436	67,436	Calculated from above		Retail Overages		\$20,000	Market Study
						► Total Gross Scheduled Yearly Incon	ne	\$5,636,070	Total from above
Land	Parcel size (sqft)		68,061			Residential Rate Inflation Factor		3%	Market Study
	Cost (per sqft)		\$30	Landowner		Retail Base Rent Inflation Factor		2%	Market Study
	► Total Land Cost		\$2,041,830			Office Rent Inflation Factor		3%	Market Study
Hard	Site Clearance & Remediation		\$0	Construction Engineer	-		Year 1	Stabilized	•
Costs	Grading and Site Preparation		\$0	Construction Engineer	Vacancy	Residential	0%	0%	Market Study
	Residential Construction Cost (per s	\$0	\$0	Construction Estimator	Rates	Retail	0%	0%	Market Study
	Retail Construction Cost (per sqft)	\$125.00	\$8,429,500	Construction Estimator		Office	0%	0%	Market Study
	Office Construction Cost (per sqft)	\$0	\$0	Construction Estimator					
	Per space parking cost	\$0	\$0	Similar Project	Expenses	Residential Expense Ratio		0%	Exchange reports
	► Total Construction Cost		\$8,429,500	Sum of Above		Retail Expense Ratio		54%	Exchange reports
	Landscaping		\$64,750	Concept		Office Expense Ratio		0%	Exchange reports
	► Total Hard Costs		\$8,494,250	Sum of Above		Residential Expense Inflation Factor		0%	Exchange reports
Soft	Architecture & Engineering Fees		\$679,540	8% of Const. Costs		Retail Expense Inflation Factor		2%	Exchange reports
Costs	Legal Fees		\$200,000	Research		Office Expense Inflation factor		0%	Exchange reports
	Permits		\$54,099	City Hall	-				
	Pre-leasing		\$20,000	Estimate	Tax Info	Depreciable Basis		\$10,297,314	Hard Costs + Some Soft Costs
	Contingencies		\$849,425	10% of Hard Costs, above		-Residential Proportion		0%	Res.HC/(Res. + Comm. HC)
	► Total Soft Costs		\$1,803,064	Sum of Above		Office and Retail Proportion		100%	1 - Residential Proportion
Total Develo	pment Costs		\$12,339,144	Land+Hard+Soft		-Residential Depreciable Basis		\$0	Depreciable Basis * Res. Propor.
						Office and Retail Debreciable Basis		\$10,297,314	Depreciable Basis * Comm. Propo
Permanent	Interest Rate		5.34%	Lender		Depreciable Personal Property		\$150,000	
Financing	Term		6.2	Lender		Residential Useful Life		27.5	IRS
-	Debt-coverage ratio		1.38	Lender		Office and Retail Useful Life		39	IRS
	Fees and Points		3.25	Lender		Personal Property Useful Life		7	IRS
	Mortgage Constant		.1937	= PMT(rate,term,-1)		Residential Depreciation		\$0	Res. Basis/Res UL
	Stabilized NOI (year 2)		\$2,630,255	from page 3		► Retail and Office Depreciation		\$264,034	Comm. Basis/Comm. UL
	► Supportable Mortgage		\$9,840,258	=NOI/(DCR*MC)		► Personal Property Depreciation		\$21,429	Pres. Property Basis/PP UL
	► Yearly Debt Service		\$1,905,982	= Mortgage * MC		► Financing Amortization		\$51,582	Mortg. Points/Term
	► Fees and Point Costs		\$319,808	Points * Mortgage		Marginal Tax Rate		0.415	Fed + State - Interaction
Construction	Hard Costs		\$8,494,250	from above					
Lending	% financed		90%	Lender	Sale	Sales Cap Rate		7%	Market Study
	Construction Loan Amount		\$7,644,825	Hard costs * % financed	& Reversion	Selling Costs		6%	Industry standard
	Interest rate		7.90%	Lender	Info	Capital Gains Tax Rate		20%	IRS
	Term (months)		26	Constr. Schedule	1	Discount (Hurdle) Rate		12%	Developer-Investor Requirement
	Drawdown Factor		0.55	Lender		· ·			· ·
	► Construction Interest		\$332,168	Loan*Rate*Term*DDF					
	Fees		3.25%	Lender					
	► Construction Fees		\$248.457	Constr. Loan * Fees					

Sources: ESRI 2014, ArcGIS Desktop: Release 10, Redlands, CA: Environmental Systems Research Institute. "City of Philadelphia Zoning Code: Quick Reference Guide," Accessed October 1, 2017, http://www.phila.gov/CityPlanning/projectreviews/PDF/Quick_Reference_Guide.pdf. "Cap Rates, Commercial Real Estate, Capitalization Rates, Mortgage Rates, Interest Rates, Market Data, Discount Rates, and News," RealtyRates.com, Accessed October 3, 2017, http: "Commercial Real Estate Database," Real Capital Analytics, Inc., Accessed October 3, 2017. https://www.rcanalytics.com/. Square Foot Costs with RSMeans Data, Kingston: RSMeans, 2017. "Summary of Building Permit Fees for Common Construction Projects," Accessed December 4, 2017, https://business.phila.gov/media/Summary-of-Building-Permit-Fees.pdf.

Pro Forma - 2800 Ridge Avenue

Key Operating Schedu	ules																													
Cash Accounts	Year 1	Year 2	Year 3	Year 4	Year 5	Year 6	Year 7	Year 8	Year 9	Year 10	Year 11	Year 12	Year 13	Year 14	Year 15	Year 16	Year 17	Year 18	Year 19	Year 20	Year 21	Year 22	Year 23	Year 24	Year 25	Year 26	Year 27	Year 28	Year 29	Year 30
Residential Gross Scheduled Ren	nt \$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
Retail Gross Scheduled Rent	\$5,616,070	\$5,728,391	\$5,842,959	\$5,959,818	\$6,079,015	\$6,200,595	\$6,324,607	\$6,451,099	\$6,580,121	\$6,711,724	\$6,845,958	\$6,982,877	\$7,122,535	\$7,264,985	\$7,410,285	\$7,558,491	\$7,709,661	\$7,863,854	\$8,021,131	\$8,181,554	\$8,345,185	\$8,512,088	\$8,682,330	\$8,855,977	\$9,033,096	\$9,213,758	\$9,398,033	\$9,585,994	\$9,777,714	\$9,973,268
Office Gross Scheduled Rent	<u>\$0</u>	<u>\$0</u>	<u>\$0</u>	<u>\$0</u>	<u>\$0</u>	<u>\$0</u>	<u>\$0</u>	<u>\$0</u>	<u>\$0</u>	<u>\$0</u>	<u>\$0</u>	<u>\$0</u>	<u>\$0</u>	<u>\$0</u>	<u>\$0</u>	<u>\$0</u>	<u>\$0</u>	<u>\$0</u>	<u>\$0</u>	<u>\$0</u>	<u>\$0</u>	<u>\$0</u>	<u>\$0</u>	<u>\$0</u>	<u>\$0</u>	<u>\$0</u>	<u>\$0</u>	<u>\$0</u>	<u>\$0</u>	<u>\$0</u>
Total Gross Scheduled Rent	\$5,616,070	\$5,728,391	\$5,842,959	\$5,959,818	\$6,079,015	\$6,200,595	\$6,324,607	\$6,451,099	\$6,580,121	\$6,711,724	\$6,845,958	\$6,982,877	\$7,122,535	\$7,264,985	\$7,410,285	\$7,558,491	\$7,709,661	\$7,863,854	\$8,021,131	\$8,181,554	\$8,345,185	\$8,512,088	\$8,682,330	\$8,855,977	\$9,033,096	\$9,213,758	\$9,398,033	\$9,585,994	\$9,777,714	\$9,973,268
+ Other Residential Income	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
+ Retail Overages	\$20,000	\$20,400	\$20,808	\$21,224	\$21,649	\$22,082	\$22,523	\$22,974	\$23,433	\$23,902	\$24,380	\$24,867	\$25,365	\$25,872	\$26,390	\$26,917	\$27,456	\$28,005	\$28,565	\$29,136	\$29,719	\$30,313	\$30,920	\$31,538	\$32,169	\$32,812	\$33,468	\$34,138	\$34,820	\$35,517
Total Gross Scheduled Income	\$5,636,070	\$5,748,791	\$5,863,767	\$5,981,043	\$6,100,664	\$6,222,677	\$6,347,130	\$6,474,073	\$6,603,554	\$6,735,625	\$6,870,338	\$7,007,745	\$7,147,900	\$7,290,858	\$7,436,675	\$7,585,408	\$7,737,116	\$7,891,859	\$8,049,696	\$8,210,690	\$8,374,904	\$8,542,402	\$8,713,250	\$8,887,515	\$9,065,265	\$9,246,570	\$9,431,502	\$9,620,132	\$9,812,534	\$10,008,785
- Residential Vacancy	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
- Retail Vacancy	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
- Office Vacancy	<u>\$0</u>	<u>\$0</u>	<u>\$0</u>	<u>\$0</u>	<u>\$0</u>	<u>\$0</u>	<u>\$0</u>	<u>\$0</u>	<u>\$0</u>	<u>\$0</u>	<u>\$0</u>	<u>\$0</u>	<u>\$0</u>	<u>\$0</u>	<u>\$0</u>	<u>\$0</u>	<u>\$0</u>	<u>\$0</u>	<u>\$0</u>	<u>\$0</u>	<u>\$0</u>	<u>\$0</u>	<u>\$0</u>	<u>\$0</u>	<u>\$0</u>	<u>\$0</u>	<u>\$0</u>	<u>\$0</u>	<u>\$0</u>	<u>\$0</u>
Effective Gross Income (EGI)	\$5,636,070	\$5,748,791	\$5,863,767	\$5,981,043	\$6,100,664	\$6,222,677	\$6,347,130	\$6,474,073	\$6,603,554	\$6,735,625	\$6,870,338	\$7,007,745	\$7,147,900	\$7,290,858	\$7,436,675	\$7,585,408	\$7,737,116	\$7,891,859	\$8,049,696	\$8,210,690	\$8,374,904	\$8,542,402	\$8,713,250	\$8,887,515	\$9,065,265	\$9,246,570	\$9,431,502	\$9,620,132	\$9,812,534	\$10,008,785
 Residential Expenses 	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
- Retail Expenses	(\$3,057,389)	(\$3,118,536)) (\$3,180,907)	(\$3,244,525)	(\$3,309,416)	(\$3,375,604)	(\$3,443,116)	(\$3,511,978)	(\$3,582,218)	(\$3,653,862)	(\$3,726,940)	(\$3,801,478)	(\$3,877,508)	(\$3,955,058)	(\$4,034,159)	(\$4,114,842)	(\$4,197,139)	(\$4,281,082)	(\$4,366,704)	(\$4,454,038)	(\$4,543,119)	(\$4,633,981)	(\$4,726,661)	(\$4,821,194)	(\$4,917,618)	(\$5,015,970)	(\$5,116,289)	(\$5,218,615)	(\$5,322,987)	(\$5,429,447)
- Office Expenses	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
Net Operating Income	\$2,578,682	\$2,630,255		\$2,736,517	\$2,791,248	\$2,847,073	\$2,904,014	\$2,962,095	\$3,021,336	\$3,081,763	\$3,143,398	\$3,206,266	\$3,270,392	\$3,335,800	\$3,402,516	\$3,470,566	\$3,539,977	\$3,610,777	\$3,682,992	\$3,756,652	\$3,831,785	\$3,908,421	\$3,986,589	\$4,066,321	\$4,147,647	\$4,230,600	\$4,315,212	\$4,401,517	\$4,489,547	\$4,579,338
- Yearly Debt Service	<u>(\$1,905,982)</u>) <u>(\$1,905,982)</u>	<u>(\$1,905,982)</u>	<u>(\$1,905,982)</u>	<u>(\$1,905,982)</u>	<u>(\$1,905,982)</u>	<u>(\$1,905,982)</u>	<u>(\$1,905,982)</u>	<u>(\$1,905,982)</u>	<u>(\$1,905,982)</u>		<u>(\$1,905,982)</u>		<u>(\$1,905,982)</u>	<u>(\$1,905,982)</u>	<u>(\$1,905,982)</u>	<u>(\$1,905,982)</u>	<u>(\$1,905,982)</u>	<u>(\$1,905,982)</u>	<u>(\$1,905,982)</u>	<u>(\$1,905,982)</u>	<u>(\$1,905,982)</u>	<u>(\$1,905,982)</u>	<u>(\$1,905,982)</u>	<u>(\$1,905,982)</u>	<u>(\$1,905,982)</u>	<u>(\$1,905,982)</u>	<u>(\$1,905,982)</u>	<u>(\$1,905,982)</u>
BTCF (Cash Throw-off)	\$672,700		\$776,878	\$830,535	\$885,266	\$941,091	\$998,032	\$1,056,113	\$1,115,354	\$1,175,781	\$1,237,416			\$1,429,818	\$1,496,534	\$1,564,584	\$1,633,995	\$1,704,795	\$1,777,010	\$1,850,670	\$1,925,803	\$2,002,439	\$2,080,607	\$2,160,339	\$2,241,665	\$2,324,618	\$2,409,230	\$2,495,535	\$2,583,565	\$2,673,356
+ Tax Liability	\$703,134	\$763,364	\$817,363	\$873,517	\$931,927	\$992,698	\$1,073,047	\$1,152,039	\$1,220,582	\$1,291,965	\$1,366,324	\$1,443,799	\$1,524,542	\$1,608,708	\$1,696,463	\$1,787,981	\$1,883,443	\$1,983,042	\$2,086,980	\$2,195,468	\$2,308,729	\$2,426,998	\$2,550,521	\$2,679,558	\$2,814,382	\$2,955,280	\$3,102,553	\$3,256,519	\$3,417,511	\$3,695,335
After Tax Cash Flow	(\$30,434)	(\$39,091)	(\$40,485)	(\$42,981)	(\$46,661)	(\$51,607)	(\$75,015)	(\$95,926)	(\$105,228)	(\$116,184)	(\$128,907)	(\$143,515)	(\$160,132)	(\$178,891)	(\$199,930)	(\$223,397)	(\$249,448)	(\$278,248)	(\$309,970)	(\$344,797)	(\$382,926)	(\$424,559)	(\$469,914)	(\$519,219)	(\$572,717)	(\$630,662)	(\$693,323)	(\$760,984)	(\$833,946)	(\$1,021,980)
Taxable Income Accounts																														
Cash Throw-off (BTCF)	\$672,700	\$724,273	\$776,878	\$830,535	\$885,266	\$941,091	\$998,032	\$1,056,113	\$1,115,354	\$1,175,781	\$1,237,416	\$1,300,284	\$1,364,410	\$1,429,818	\$1,496,534	\$1,564,584	\$1,633,995	\$1,704,795	\$1,777,010	\$1,850,670	\$1,925,803	\$2,002,439	\$2,080,607	\$2,160,339	\$2,241,665	\$2,324,618	\$2,409,230	\$2,495,535	\$2,583,565	\$2,673,356
+ Principal Amortization	\$1,380,512	\$1,454,232	\$1,531,888	\$1,613,690	\$1,699,861	\$1,790,634	\$1,886,254	\$1,986,980	\$2,093,084	\$2,204,855	\$2,322,594	\$2,446,621	\$2,577,271	\$2,714,897	\$2,859,872	\$3,012,590	\$3,173,462	\$3,342,925	\$3,521,437	\$3,709,482	\$3,907,568	\$4,116,232	\$4,336,039	\$4,567,583	\$4,811,492	\$5,068,426	\$5,339,080	\$5,624,187	\$5,924,518	\$6,240,888
- Depreciation	(\$285,462)	(\$285,462)	(\$285,462)	(\$285,462)	(\$285,462)	(\$285,462)	(\$285,462)	(\$264,034)	(\$264,034)	(\$264,034)	(\$264,034)	(\$264,034)	(\$264,034)	(\$264,034)	(\$264,034)	(\$264,034)	(\$264,034)	(\$264,034)	(\$264,034)	(\$264,034)	(\$264,034)	(\$264,034)	(\$264,034)	(\$264,034)	(\$264,034)	(\$264,034)	(\$264,034)	(\$264,034)	(\$264,034)	\$0
- Fees & Points Amortization	(\$51,582)	(\$51,582)	(\$51,582)	(\$51,582)	(\$51,582)	(\$51,582)	(\$10,316)	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
 Pre-leasing Expense 	<u>(\$20,000)</u>	<u>\$0</u>	<u>\$0</u>	<u>\$0</u>	<u>\$0</u>	<u>\$0</u>	<u>\$0</u>	<u>\$0</u>	<u>\$0</u>	<u>\$0</u>	<u>\$0</u>	<u>\$0</u>	<u>\$0</u>	<u>\$0</u>	<u>\$0</u>	<u>\$0</u>	<u>\$0</u>	<u>\$0</u>	<u>\$0</u>	<u>\$0</u>	<u>\$0</u>	<u>\$0</u>	<u>\$0</u>	<u>\$0</u>	<u>\$0</u>	<u>\$0</u>	<u>\$0</u>	<u>\$0</u>	<u>\$0</u>	<u>\$0</u>
Taxable Income (Loss)	\$1,696,167	\$1,841,460	\$1,971,722	\$2,107,182	\$2,248,083	\$2,394,680	\$2,588,507	\$2,779,059	\$2,944,405	\$3,116,603	\$3,295,977	\$3,482,872	\$3,677,647	\$3,880,681	\$4,092,372	\$4,313,140	\$4,543,423	\$4,783,686	\$5,034,413	\$5,296,118	\$5,569,337	\$5,854,637	\$6,152,612	\$6,463,889	\$6,789,124	\$7,129,011	\$7,484,276	\$7,855,688	\$8,244,050	\$8,914,243
Tax Due (Refund)	\$703,134	\$763,364	\$817,363	\$873,517	\$931,927	\$992,698	\$1,073,047	\$1,152,039	\$1,220,582	\$1,291,965	\$1,366,324	\$1,443,799	\$1,524,542	\$1,608,708	\$1,696,463	\$1,787,981	\$1,883,443	\$1,983,042	\$2,086,980	\$2,195,468	\$2,308,729	\$2,426,998	\$2,550,521	\$2,679,558	\$2,814,382	\$2,955,280	\$3,102,553	\$3,256,519	\$3,417,511	\$3,695,335
Key Operating Schedu	llos																													
	Year 1	Year 2	Year 3	Year 4	Year 5	Year 6	Year 7	Year 8	Year 9	Year 10	Year 11	Year 12	Year 13	Year 14	Year 15	Year 16	Year 17	Year 18	Year 19	Year 20	Year 21	Year 22	Year 23	Year 24	Year 25	Year 26	Year 27	Year 28	Year 29	Year 30
Mortgage Amortization Beginning Balance	\$9,840,258	\$8,459,746		\$5.473.627	\$3.859.937	\$2,160.076	\$369.442	(\$1.516.812)	(\$3,503,792)	(\$5.596.876)	(\$7.801.732)		(\$12 570 047	(\$15 149 219)	(\$17.962.115)	(\$20,722,097)	(\$23,735,576)	(\$26,000,039)	(\$30,251,963)	(\$33,773,400)	(\$27.492.991)	(\$41,200,440)	(\$45 506 691)	(\$49.842.720)	(\$54 410 303)	(\$59 221 795)	(\$64.290.221)	(\$60,620,201)	(\$75,253,488)	(\$81.178.006)
Yearly Debt Service	\$1,905,982	\$1,905,982	1 1	\$1,905,982	\$1,905,982	\$1,905,982	\$1,905,982	\$1,905,982	\$1,905,982	\$1,905,982	\$1,905,982	\$1.905.982	\$1,905,982	\$1,905,982	\$1,905,982	\$1,905,982	\$1,905,982	\$1,905,982	\$1,905,982	\$1,905,982	\$1,905,982	\$1,905,982	\$1,905,982	\$1,905,982	\$1,905,982	\$1,905,982	\$1,905,982	\$1,905,982	\$1,905,982	\$1,905,982
Interest	\$525,470					\$1,905,982 \$115,348		(\$80,998)	(\$187,102)	(\$298.873)		\$1,905,982 (\$540,639)		\$1,905,982	(\$953.890)	(\$1,106,608)	(\$1,267,480)	\$1,905,982 (\$1,436,943)	\$1,905,982 (\$1.615.455)	(\$1,803,500)			\$1,905,982 (\$2,430,057)	\$1,905,982 (\$2.661.601)		(\$3,162,444)	(\$3,433,098)			(\$4,334,906)
	\$525,470 <u>\$1,380,512</u>	\$451,750 \$1.454.222	\$374,094 \$1,531,999	\$292,292 \$1,613,690	\$206,121 \$1,699,861		\$19,728 <u>\$1,886,254</u>	((\$187,102) <u>\$2,093,084</u>	(\$298,873) \$2,204,855	(\$416,612) \$2,322,594	(\$540,639) \$2,446,621	(\$671,289) \$2,577,271	((\$953,890) \$2,859,872	(\$1,106,608) \$3,012,590	(*************************************	(\$1,436,943) \$3,342,925	(\$1,615,455) \$3,521,437	(\$1,803,500) <u>\$3,709,482</u>	(\$2,001,586) \$3,907,568	(\$2,210,250) \$4,116,232	(\$2,430,057) <u>\$4,336,039</u>	(\$2,001,001) \$4,567,583	(\$2,905,510) \$4,911,402	(11) - T	(\$3,433,098) <u>\$5,339,080</u>	(\$3,718,205) \$5,624,187	(\$4,018,536) \$5,924,518	(\$4,334,906) <u>\$6,240,888</u>
Principle Ending Releases	\$1,380,512 \$8,459,746	\$1,454,232 \$7,005,515	<u>\$1,531,888</u> \$5,473,627	\$3.859.937	\$1,699,861 \$2,160.076	<u>\$1,790,634</u> \$369,442	\$1,880,254 (\$1,516,812)	\$1,986,980 (\$3,503,792)	<u>\$2,093,084</u> (\$5,596,876)	<u>\$2,204,855</u> (\$7,801,732)		<u>\$2,440,621</u> (\$12,570,947)		\$2,714,897 (\$17,863,115)	\$2,859,872 (\$20,722,987)	(\$23,735,576)	\$3,173,462 (\$26,909,038)	\$3,342,925 (\$30,251,963)	\$3,521,437 (\$33,773,400)		(\$41,390,449)	\$4,116,232 (\$45,506,681)	\$4,336,039 (\$49,842,720)	\$4,567,583 (\$54,410,303)	\$4,811,492 (\$59,221,795)	\$5,068,426 (\$64,290,221)	(\$69.629.301)		<u>\$5,924,518</u> (\$81,178,006)	
Ending Balance Building Depreciation	φ0,409,740	¢1,000,015	φJ,413,021	φ3,009,93 <i>1</i>	φ2,100,076	¢309,442	(\$1,010,012)	(\$3,503,792)	(40,090,070)	(\$1,001,132)	(\$10,124,320	η (φ12,570,947)	(\$10,140,218	y (#17,003,115)	(920,122,987)	(\$23,733,376)	(\$20,909,038)	(430,231,963)	(\$33,113,400)	(\$31,402,681)	(#41,380,448)	(940,000,081)	(\$49,042,720)	(\$34,410,303)	(\$39,221,795)	(404,290,221)	(409,029,301)	(\$10,200,488)	(401,170,000)	(401,410,093)
Beginning Basis	\$10,297,314	\$10,033,280	\$9,769,246	\$9,505,213	\$9,241,179	\$8,977,145	\$8,713,112	\$8,449,078	\$8,185,044	\$7,921,011	\$7,656,977	\$7,392,943	\$7,128,910	\$6,864,876	\$6,600,842	\$6,336,808	\$6,072,775	\$5,808,741	\$5,544,707	\$5,280,674	\$5,016,640	\$4,752,606	\$4,488,573	\$4,224,539	\$3,960,505	\$3,696,472	\$3,432,438	\$3,168,404	\$2,904,371	\$189,593
Residential Depreciation Claimed		\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0,200,074	\$0	\$0	\$0	\$0	\$0,500,505	\$0,090,472	\$0	\$0,100,404	\$0	\$0
Commercial Depreciation Claimed		\$0 \$264,034	\$0 \$264,034	\$264,034	\$0 \$264,034	\$264,034	\$264,034	\$264,034	\$264,034	\$264,034	\$264,034	\$264,034	\$264,034	\$264,034	\$264,034	\$264,034	\$264,034	\$264,034	\$264,034	\$264,034	\$264,034	\$264,034	\$264,034	\$264,034	\$264,034	\$264,034	\$264,034	\$264,034	\$264,034	\$0 \$0
Cummulative Depreciation Claime		\$264,034 \$264,034	\$264,034 \$264,034	\$264,034 \$264,034	\$264,034 \$264,034	\$264,034 \$264,034	\$264,034 \$264,034	\$264,034 \$264,034	\$264,034 \$264,034	\$264,034 \$264,034	\$264,034 \$264,034	\$264,034 \$264,034	\$264,034 \$264,034	\$264,034 \$264,034	\$264,034 <u>\$264,034</u>	\$264,034 <u>\$264,034</u>	\$264,034 \$264,034	\$264,034 \$264,034	\$264,034 \$264,034	\$264,034 \$264,034	\$264,034 \$264,034	\$264,034 \$264,034	\$264,034 \$264,034	\$264,034 \$264,034	\$264,034 \$264,034	\$264,034 \$264,034	\$264,034 \$264,034	\$264,034 \$264,034	\$264,034 \$264,034	\$0 \$0
Ending Balance	\$10.033.280	\$264,034 \$9,769,246		\$264.034 \$9.241.179	\$264.034 \$8.977.145	\$264,034 \$8,713,112	<u>\$264,034</u> \$8,449,078	\$264,034 \$8,185,044	\$264.034 \$7.921.011	\$264,034 \$7.656.977		\$264,034 \$7,128,910	\$6.864.876	\$6,600,842	\$264,034 \$6,336,808	\$264.034 \$6.072.775	\$264,034 \$5,808,741	\$264,034 \$5,544,707	\$264,034 \$5.280.674	\$264,034 \$5,016,640	\$264,034 \$4,752,606	\$264,034 \$4,488,573	\$264,034 \$4,224,539	\$264,034 \$3,960,505	\$264,034 \$3.696,472	\$264,034 \$3,432,438	\$264,034 \$3,168,404	\$264,034 \$2,904,371	\$264,034 \$2,640,337	<u>\$0</u> \$189.593
Personal Property	φ10,033,280	¢9,709,240	φ 3 ,000,213	φ3,241,179	φ0,977,145	φ0, <i>1</i> 13,1 12	φ0,449,078	φ0,100,044	¢7,9∠1,011	φ1,000,911	\$1,392,943	φ1,120,91U	φ0,004,076	φ0,000,042	φ0,330,000	φ0,012,113	φϑ,000,741	φ3,344,707	¢0,200,074	40,010,040	φ4,102,000	φ4,400,013	<i>4,224,009</i>	<i>43,900,005</i>	40,090,47Z	<i>∉</i> 3,432,436	φ 3,100,40 4	92,904,37 I	φ2,040,337	\$109,090 \$
	\$150,000	\$128,571	\$107,143	\$85,714	\$64,286	\$42,857	\$21,429	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0.	\$0	\$0	\$0	¢0	\$0	\$0	\$0	¢0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
Beginning Basis Current Depreciation Claimed	\$150,000 \$21,429	\$128,571 \$21,429	\$107,143 \$21,429	\$85,714 \$21,429	\$64,286 \$21,429	\$42,857 \$21,429	\$21,429 \$21,429	\$0 \$0	\$0 \$0	\$0 \$0	\$0 \$0	\$0 \$0	90 \$0	\$0 \$0	\$0 \$0	\$0 \$0	\$0 \$0	\$0 \$0	90 \$0	\$0 \$0	\$0 \$0	\$0 \$0	\$0 \$0	\$0 \$0	\$0 \$0	\$0 \$0	\$0 \$0	\$0 \$0	\$0 \$0	\$0 \$0
Cummulative Depreciation Claimed		\$21,429 \$42,857	\$21,429 \$64,286	\$21,429 \$85,714	\$21,429 \$107,143	\$128,571	\$21,429 \$150,000	\$0 \$150,000	\$0 \$150,000	\$0 \$150,000	\$0 \$150,000	\$0 \$150,000	\$0 \$150,000	\$0 \$150,000	\$0 \$150,000	\$0 \$150,000	\$0 \$150,000	\$0 \$150,000	\$0 \$150,000	\$150,000	\$0 \$150,000	\$0 \$150,000	\$0 \$150,000	\$0 \$150,000	\$150,000	\$0 \$150,000	\$0 \$150,000	\$0 \$150,000	\$0 \$150,000	\$0 \$150,000
Ending Balance	\$128.571	<u>\$42,057</u> \$107.143	\$85.714	\$64.286	\$42.857	\$21.429	\$150,000	\$150,000	\$150,000	\$0	\$0	\$150,000 \$0	\$0	\$150,000 \$0	\$0	\$150,000	\$150,000 \$0	\$150,000	\$0	\$0	\$150,000	\$0	\$0	\$0	\$0	\$150,000	\$0	\$0	\$150,000 \$0	<u>\$150,000</u> \$0
Fees and Points Amortization	ψ120,071	Ş107,1 4 0	400,7 I T	¥37,200	ΨT2,001	¥21,723	ΨŪ	ΨŪ	ΨŬ	ΨU	ΨU	ΨŬ	ΨU	ΨŬ	ΨŬ	ΨU	ΨŪ	40	ΨŪ	ψu	40	4 0	ΨU	ΨŪ	ΨŪ	40	44	ΨŪ	ΨŬ	ΨŬ
Beginning Basis	\$319,808	\$268,226	\$216,644	\$165,062	\$113,480	\$61,898	\$10,316	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
Current Amortization	\$51,582	\$51,582	\$51,582	\$51,582	\$51,582	\$51,582	\$10,316	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
Cummulative Amortization	\$51,582	\$103,164	\$154,746	\$206,328	\$257,910	\$309,492	\$319,808	\$319,808	\$319,808	\$319,808	\$319,808	\$319,808	\$319,808	\$319,808	\$319,808	\$319,808	\$319,808	\$319,808	\$319,808	\$319,808	\$319,808	\$319,808	\$319,808	\$319,808	\$319,808	\$319,808	\$319,808	\$319,808	\$319,808	\$319,808
Ending Balance	\$268,226	\$216,644	\$165,062	\$113,480	\$61,898	\$10,316	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0

Pro Forma - 2800 Ridge Avenue

Reversion (Terminati		ts																											
Cash at Sale (using Cap Rates)		A0 000 055 A0 000 000	00 000 510		40.013.030					A0 1 10 000 A0 000 000	A0 070 000 A0 005 000		A0 170 500	AA 500 033			40 350 050	AA AA 1 705							A. 101 513		A. 570.000		
NOI Estimated Sales Price	\$2,578,682 \$38,487,784		\$2,736,517 \$40.843.544	\$2,791,248 \$41,660,415	\$2,847,073 \$42,493,623	\$2,904,014 \$43.343.496	\$2,962,095 \$44,210,366	\$3,021,336 \$45.094,573	\$3,081,763 \$45,996,465	\$3,143,398 \$3,206,266 \$46,916,394 \$47,854,722	\$3,270,392 \$3,335,800 \$48,811,816 \$49,788,053	\$3,402,516 \$50,783,814	\$3,470,566 \$51,799,490	\$3,539,977 \$52,835,480	\$3,610,777 \$53,892,189	\$3,682,992 \$54,970,033	\$3,756,652 \$56,069,434	\$3,831,785 \$57,190.822	\$3,908,421 \$58,334,639	\$3,986,589 \$59,501,332	\$4,066,321 \$60.691,358	\$4,147,647 \$61,905,185	\$4,230,600 \$63,143,289	\$4,315,212 \$64,406,155	\$4,401,517 \$65.694,278	\$4,489,547 \$67.008.164	\$4,579,338 \$68.348.327		
- Selling Costs	\$2,309,267	\$2,355,452 \$2,402,561	\$2,450,613	\$2,499,625	\$2,549,617	\$2.600.610	\$2,652,622	\$2,705,674	\$2,759,788	\$2,814,984 \$2,871,283	\$2,928,709 \$2,987,283	\$3,047,029	\$3,107,969	\$3,170,129	\$3,233,531	\$3,298,202	\$3,364,166	\$3,431,449	\$3,500,078	\$3,570,080	\$3,641,481	\$3,714,311	\$3,788,597	\$3,864,369	\$3,941,657	\$4,020,490	\$4,100,900		
- Mortgage Balance	\$8,459,746	\$7,005,515 \$5,473,627	\$3,859,937	\$2,160,076	\$369,442	(\$1,516,812)	(\$3,503,792)	(\$5,596,876)	(\$7,801,732)	(\$10,124,326) (\$12,570,947)	(\$15,148,218) (\$17,863,115		(\$23,735,576)	(\$26,909,038)	(\$30,251,963)	(\$33,773,400)	(\$37,482,881)	(\$41,390,449)	(\$45,506,681)	(\$49,842,720)	(\$54,410,303)	(\$59,221,795)	(\$64,290,221)	(\$69,629,301)	(\$75,253,488)	(\$81,178,006)	(\$87,418,893)		
Before Tax Cash on Sale	\$27,718,771	\$29,896,573 \$32,166,502	\$34,532,995	\$37,000,715	\$39,574,564	\$42,259,698	\$45,061,536	\$47,985,775	\$51,038,408	\$54,225,736 \$57,554,386	\$61,031,325 \$64,663,884		\$72,427,097	\$76,574,389	\$80,910,621	\$85,445,231	\$90,188,149	\$95,149,822	\$100,341,242	\$105,773,972	\$111,460,180	\$117,412,670	\$123,644,913	\$130,171,086	\$137,006,109	\$144,165,680	\$151,666,321		
- Capital Gains Tax on Sale	\$4,794,967	\$4,996,774 \$5,201,474	\$5,409,127	\$5,619,792	\$5,833,527	\$6,050,396	\$6,266,174	\$6,485,212	\$6,707,574	\$6,933,327 \$7,162,540	\$7,395,280 \$7,631,619	\$7,871,629	\$8,115,383	\$8,362,956	\$8,614,424	\$8,869,865	\$9,129,360	\$9,392,987	\$9,660,832	\$9,932,977	\$10,209,508	\$10,490,515	\$10,776,085	\$11,066,310	\$11,361,284	\$11,661,101	\$12,403,201		
 Write-off of Unamortized Fee 		<u>\$216,644</u> <u>\$165,062</u>	\$113,480	\$61,898	\$10,316	<u>\$0</u>	<u>\$0</u>	<u>\$0</u>	<u>\$0</u>	<u>\$0</u>	<u>\$0</u>	<u>\$0</u>	<u>\$0</u>	<u>\$0</u>	<u>\$0</u>	<u>\$0</u>	<u>\$0</u>	<u>\$0</u>	<u>\$0</u>	<u>\$0</u>	<u>\$0</u>	<u>\$0</u>	<u>\$0</u>	<u>\$0</u>	<u>\$0</u>	<u>\$0</u>	<u>\$0</u>		
After Tax Cash on Sale	\$22,655,577	\$24,683,155 \$26,799,965	\$29,010,387	\$31,319,025	\$33,730,721	\$36,209,303	\$38,795,362	\$41,500,564	\$44,330,834	\$47,292,409 \$50,391,846	\$53,636,045 \$57,032,265	\$60,588,142	\$64,311,714	\$68,211,433	\$72,296,197	\$76,575,365	\$81,058,789	\$85,756,835	\$90,680,410	\$95,840,995	\$101,250,671	\$106,922,155	\$112,868,828	\$119,104,776	\$125,644,825	\$132,504,578	\$139,263,120		
Calculation of Taxable Gain																													
Project Sale Price	\$38,487,784	\$39,257,540 \$40,042,690	\$40,843,544	\$41,660,415	\$42,493,623	\$43,343,496	\$44,210,366	\$45,094,573	\$45,996,465	\$46,916,394 \$47,854,722	\$48,811,816 \$49,788,053	\$50,783,814	\$51,799,490	\$52,835,480	\$53,892,189	\$54,970,033	\$56,069,434	\$57,190,822	\$58,334,639	\$59,501,332	\$60,691,358	\$61,905,185	\$63,143,289	\$64,406,155	\$65.694.278	\$67,008,164	\$68,348,327		
- Selling Costs	(\$2,309,267)			(\$2,499,625)	(\$2.549.617)	(\$2,600,610)	(\$2.652.622)	(\$2,705,674)	(\$2,759,788)	(\$2.814.984) (\$2.871.283)	(\$2,928,709) (\$2,987,283)		(\$3,107,969)	(\$3,170,129)	(\$3,233,531)	(\$3,298,202)	(\$3.364,166)	(\$3,431,449)	(\$3,500,078)	(\$3,570,080)	(\$3.641.481)	(\$3,714,311)	(\$3,788,597)	(\$3,864,369)	(\$3.941.657)	(\$4.020.490)	(\$4,100,900)		
- Land	(\$2,041,830)	(\$2,041,830) (\$2,041,830)	(\$2,041,830)	(\$2,041,830)	(\$2,041,830)	(\$2,041,830)	(\$2,041,830)	(\$2,041,830)	(\$2,041,830)	(\$2,041,830) (\$2,041,830)	(\$2,041,830) (\$2,041,830)	(\$2,041,830)	(\$2,041,830)	(\$2,041,830)	(\$2,041,830)	(\$2,041,830)	(\$2,041,830)	(\$2,041,830)	(\$2,041,830)	(\$2,041,830)	(\$2,041,830)	(\$2,041,830)	(\$2,041,830)	(\$2,041,830)	(\$2,041,830)	(\$2,041,830)	(\$2,041,830)		
- Remaining Depreciable Basi:	(\$10,033,280)) (\$9,769,246) (\$9,505,213)	(\$9,241,179)	(\$8,977,145)	(\$8,713,112)	(\$8,449,078)	(\$8,185,044)	(\$7,921,011)	(\$7,656,977)	(\$7,392,943) (\$7,128,910)	(\$6,864,876) (\$6,600,842)	(\$6,336,808)	(\$6,072,775)	(\$5,808,741)	(\$5,544,707)	(\$5,280,674)	(\$5,016,640)	(\$4,752,606)	(\$4,488,573)	(\$4,224,539)	(\$3,960,505)	(\$3,696,472)	(\$3,432,438)	(\$3,168,404)	(\$2,904,371)	(\$2,640,337)	(\$189,593)		
- Remaining Personal Propert	(\$128,571)	(\$107,143) (\$85,714)	(\$64,286)	(\$42,857)	(\$21,429)	<u>(\$0)</u>	<u>\$0</u>	<u>\$0</u>	<u>\$0</u>	<u>\$0</u>	<u>\$0</u> <u>\$0</u>	<u>\$0</u>	<u>\$0</u>	<u>\$0</u>	<u>\$0</u>	<u>\$0</u>	<u>\$0</u>	<u>\$0</u>	<u>\$0</u>	<u>\$0</u>	<u>\$0</u>	<u>\$0</u>	<u>\$0</u>	<u>\$0</u>	<u>\$0</u>	<u>\$0</u>	<u>\$0</u>		
Taxable Gair		\$24,983,868 \$26,007,372		\$28,098,958	\$29,167,636	\$30,251,978	\$31,330,870	\$32,426,058	\$33,537,870	\$34,666,637 \$35,812,699	\$36,976,401 \$38,158,097		\$40,576,916	\$41,814,780	\$43,072,121	\$44,349,327	\$45,646,798	\$46,964,937	\$48,304,158	\$49,664,883	\$51,047,541	\$52,452,573	\$53,880,424	\$55,331,551	\$56,806,421	\$58,305,507	\$62,016,004		
Tax (Shelter) on Gair	\$4,794,967	\$4,996,774 \$5,201,474	\$5,409,127	\$5,619,792	\$5,833,527	\$6,050,396	\$6,266,174	\$6,485,212	\$6,707,574	\$6,933,327 \$7,162,540	\$7,395,280 \$7,631,619	\$7,871,629	\$8,115,383	\$8,362,956	\$8,614,424	\$8,869,865	\$9,129,360	\$9,392,987	\$9,660,832	\$9,932,977	\$10,209,508	\$10,490,515	\$10,776,085	\$11,066,310	\$11,361,284	\$11,661,101	\$12,403,201		
Drofitability Summer																													1
Profitability Summary Cash Flow Summary	/ Year -1	Year 0 Year 1	Year 2	Year 3	Year 4	Year 5	Year 6	Year 7	Year 8	Year 9 Year 10	Year 11 Year 12	Year 13	Year 14	Year 15	Year 16	Year 17	Year 18	Year 19	Year 20	Year 21	Year 22	Year 23	Year 24	Year 25	Year 26	Year 27	Year 28	Year 29	Year 30
Initial Cash-in		\$1,543,457											1041 14		1001 10								1041 24				20		
ATCF from Operations	(* .,,)	(\$30,434)	(\$39,091)	(\$40,485)	(\$42,981)	(\$46,661)	(\$51,607)	(\$75,015)	(\$95,926)	(\$105,228) (\$116,184)	(\$128,907) (\$143,515)	(\$160,132)	(\$178,891)	(\$199,930)	(\$223,397)	(\$249,448)	(\$278,248)	(\$309,970)	(\$344,797)	(\$382,926)	(\$424,559)	(\$469,914)	(\$519,219)	(\$572,717)	(\$630,662)	(\$693,323)	(\$760,984)	(\$833,946)	(\$1,021,980)
ATCF at Sale		\$22,655,577	\$24,683,155	\$26,799,965	\$29,010,387	\$31,319,025	\$33,730,721	\$36,209,303	\$38,795,362	\$41,500,564 \$44,330,834	\$47,292,409 \$50,391,846		\$57,032,265	\$60,588,142	\$64,311,714	\$68,211,433	\$72,296,197	\$76,575,365	\$81,058,789	\$85,756,835	\$90,680,410	\$95,840,995	\$101,250,671	\$106,922,155	\$112,868,828	\$119,104,776	\$125,644,825	\$132,504,578	\$139,263,120
Total AT Proceeds		\$22,625,143	\$24,644,064	\$26,759,480	\$28,967,405	\$31,272,364	\$33,679,114	\$36,134,288	\$38,699,436	\$41,395,336 \$44,214,650	\$47,163,502 \$50,248,331	\$53,475,913	\$56,853,374	\$60,388,213	\$64,088,317	\$67,961,985	\$72,017,949	\$76,265,396	\$80,713,992	\$85,373,909	\$90,255,851	\$95,371,081	\$100,731,452	\$106,349,438	\$112,238,166	\$118,411,454	\$124,883,841	\$131,670,632	\$138,241,140
AT Return (Operations) on Cas	n-ir	-0.90%	-1.15%	-1.19%	-1.26%	-1.37%	-1.52%	-2.21%	-2.82%	-3.10% -3.42%	-3.79% -4.22%	-4.71%	-5.26%	-5.88%	-6.57%	-7.34%	-8.19%	-9.12%	-10.14%	-11.26%	-12.49%	-13.82%	-15.27%	-16.85%	-18.55%	-20.40%	-22.39%	-24.53%	-30.06%
IBB and NPV Pyramid	Year -1	Year 0 Year 1	Year 2	Year 3	Year 4	Year 5	Year 6	Year 7	Year 8	Year 9 Year 10	Year 11 Year 12	Year 13	Year 14	Year 15	Year 16	Year 17	Year 18	Year 19	Year 20	Year 21	Year 22	Year 23	Year 24	Year 25	Year 26	Year 27	Year 28	Year 29	Year 30
IRR and NPV Pyramid	Year -1	Year 0 Year 1 \$1.543.457 \$22.625.143	Year 2	Year 3	Year 4	Year 5	Year 6	Year 7	Year 8	Year 9 Year 10	Year 11 Year 12	Year 13	Year 14	Year 15	Year 16	Year 17	Year 18	Year 19	Year 20	Year 21	Year 22	Year 23	Year 24	Year 25	Year 26	Year 27	Year 28	Year 29	Year 30
Y	Year -1 ear 1 (\$4,942,776) ear 2 (\$4,942,776)	\$1,543,457 \$22,625,143	Year 2 \$24,644,064	Year 3	Year 4	Year 5	Year 6	Year 7	Year 8	Year 9 Year 10	Year 11 Year 12	Year 13	Year 14	Year 15	Year 16	Year 17	Year 18	Year 19	Year 20	Year 21	Year 22	Year 23	Year 24	Year 25	Year 26	Year 27	Year 28	Year 29	Year 30
Yi	ear 1 (\$4,942,776)	\$1,543,457 \$1,543,457 \$1,543,457 \$22,625,143 \$30,434		Year 3 \$26,759,480	Year 4	Year 5	Year 6	Year 7	Year 8	Year 9 Year 10	Year 11 Year 12	Year 13	Year 14	Year 15	Year 16	Year 17	Year 18	Year 19	Year 20	Year 21	Year 22	Year 23	Year 24	Year 25	Year 26	Year 27	Year 28	Year 29	Year 30
Y Y Y Y	ear 1 <u>(\$4,942,776)</u> ear 2 <u>(\$4,942,776)</u> ear 3 <u>(\$4,942,776)</u> ear 4 <u>(\$4,942,776)</u>	\$1.543.457 \$22,625,143 \$1.543.457 (\$30,434) \$1.543.457 (\$30,434) \$1.543.457 (\$30,434) \$1.543.457 (\$30,434)	\$24,644,064 (\$39,091) (\$39,091)	\$26,759,480 (\$40,485)	\$28,967,405		Year 6	Year 7	Year 8	Year 9 Year 10	Year 11 Year 12	Year 13	Year 14	Year 15	Year 16	Year 17	Year 18	Year 19	Year 20	Year 21	Year 22	Year 23	Year 24	Year 25	Year 26	Year 27	Year 28	Year 29	Year 30
Y Y Y Y Y	ear 1 <u>(\$4,942,776)</u> ear 2 <u>(\$4,942,776)</u> ear 3 <u>(\$4,942,776)</u> ear 4 <u>(\$4,942,776)</u> ear 5 <u>(\$4,942,776)</u>	\$1.543.457 \$22,625,143 \$1.543.457 (\$30,434) \$1.543.457 (\$30,434) \$1.543.457 (\$30,434) \$1.543.457 (\$30,434) \$1.543.457 (\$30,434)	\$24,644,064 (\$39,091) (\$39,091) (\$39,091)	\$26,759,480 (\$40,485) (\$40,485)	\$28,967,405 (\$42,981)	\$31,272,364		Year 7	Year 8	Year 9 Year 10	Year 11 Year 12	Year 13	Year 14	Year 15	Year 16	Year 17	Year 18	Year 19	Year 20	Year 21	Year 22	Year 23	Year 24	Year 25	Year 26	Year 27	Year 28	Year 29	Year 30
Y Y Y Y Y Y Y	ear 1 (<u>\$4,942,776</u>) ear 2 (<u>\$4,942,776</u>) ear 3 (<u>\$4,942,776</u>) ear 4 (<u>\$4,942,776</u>) ear 5 (<u>\$4,942,776</u>) ear 6 (<u>\$4,942,776</u>)	\$1.543,457 \$22,625,143 \$1.543,457 (\$30,434) \$1.543,457 (\$30,434) \$1.543,457 (\$30,434) \$1.543,457 (\$30,434) \$1.543,457 (\$30,434) \$1.543,457 (\$30,434) \$1.543,457 (\$30,434) \$1.543,457 (\$30,434)	\$24,644,064 (\$39,091) (\$39,091) (\$39,091) (\$39,091)	\$26,759,480 (\$40,485) (\$40,485) (\$40,485)	\$28,967,405 (\$42,981) (\$42,981)	\$31,272,364 (\$46,661)	\$33,679,114		Year 8	Year 9 Year 10	Year 11 Year 12	Year 13	Year 14	Year 15	Year 16	Year 17	Year 18	Year 19	Year 20	Year 21	Year 22	Year 23	Year 24	Year 25	Year 26	Year 27	Year 28	Year 29	Year 30
Y Y Y Y Y Y Y	ear 1 (\$4,942,776) ear 2 (\$4,942,776) ear 3 (\$4,942,776) ear 4 (\$4,942,776) ear 5 (\$4,942,776) ear 6 (\$4,942,776) ear 7 (\$4,942,776)	\$1.543.457 \$22,625,143 \$1.543.457 \$\$30,434 \$1.543.457 (\$30,434) \$1.543.457 (\$30,434) \$1.543.457 (\$30,434) \$1.543.457 (\$30,434) \$1.543.457 (\$30,434) \$1.543.457 (\$30,434) \$1.543.457 (\$30,434) \$1.543.457 (\$30,434) \$1.543.457 (\$30,434)	\$24,644,064 (\$39,091) (\$39,091) (\$39,091) (\$39,091) (\$39,091)	\$26,759,480 (\$40,485) (\$40,485) (\$40,485) (\$40,485)	\$28,967,405 (\$42,981) (\$42,981) (\$42,981)	\$31,272,364 (\$46,661) (\$46,661)	\$33,679,114 (\$51,607)	\$36,134,288		Year 9 Year 10	Year 11 Year 12	Year 13	Year 14	Year 15	Year 16	Year 17	Year 18	Year 19	Year 20	Year 21	Year 22	Year 23	Year 24	Year 25	Year 26	Year 27	Year 28	Year 29	Year 30
Y Y Y Y Y Y Y Y Y	ear 1 (\$4,942,776) ear 2 (\$4,942,776) ear 3 (\$4,942,776) ear 4 (\$4,942,776) ear 5 (\$4,942,776) ear 6 (\$4,942,776) ear 7 (\$4,942,776) ear 8 (\$4,942,776)	\$1.543.457 \$22,625,143 \$1,543.457 \$30,434 \$1.543.457 \$30,434 \$1.543.457 \$30,434 \$1.543.457 \$30,434 \$1.543.457 \$30,434 \$1.543.457 \$30,434 \$1.543.457 \$30,434 \$1.543.457 \$30,434 \$1.543.457 \$30,434 \$1.543.457 \$30,434 \$1.543.457 \$30,434 \$1.543.457 \$30,434 \$1.543.457 \$30,434 \$1.543.457 \$30,434	\$24,644,064 (\$39,091) (\$39,091) (\$39,091) (\$39,091) (\$39,091) (\$39,091)	\$26,759,480 (\$40,485) (\$40,485) (\$40,485) (\$40,485) (\$40,485)	\$28,967,405 (\$42,981) (\$42,981) (\$42,981) (\$42,981)	\$31,272,364 (\$46,661) (\$46,661) (\$46,661)	\$33,679,114 (\$51,607) (\$51,607)	\$36,134,288 (\$75,015)	\$38,699,436		Year 11 Year 12	Year 13	Year 14	Year 15	Year 16	Year 17	Year 18	Year 19	Year 20	Year 21	Year 22	Year 23	Year 24	Year 25	Year 26	Year 27	Year 28	Year 29	Year 30
A A A A A A A A A A A A A A A A A A A	ear 1 (<u>\$4,942,776</u>) ear 2 (<u>\$4,942,776</u>) ear 3 (<u>\$4,942,776</u>) ear 4 (<u>\$4,942,776</u>) ear 4 (<u>\$4,942,776</u>) ear 6 (<u>\$4,942,776</u>) ear 7 (<u>\$4,942,776</u>) ear 7 (<u>\$4,942,776</u>) ear 9 (<u>\$4,942,776</u>)	\$1.543.457 \$1.543.457	\$24,644,064 (\$39,091) (\$39,091) (\$39,091) (\$39,091) (\$39,091) (\$39,091) (\$39,091)	\$26,759,480 (\$40,485) (\$40,485) (\$40,485) (\$40,485) (\$40,485) (\$40,485)	\$28,967,405 (\$42,981) (\$42,981) (\$42,981) (\$42,981) (\$42,981)	\$31,272,364 (\$46,661) (\$46,661) (\$46,661) (\$46,661)	\$33,679,114 (\$51,607) (\$51,607) (\$51,607)	\$36,134,288 (\$75,015) (\$75,015)	\$38,699,436 (\$95,926)	\$41,395,336	Year 11 Year 12	Year 13	Year 14	Year 15	Year 16	Year 17	Year 18	Year 19	Year 20	Year 21	Year 22	Year 23	Year 24	Year 25	Year 26	Year 27	Year 28	Year 29	Year 30
Y Y Y Y Y Y Y Y Y Y	ear 1 (<u>\$4,942,776</u>) ear 2 (<u>\$4,942,776</u>) ear 4 (<u>\$4,942,776</u>) ear 4 (<u>\$4,942,776</u>) ear 4 (<u>\$4,942,776</u>) ear 5 (<u>\$4,942,776</u>) ear 6 (<u>\$4,942,776</u>) ear 8 (<u>\$4,942,776</u>) ear 9 (<u>\$4,942,776</u>) ear 9 (<u>\$4,942,776</u>) ear 10 (<u>\$4,942,776</u>)	\$1.543.457 \$22.625.143 \$1.543.457 \$30.434 \$1.543.457 \$30.434 \$1.543.457 \$30.434 \$1.543.457 \$30.434 \$1.543.457 \$30.434 \$1.543.457 \$30.434 \$1.543.457 \$30.434 \$1.543.457 \$30.434 \$1.543.457 \$30.434 \$1.543.457 \$30.434 \$1.543.457 \$30.434 \$1.543.457 \$30.434 \$1.543.457 \$30.434 \$1.543.457 \$30.434 \$1.543.457 \$30.434 \$1.543.457 \$30.434 \$1.543.457 \$30.434	\$24,644,064 (\$39,091) (\$39,091) (\$39,091) (\$39,091) (\$39,091) (\$39,091)	\$26,759,480 (\$40,485) (\$40,485) (\$40,485) (\$40,485) (\$40,485)	\$28,967,405 (\$42,981) (\$42,981) (\$42,981) (\$42,981)	\$31,272,364 (\$46,661) (\$46,661) (\$46,661)	\$33,679,114 (\$51,607) (\$51,607)	\$36,134,288 (\$75,015)	\$38,699,436		Year 11 Year 12	Year 13	Year 14	Year 15	Year 16	Year 17	Year 18	Year 19	Year 20	Year 21	Year 22	Year 23	Year 24	Year 25	Year 26	Year 27	Year 28	Year 29	Year 30
Y Y Y Y Y Y Y Y Y Y Y Y Y Y	ear 1 (<u>\$4,942,776</u>) ear 2 (<u>\$4,942,776</u>) ear 3 (<u>\$4,942,776</u>) ear 4 (<u>\$4,942,776</u>) ear 4 (<u>\$4,942,776</u>) ear 6 (<u>\$4,942,776</u>) ear 7 (<u>\$4,942,776</u>) ear 7 (<u>\$4,942,776</u>) ear 9 (<u>\$4,942,776</u>)	\$1.543.457 \$22.625.143 \$1.543.457 \$30.434 \$1.543.457 \$30.434 \$1.543.457 \$30.434 \$1.543.457 \$30.434 \$1.543.457 \$30.434 \$1.543.457 \$30.434 \$1.543.457 \$30.434 \$1.543.457 \$30.434 \$1.543.457 \$30.434 \$1.543.457 \$30.434 \$1.543.457 \$30.434 \$1.543.457 \$30.434 \$1.543.457 \$30.434 \$1.543.457 \$30.434 \$1.543.457 \$30.434 \$1.543.457 \$30.434 \$1.543.457 \$30.434	\$24,644,064 (\$39,091) (\$39,091) (\$39,091) (\$39,091) (\$39,091) (\$39,091) (\$39,091)	\$26,759,480 (\$40,485) (\$40,485) (\$40,485) (\$40,485) (\$40,485) (\$40,485) (\$40,485)	\$28,967,405 (\$42,981) (\$42,981) (\$42,981) (\$42,981) (\$42,981) (\$42,981)	\$31,272,364 (\$46,661) (\$46,661) (\$46,661) (\$46,661) (\$46,661)	\$33,679,114 (\$51,607) (\$51,607) (\$51,607) (\$51,607)	\$36,134,288 (\$75,015) (\$75,015) (\$75,015)	\$38,699,436 (\$95,926) (\$95,926)	\$41,395,336 (\$105,228) \$44,214,650		Year 13	Year 14	Year 15	Year 16	Year 17	Year 18	Year 19	Year 20	Year 21	Year 22	Year 23	Year 24	Year 25	Year 26	Year 27	Year 28	Year 29	Year 30
Y Y Y Y Y Y Y Y Y Y Y Y Y Y Y Y Y	ear 1 (\$4.942,776) ear 2 (\$4.942,776) ear 3 (\$4.942,776) ear 3 (\$4.942,776) ear 4 (\$4.942,776) ear 5 (\$4.942,776) ear 6 (\$4.942,776) ear 7 (\$4.942,776) ear 9 (\$4.942,776) ear 10 (\$4.942,776) er 11 (\$4.942,776) ear 11 (\$4.942,776)	$\begin{array}{r} \underline{\$} 1.543.457 \$22.825.443 \\ \underline{\$} 1.543.457 (\$30,434) \\ \underline{\$} 1.543.57 (\$30,434) (\$30,434) (\$30,434) (\$30,434) (\$30,434) (\$30,43$	\$24,644,064 (\$39,091) (\$39,091) (\$39,091) (\$39,091) (\$39,091) (\$39,091) (\$39,091) (\$39,091) (\$39,091) (\$39,091)	\$26,759,480 (\$40,485) (\$40,485) (\$40,485) (\$40,485) (\$40,485) (\$40,485) (\$40,485) (\$40,485) (\$40,485) (\$40,485)	\$28,967,405 (\$42,981) (\$42,981) (\$42,981) (\$42,981) (\$42,981) (\$42,981) (\$42,981) (\$42,981)	\$31,272,364 (\$46,661) (\$46,661) (\$46,661) (\$46,661) (\$46,661) (\$46,661) (\$46,661)	\$33,679,114 (\$51,607) (\$51,607) (\$51,607) (\$51,607) (\$51,607) (\$51,607)	\$36,134,288 (\$75,015) (\$75,015) (\$75,015) (\$75,015) (\$75,015) (\$75,015)	\$38,699,436 (\$95,926) (\$95,926) (\$95,926) (\$95,926) (\$95,926)	\$41,395,336 (\$105,228) \$44,214,650 (\$105,228) (\$116,184) (\$105,228) (\$116,184) (\$105,228) (\$116,184) (\$105,228) (\$116,184)	\$47,163,502 (\$128,907) \$50,248,331 (\$128,907) \$(\$143,515)	Year 13 \$53,475,913		Year 15	Year 16	Year 17	Year 18	Year 19	Year 20	Year 21	Year 22	Year 23	Year 24	Year 25	Year 26	Year 27	Year 28	Year 29	Year 30
Y Y Y Y Y Y Y Y Y Y Y Y Y Y Y Y Y Y Y	bar 1 [<u><u><u>4</u></u>,<u>942</u>,776] bar 3 [<u><u>4</u></u>,<u>942</u>,776] bar 3 [<u><u>4</u></u>,<u>942</u>,776] bar 4 [<u><u>4</u></u>,<u>942</u>,776] bar 5 [<u><u>4</u>,<u>942</u>,776] bar 6 [<u><u>4</u>,<u>942</u>,776] bar 8 [<u><u>4</u>,<u>942</u>,776] bar 8 [<u><u>4</u>,<u>942</u>,776] bar 9 [<u><u>4</u>,<u>942</u>,776] bar 10 [<u><u>5</u></u>,<u>942</u>,776] ar 11 [<u><u>5</u>,<u>942</u>,2776] ar 11 [<u><u>5</u>,<u>942</u>,2776] ar 13 [<u>5</u><u>4</u>,<u>942</u>,776] ar 13 [<u>5</u><u>4</u>,<u>942</u>,2776] ar 13 [<u>5</u><u>4</u>,<u>942</u>,2776] ar 14 [<u><u>5</u>,<u>942</u>,2776]</u></u></u></u></u></u></u></u></u>	$\begin{array}{r} \underline{\$}_{15,43,457} & \underline{\$22,485,143} \\ \underline{\$1,543,457} & [\underline{\$30,434}] \\ \underline{\$1,543,57} & [\$30,574,576 & [\underline{\$30,576 & [\underline{\$3$	\$24,644,064 (\$39,091) (\$39,091) (\$39,091) (\$39,091) (\$39,091) (\$39,091) (\$39,091) (\$39,091) (\$39,091) (\$39,091) (\$39,091)	\$26,759,480 (\$40,485) (\$40,485) (\$40,485) (\$40,485) (\$40,485) (\$40,485) (\$40,485) (\$40,485) (\$40,485) (\$40,485) (\$40,485) (\$40,485)	\$28,967,405 (\$42,981) (\$42,981) (\$42,981) (\$42,981) (\$42,981) (\$42,981) (\$42,981) (\$42,981) (\$42,981)	\$31,272,364 (\$46,661) (\$46,661) (\$46,661) (\$46,661) (\$46,661) (\$46,661) (\$46,661) (\$46,661)	\$33,679,114 (\$51,607) (\$51,607) (\$51,607) (\$51,607) (\$51,607) (\$51,607) (\$51,607)	\$36,134,288 (\$75,015) (\$75,015) (\$75,015) (\$75,015) (\$75,015) (\$75,015) (\$75,015)	\$38,699,436 (\$95,926) (\$95,926) (\$95,926) (\$95,926) (\$95,926) (\$95,926)	\$41,395,338 (\$105,228) \$44,214,650 (\$105,228) (\$116,184) (\$105,228) (\$116,184) (\$105,228) (\$116,184) (\$105,228) (\$116,184) (\$105,228) (\$116,184)	\$47,163,502 (\$128,907) \$50,248,331 (\$128,907) (\$143,515) (\$128,907) (\$143,515)	\$53,475,913 (\$160,132)	\$56,853,374		Year 16	Year 17	Year 18	Year 19	Year 20	Year 21	Year 22	Year 23	Year 24	Year 25	Year 26	Year 27	Year 28	Year 29	Year 30
Y Y Y Y Y Y Y Y Y Y Y Y Y Y Y Y Y Y Y	sar 1 [<u><u><u>4</u></u>,<u>942</u>,776] sar 2 (<u><u>8</u></u>,<u>942</u>,776] sar 3 (<u><u>5</u></u>,<u>942</u>,776] sar 4 (<u><u>5</u>4</u>,<u>942</u>,776] sar 5 (<u><u>5</u>4</u>,<u>942</u>,776] sar 6 (<u><u>5</u>4</u>,<u>942</u>,776] sar 7 (<u><u>5</u>4,<u>942</u>,776] sar 10 (<u><u>5</u>4,<u>942</u>,776] sar 11 (<u><u>5</u>4,<u>942</u>,776] sar 11 (<u><u>5</u>4,<u>942</u>,776] sar 11 (<u><u>5</u>4,<u>942</u>,776] sar 13 (<u><u>5</u>4</u>,<u>942</u>,776] sar 14 (<u><u>5</u>4,<u>942</u>,776] sar 15 (<u><u>5</u>4</u>,<u>942</u>,776] sar 15 (<u><u>5</u>4</u>,<u>942</u>,776] sar 15 (<u><u>5</u>4</u>,<u>942</u>,776] sar 15 (<u><u>5</u>4</u>,<u>942</u>,2776]</u></u></u></u></u></u></u>	$\begin{array}{r} \underline{\$} 1.543.457 \$22.825.443 \\ \underline{\$} 1.543.457 (\$30.434) \\ \underline{\$} 1.543.57 (\$30.57) (\$30.57) (\$30.57) (\$30.57) (\$30.57) (\$30.57) (\$30.57) (\$30.57) (\$3$	\$24,644,064 (\$39,091) (\$39,091) (\$39,091) (\$39,091) (\$39,091) (\$39,091) (\$39,091) (\$39,091) (\$39,091) (\$39,091) (\$39,091) (\$39,091)	\$26,759,480 (\$40,485) (\$40,485) (\$40,485) (\$40,485) (\$40,485) (\$40,485) (\$40,485) (\$40,485) (\$40,485) (\$40,485) (\$40,485) (\$40,485)	\$28,967,405 (\$42,981) (\$42,981) (\$42,981) (\$42,981) (\$42,981) (\$42,981) (\$42,981) (\$42,981) (\$42,981) (\$42,981)	\$31,272,364 (\$46,661) (\$46,661) (\$46,661) (\$46,661) (\$46,661) (\$46,661) (\$46,661) (\$46,661)	\$33,679,114 (\$51,607) (\$51,607) (\$51,607) (\$51,607) (\$51,607) (\$51,607) (\$51,607)	\$36,134,288 (\$75,015) (\$75,015) (\$75,015) (\$75,015) (\$75,015) (\$75,015) (\$75,015)	\$38,699,436 (\$95,926) (\$95,926) (\$95,926) (\$95,926) (\$95,926) (\$95,926) (\$95,926)	\$41,395,336 (\$105,228) \$44,214,650 (\$105,228) (\$116,184) (\$105,228) (\$116,184) (\$105,228) (\$116,184) (\$105,228) (\$116,184) (\$105,228) (\$116,184)	\$47,163,502 (\$128,907) \$50,248,331 (\$128,907) (\$143,515) (\$128,907) (\$143,515) (\$128,907) (\$143,515)	\$53,475,913 (\$160,132) (\$160,132)	\$56,853,374 (\$178,891)	\$60,388,213		Year 17	Year 18	Year 19	Year 20	Year 21	Year 22	Year 23	Year 24	Year 25	Year 26	Year 27	Year 28	Year 29	Year 30
Y Y Y Y Y Y Y Y Y Y Y Y Y Y Y Y Y Y Y	ear 1 (<u>§4.942.776</u>) ear 2 (<u>§4.942.776</u>) ear 3 (<u>§4.942.776</u>) ear 4 (<u>§4.942.776</u>) ear 6 (<u>§4.942.776</u>) ear 5 (<u>§4.942.776</u>) ear 7 (<u>§4.942.776</u>) ear 8 (<u>§4.942.776</u>) ear 8 (<u>§4.942.776</u>) ear 10 (<u>§4.942.776</u>) er 10 (<u>§4.942.776</u>) er 11 (<u>§4.942.776</u>) er 13 (<u>§4.942.776</u>) er 13 (<u>§4.942.776</u>) er 13 (<u>§4.942.776</u>) er 15 (<u>§4.942.776</u>) er 15 (<u>§4.942.776</u>) er 15 (<u>§4.942.776</u>)	$\begin{array}{r} \underline{\$}_{15,43,457} & \underline{\$22,485,143} \\ \underline{\$1,543,457} & \underline{\$30,434} \\ \underline{\$1,543,457} & \underline{\$30,543} & \underline{\$30,543} \\ \underline{\$1,543,557} & \underline{\$30,543} & \underline{\$1,543,557} & \underline{\$30,553} & \underline{\$1,553,554} & \underline{\$1,554,557} & \$1,55$	\$24,644,064 (533,001) (533,001) (533,001) (533,001) (533,001) (533,001) (533,001) (533,001) (533,001) (533,001) (533,001)	\$26,759,480 (\$40,485) (\$40,485) (\$40,485) (\$40,485) (\$40,485) (\$40,485) (\$40,485) (\$40,485) (\$40,485) (\$40,485) (\$40,485) (\$40,485)	\$28,967,405 (\$42,981) (\$42,981) (\$42,981) (\$42,981) (\$42,981) (\$42,981) (\$42,981) (\$42,981) (\$42,981) (\$42,981)	\$31,272,364 (\$46,661) (\$46,661) (\$46,661) (\$46,661) (\$46,661) (\$46,661) (\$46,661) (\$46,661) (\$46,661)	\$33,679,114 (\$51,607) (\$51,607) (\$51,607) (\$51,607) (\$51,607) (\$51,607) (\$51,607) (\$51,607) (\$51,607)	\$36,134,288 (\$75,015) (\$75,015) (\$75,015) (\$75,015) (\$75,015) (\$75,015) (\$75,015) (\$75,015)	\$38,699,436 (\$65,926) (\$95,926) (\$95,926) (\$95,926) (\$95,926) (\$95,926) (\$95,926) (\$95,926)	\$41,395,338 (\$105,228) \$44,214,650 (\$105,228) (\$116,184) (\$105,228) (\$116,184) (\$105,228) (\$116,184) (\$105,228) (\$116,184) (\$105,228) (\$116,184) (\$105,228) (\$116,184)	\$47,163,502 (\$128,907) \$50,248,331 (\$128,907) (\$143,515) (\$128,907) (\$143,515) (\$128,907) (\$143,515) (\$128,907) (\$143,515)	\$53,475,913 (\$160,132) (\$160,132) (\$160,132)	\$56,853,374 (\$178,891) (\$178,891)	\$60,388,213 (\$199,930)	\$64,088,317		Year 18	Year 19	Year 20	Year 21	Year 22	Year 23	Year 24	Year 25	Year 26	Year 27	Year 28	Year 29	Year 30
Y Y Y Y Y Y Y Y Y Y Y Y Y Y Y Y Y Y Y	sar 1 (<u>54.942.776</u>) sar 2 (<u>54.942.776</u>) sar 3 (<u>54.942.776</u>) sar 4 (<u>54.942.776</u>) sar 6 (<u>54.942.776</u>) sar 6 (<u>54.942.776</u>) sar 6 (<u>54.942.776</u>) sar 8 (<u>54.942.776</u>) sar 1 (<u>54.942.776</u>) ar 15 (<u>54.942.776</u>)	$\begin{array}{r} \underline{\$} 1.\underline{\$} 3.\underline{\$} 4.\underline{\$} 7 & \underline{\$} 22.285, 143 \\ \underline{\$} 1.\underline{\$} 4.\underline{\$} 3.57 & (\overline{\$} 50, 434) \\ \underline{\$} 1.\underline{\$} 4.\underline{\$} 4.\underline{\$} 7 & (\overline{\$} 50, 434) \\ \underline{\$} 1.\underline{\$} 4.\underline{\$} 4.\underline{\$} 7 & (\overline{\$} 50, 434) \\ \underline{\$} 1.\underline{\$} 4.\underline{\$} 4.\underline{\$} 7 & (\overline{\$} 50, 434) \\ \underline{\$} 1.\underline{\$} 4.\underline{\$} 4.\underline{\$} 7 & (\overline{\$} 50, 434) \\ \underline{\$} 1.\underline{\$} 4.\underline{\$} 4.\underline{\$} 7 & (\overline{\$} 50, 434) \\ \underline{\$} 1.\underline{\$} 4.\underline{\$} 4.\underline{\$} 7 & (\overline{\$} 50, 434) \\ \underline{\$} 1.\underline{\$} 4.\underline{\$} 4.\underline{\$} 7 & (\overline{\$} 50, 434) \\ \underline{\$} 1.\underline{\$} 4.\underline{\$} 4.\underline{\$} 7 & (\overline{\$} 50, 434) \\ \underline{1} 1.\underline{\$} 4.\underline{\$} 4.\underline{\$} 7 & (\overline{\$} 50, 434) \\ \underline{1} 1.\underline{\$} 4.\underline{\$} 4.\underline{\$} 7 & (\overline{\$} 50, 434) \\ \underline{1} 1.\underline{\$} 4.\underline{\$} 4.\underline{\$} 7 & (\overline{\$} 50, 434) \\ \underline{1} 1.\underline{\$} 4.\underline{\$} 4.\underline{\$} 7 & (\overline{\$} 50, 434) \\ \underline{1} 1.\underline{\$} 4.\underline{\$} 4.\underline{\$} 7 & (\overline{\$} 50, 434) \\ \underline{1} 1.\underline{\$} 4.\underline{\$} 4.\underline{\$} 7 & (\overline{\$} 50, 434) \\ \underline{1} 1.\underline{\$} 4.\underline{\$} 4.\underline{\$} 7 & (\overline{\$} 50, 434) \\ \underline{1} 1.\underline{\$} 4.\underline{\$} 4.\underline{\$} 7 & (\overline{\$} 50, 434) \\ \underline{1} 1.\underline{\$} 4.\underline{\$} 4.\underline{\$} 7 & (\overline{\$} 50, 434) \\ \underline{1} 1.\underline{\$} 4.\underline{\$} 4.\underline{\$} 7 & (\overline{\$} 50, 434) \\ \underline{1} 1.\underline{\$} 4.\underline{\$} 4.\underline{\$} 7 & (\overline{\$} 50, 434) \\ \underline{1} 1.\underline{\$} 4.\underline{\$} 4.\underline{\$} 7 & (\overline{\$} 50, 434) \\ \underline{1} 1.\underline{\$} 4.\underline{\$} 4.\underline{\$} 7 & (\overline{\$} 50, 434) \\ \underline{1} 1.\underline{\$} 4.\underline{\$} 4.\underline{\$} 7 & (\overline{\$} 50, 434) \\ \underline{1} 1.\underline{\$} 4.\underline{\$} 4.\underline{\$} 7 & (\overline{\$} 50, 434) \\ \underline{1} 1.\underline{\$} 4.\underline{\$} 4.\underline{\$} 7 & (\overline{\$} 50, 434) \\ \underline{1} 1.\underline{\$} 4.\underline{\$} 4.\underline{\$} 7 & (\overline{\$} 50, 434) \\ \underline{1} 1.\underline{\$} 4.\underline{\$} 4.\underline{\$} 7 & (\overline{\$} 50, 434) \\ \underline{1} 1.\underline{\$} 4.\underline{\$} 4.\underline{\$} 7 & (\overline{\$} 50, 434) \\ \underline{1} 1.\underline{\$} 4.\underline{\$} 4.\underline{\$} 7 & (\overline{\$} 50, 434) \\ \underline{1} 1.\underline{\$} 4.\underline{\$} 4.\underline{\$} 7 & (\overline{\$} 50, 434) \\ \underline{1} 1.\underline{\$} 4.\underline{\$} 4.\underline{\$} 7 & (\overline{\$} 50, 434) \\ \underline{1} 1.\underline{\$} 4.\underline{\$} 4.\underline{\$} 7 & (\overline{\$} 50, 434) \\ \underline{1} 1.\underline{\$} 4.\underline{\$} 4.\underline{\$} 7 & (\overline{\$} 50, 434) \\ \underline{1} 1.\underline{\$} 4.\underline{\$} 4.\underline{\$} 7 & (\overline{\$} 50, 434) \\ \underline{1} 1.\underline{\$} 4.\underline{\$} 4.\underline{\$} 7 & (\overline{\$} 50, 434) \\ \underline{1} 1.\underline{\$} 4.\underline{\$} 4.\underline{\$} 7 & (\overline{\$} 50, 434) \\ \underline{1} 1.\underline{\$} 4.\underline{\$} 4.\underline{\$} 7 & (\overline{\$} 50, 434) \\ \underline{1} 1.\underline{\$} 4.\underline{\$} 4.\underline{\$} 7 & (\overline{\$} 50, 434) \\ \underline{1} 1.\underline{\$} 4.\underline{\$} 4.\underline{\$} 7 & (\overline{\$} 50, 434) \\ \underline{1} 1.\underline{\$} 4.\underline{\$} 4.\underline{\$} 7 & (\overline{\$} 50, 434) \\ \underline{1} 1.\underline{\$} 4.\underline{\$} 4.\underline{\$} 7 & (\overline{\$} 50, 434) \\ \underline{1} 1.\underline{\$} 4.\underline{\$} 4.\underline{\$} 7 & (\overline{\$} 50, 434) \\ \underline{1} 1.\underline{\$} 4.\underline{\$} 4$	\$24,644,064 (\$30,001) (\$30,001) (\$30,001) (\$30,001) (\$30,001) (\$30,001) (\$30,001) (\$30,001) (\$30,001) (\$30,001) (\$30,001) (\$30,001) (\$30,001)	\$26,759,480 (\$40,485) (\$40,485) (\$40,485) (\$40,485) (\$40,485) (\$40,485) (\$40,485) (\$40,485) (\$40,485) (\$40,485) (\$40,485) (\$40,485) (\$40,485)	\$28,967,405 (\$42,981) (\$42,981) (\$42,981) (\$42,981) (\$42,981) (\$42,981) (\$42,981) (\$42,981) (\$42,981) (\$42,981) (\$42,981)	\$31,272,364 (\$46,661) (\$46,661) (\$46,661) (\$46,661) (\$46,661) (\$46,661) (\$46,661) (\$46,661) (\$46,661) (\$46,661)	\$33,679,114 (\$51,607) (\$51,607) (\$51,607) (\$51,607) (\$51,607) (\$51,607) (\$51,607) (\$51,607) (\$51,607)	\$36,134,288 (\$75,015) (\$75,015) (\$75,015) (\$75,015) (\$75,015) (\$75,015) (\$75,015) (\$75,015) (\$75,015)	\$38,699,436 (\$95,926) (\$95,926) (\$95,926) (\$95,926) (\$95,926) (\$95,926) (\$95,926) (\$95,926) (\$95,926) (\$95,926)	\$41,395,336 (\$105,228) \$44,214,650 (\$105,228) (\$116,184) (\$105,228) (\$116,184) (\$105,228) (\$116,184) (\$105,228) (\$116,184) (\$105,228) (\$116,184) (\$105,228) (\$116,184) (\$105,228) (\$116,184)	\$47,163,502 (\$128,907) \$50,248,331 (\$128,907) (\$143,515) (\$128,907) (\$143,515) (\$128,907) (\$143,515) (\$128,907) (\$143,515) (\$128,907) (\$143,515)	\$53,475,913 (\$160,132) (\$160,132) (\$160,132) (\$160,132)	\$56,853,374 (\$178,891) (\$178,891) (\$178,891)	\$60,388,213 (\$199,930) (\$199,930)	\$64,088,317 (\$223,397)	\$67,961,985		Year 19	Year 20	Year 21	Year 22	Year 23	Year 24	Year 25	Year 26	Year 27	Year 28	Year 29	Year 30
Y Y Y Y Y Y Y Y Y Y Y Y Y Y Y Y Y Y Y	ear 1 (<u>\$4,942,776</u>) ear 2 (<u>\$4,942,776</u>) ear 3 (<u>\$4,942,776</u>) ear 4 (<u>\$4,942,776</u>) ear 5 (<u>\$4,942,776</u>) ear 5 (<u>\$4,942,776</u>) ear 7 (<u>\$4,942,776</u>) ear 8 (<u>\$4,942,776</u>) ear 10 (<u>\$4,942,776</u>) ear 10 (<u>\$4,942,776</u>) ear 11 (<u>\$4,942,776</u>) ear 15 (<u>\$4,942,776</u>) ear 15 (<u>\$4,942,776</u>) ear 15 (<u>\$4,942,776</u>) ear 15 (<u>\$4,942,776</u>) ear 16 (<u>\$4,942,776</u>) ear 16 (<u>\$4,942,776</u>) ear 16 (<u>\$4,942,776</u>) ear 16 (<u>\$4,942,776</u>)	$\begin{array}{r} \underline{\$} 1 \pm \underline{6}_{14} \pm \underline{6}_{17} & \underline{\$} 22 \pm \underline{8}_{27} \pm \underline{4}_{27} \\ \underline{\$} 1 \pm \underline{6}_{24} \pm \underline{5}_{17} & (\underline{\$}_{30}, \underline{4}_{34}) \\ \underline{\$} 1 \pm \underline{6}_{24} \pm \underline{5}_{17} & (\underline{\$}_{30}, \underline{4}_{34}) \\ \underline{\$} 1 \pm \underline{6}_{24} \pm \underline{5}_{17} & (\underline{\$}_{30}, \underline{4}_{34}) \\ \underline{\$} 1 \pm \underline{6}_{24} \pm \underline{5}_{17} & (\underline{\$}_{30}, \underline{4}_{34}) \\ \underline{\$} 1 \pm \underline{6}_{24} \pm \underline{5}_{17} & (\underline{\$}_{30}, \underline{4}_{34}) \\ \underline{\$} 1 \pm \underline{6}_{24} \pm \underline{5}_{17} & (\underline{\$}_{30}, \underline{4}_{34}) \\ \underline{\$} 1 \pm \underline{6}_{24} \pm \underline{5}_{17} & (\underline{\$}_{30}, \underline{4}_{34}) \\ \underline{\$} 1 \pm \underline{6}_{24} \pm \underline{5}_{17} & (\underline{\$}_{30}, \underline{4}_{34}) \\ \underline{\$} 1 \pm \underline{6}_{24} \pm \underline{5}_{17} & (\underline{\$}_{30}, \underline{4}_{34}) \\ \underline{\$} 1 \pm \underline{6}_{24} \pm \underline{5}_{17} & (\underline{\$}_{30}, 4\underline{3}_{4}) \\ \underline{\$} 1 \pm \underline{6}_{24} \pm \underline{5}_{17} & (\underline{\$}_{30}, 4\underline{3}_{4}) \\ \underline{\$} 1 \pm \underline{6}_{24} \pm \underline{5}_{17} & (\underline{\$}_{30}, 4\underline{3}_{4}) \\ \underline{\$} 1 \pm \underline{6}_{24} \pm \underline{5}_{17} & (\underline{\$}_{30}, 4\underline{3}_{4}) \\ \underline{\$} 1 \pm \underline{6}_{24} \pm \underline{5}_{17} & (\underline{\$}_{30}, 4\underline{3}_{4}) \\ \underline{\$} 1 \pm \underline{6}_{24} \pm \underline{5}_{17} & (\underline{\$}_{30}, 4\underline{3}_{4}) \\ \underline{\$} 1 \pm \underline{6}_{24} \pm \underline{5}_{17} & (\underline{\$}_{30}, 4\underline{3}_{4}) \\ \underline{\$} 1 \pm \underline{6}_{24} \pm \underline{5}_{17} & (\underline{\$}_{30}, 4\underline{3}_{4}) \\ \underline{\$} 1 \pm \underline{6}_{24} \pm \underline{5}_{17} & (\underline{\$}_{30}, 4\underline{3}_{4}) \\ \underline{\$} 1 \pm \underline{6}_{24} \pm \underline{5}_{17} & (\underline{\$}_{30}, 4\underline{3}_{4}) \\ \underline{\$} 1 \pm \underline{6}_{24} \pm \underline{5}_{17} & (\underline{\$}_{30}, 4\underline{3}_{4}) \\ \underline{\$} 1 \pm \underline{6}_{24} \pm \underline{5}_{17} & (\underline{\$}_{30}, 4\underline{3}_{4}) \\ \underline{\$} 1 \pm \underline{6}_{24} \pm \underline{5}_{17} & (\underline{\$}_{30}, 4\underline{3}_{4}) \\ \underline{\$} 1 \pm \underline{6}_{24} \pm \underline{5}_{17} & (\underline{\$}_{30}, 4\underline{3}_{4}) \\ \underline{\$} 1 \pm \underline{6}_{24} \pm \underline{5}_{17} & (\underline{\$}_{30}, 4\underline{3}_{4}) \\ \underline{\$} 1 \pm \underline{6}_{24} \pm \underline{5}_{17} & (\underline{\$}_{30}, 4\underline{3}_{4}) \\ \underline{\$} 1 \pm \underline{6}_{24} \pm \underline{5}_{17} & (\underline{\$}_{30}, 4\underline{3}_{4}) \\ \underline{\$} 1 \pm \underline{6}_{24} \pm \underline{5}_{17} & (\underline{\$}_{30}, 4\underline{3}_{18}) \\ \underline{5} 1 \pm \underline{6}_{24} \pm \underline{5}_{17} & (\underline{\$}_{30}, 4\underline{3}_{18}) \\ \underline{5} 1 \pm \underline{6}_{24} \pm \underline{5}_{17} & (\underline{\$}_{30}, 4\underline{3}_{18}) \\ \underline{5} 1 \pm \underline{6}_{24} \pm \underline{5}_{17} & (\underline{5}_{30}, 4\underline{3}_{18}) \\ \underline{5} 1 \pm \underline{6}_{24} \pm \underline{5}_{18} & (\underline{5}_{28}, 4\underline{5}_{18}) \\ \underline{5} 1 \pm \underline{6}_{24} \pm \underline{5}_{18} & (\underline{5}_{28}, 4\underline{5}_{18}) \\ \underline{5} 1 \pm \underline{6}_{24} \pm \underline{5}_{18} & (\underline{5}_{28}, 4\underline{5}_{18}) \\ \underline{5} 1 \pm \underline{5}_{28} & \underline{5}_{18} & (\underline{5}_{18}, 4\underline{5})$	\$24,644,064 (\$33,091) (\$33,091) (\$33,091) (\$33,091) (\$33,091) (\$33,091) (\$30,091) (\$30,091) (\$30,091) (\$33,091) (\$33,091) (\$33,091) (\$33,091) (\$33,091)	\$26,759,480 (\$40,485) (\$40,485) (\$40,485) (\$40,485) (\$40,485) (\$40,485) (\$40,485) (\$40,485) (\$40,485) (\$40,485) (\$40,485) (\$40,485) (\$40,485)	\$28,967,405 (\$42,981) (\$42,981) (\$42,981) (\$42,981) (\$42,981) (\$42,981) (\$42,981) (\$42,981) (\$42,981) (\$42,981) (\$42,981)	\$31,272,364 (\$46,661) (\$46,661) (\$46,661) (\$46,661) (\$46,661) (\$46,661) (\$46,661) (\$46,661) (\$46,661) (\$46,661) (\$46,661)	\$33,679,114 (\$51,607) (\$51,607) (\$51,607) (\$51,607) (\$51,607) (\$51,607) (\$51,607) (\$51,607) (\$51,607) (\$51,607) (\$51,607)	\$36,134,288 (\$75,015) (\$75,015) (\$75,015) (\$75,015) (\$75,015) (\$75,015) (\$75,015) (\$75,015) (\$75,015) (\$75,015)	\$38,699,436 (\$65,926) (\$65,926) (\$65,926) (\$55,926) (\$55,926) (\$55,926) (\$55,926) (\$55,926) (\$55,926) (\$55,926)	\$41,395,336 (\$105,228) \$44,214,850 (\$105,228) (\$116,184) (\$105,228) (\$116,184) (\$105,228) (\$116,184) (\$105,228) (\$116,184) (\$105,228) (\$116,184) (\$105,228) (\$116,184) (\$105,228) (\$116,184)	\$47,163,502 (\$128,907) \$50,248,331 (\$128,907) (\$143,515) (\$128,907) (\$143,515) (\$128,907) (\$143,515) (\$128,907) (\$143,515) (\$128,907) (\$143,515)	\$53,475,913 (\$160,132) (\$160,132) (\$160,132) (\$160,132) (\$160,132)	\$56,853,374 (\$178,891) (\$178,891) (\$178,891) (\$178,891)	\$60,368,213 (\$199,930) (\$199,930) (\$199,930)	\$64,088,317 (\$223,397) (\$223,397)	\$67,961,985 (\$249,448)	\$72,017,949		Year 20	Year 21	Year 22	Year 23	Year 24	Year 25	Year 26	Year 27	Year 28	Year 29	Year 30
Y Y Y Y Y Y Y Y Y Y Y Y Y Y Y Y Y Y Y	sar 1 (<u>54.942.776</u>) sar 2 (<u>54.942.776</u>) sar 2 (<u>54.942.776</u>) sar 3 (<u>54.942.776</u>) sar 4 (<u>54.942.776</u>) sar 6 (<u>54.942.776</u>) sar 7 (<u>54.942.776</u>) sar 7 (<u>54.942.776</u>) sar 1 (<u>54.942.776</u>)	$\begin{array}{r} \underline{s}_{15,43,457} & \underline{s}_{22,265,143} \\ \underline{s}_{15,44,457} & (\underline{s}_{30,434}) \\ \underline{s}_{15,44,457} & (\underline{s}_{30,434}) \\ \underline{s}_{15,42,457} & (\underline{s}_{30,434}) \\ \underline{s}_{15,42,457} & (\underline{s}_{30,434}) \\ \underline{s}_{15,424,457} & (\underline{s}_{30,434}) \\ \underline{s}_{15,424,57} & (\underline{s}_{30,434}) $	\$24,644,064 (530,001) (\$30,001) (\$30,001) (\$30,001) (\$30,001) (\$30,001) (\$30,001) (\$30,001) (\$30,001) (\$30,001) (\$30,001) (\$30,001) (\$30,001) (\$30,001) (\$30,001)	\$26,759,480 (\$40,485) (\$40,485) (\$40,485) (\$40,485) (\$40,485) (\$40,485) (\$40,485) (\$40,485) (\$40,485) (\$40,485) (\$40,485) (\$40,485) (\$40,485)	\$28.967.405 (\$42.961) (\$42.961) (\$42.961) (\$42.961) (\$42.961) (\$42.961) (\$42.961) (\$42.961) (\$42.961) (\$42.961) (\$42.961) (\$42.961) (\$42.961) (\$42.961)	\$31,272,364 (\$46,661) (\$46,661) (\$46,661) (\$46,661) (\$46,661) (\$46,661) (\$46,661) (\$46,661) (\$46,661) (\$46,661) (\$46,661)	\$33,679,114 (\$51,607) (\$51,607) (\$51,607) (\$51,607) (\$51,607) (\$51,607) (\$51,607) (\$51,607) (\$51,607) (\$51,607) (\$51,607)	\$36,134,288 (\$75,015) (\$75,015) (\$75,015) (\$75,015) (\$75,015) (\$75,015) (\$75,015) (\$75,015) (\$75,015) (\$75,015) (\$75,015)	\$38,699,436 (\$95,926) (\$95,926) (\$95,926) (\$95,926) (\$95,926) (\$95,926) (\$95,926) (\$95,926) (\$95,926) (\$95,926)	\$41,395,336 (\$105,228) \$44,214,650 (\$105,228) (\$116,184) (\$105,228) (\$116,184) (\$105,228) (\$116,184) (\$105,228) (\$116,184) (\$105,228) (\$116,184) (\$105,228) (\$116,184) (\$105,228) (\$116,184) (\$105,228) (\$116,184) (\$105,228) (\$116,184)	\$47,163,502 (\$128,907) \$50,248,331 (\$128,907) (\$143,515) (\$128,907) (\$143,515) (\$128,907) (\$143,515) (\$128,907) (\$143,515) (\$128,907) (\$143,515) (\$128,907) (\$143,515)	\$53,475,913 (\$160,132) (\$160,132) (\$160,132) (\$160,132) (\$160,132) (\$160,132)	\$56,853,374 (\$178,891) (\$178,891) (\$178,891) (\$177,891) (\$177,891)	\$60.388.213 (\$199.930) (\$199.930) (\$199.930) (\$199.930)	\$64,088,317 (\$223,397) (\$222,397) (\$222,397)	\$67,961,985 (\$249,448) (\$249,448)	\$72,017,949 (\$276,248)	\$76,265,396		Year 21	Year 22	Year 23	Year 24	Year 25	Year 26	Year 27	Year 28	Year 29	Year 30
Y Y Y Y Y Y Y Y Y Y Y Y Y Y Y Y Y Y Y	par 1 (<u>§4.942.776</u>) par 2 (<u>§4.942.776</u>) par 3 (<u>§4.942.776</u>) par 4 (<u>§4.942.776</u>) par 4 (<u>§4.942.776</u>) par 6 (<u>§4.942.776</u>) par 6 (<u>§4.942.776</u>) par 7 (<u>§4.942.776</u>) par 9 (<u>§4.942.776</u>) par 10 (<u>§4.942.776</u>) par 11 (<u>§4.942.776</u>) par 11 (<u>§4.942.776</u>) par 13 (<u>§4.942.776</u>) par 16 (<u>§4.942.776</u>) par 16 (<u>§4.942.776</u>) par 16 (<u>§4.942.776</u>) par 16 (<u>§4.942.776</u>) par 17 (<u>§4.942.776</u>) par 18 (<u>§4.942.776</u>) par 19 (<u>§4.942.776</u>) par 10 (<u>§4.942.776</u>)	$\begin{array}{r} \underline{\$} 1.63.457 \$22.825.443 \\ \underline{\$} 1.63.457 \$23.825.443 \\ \underline{\$} 1.634.457 (\$30.434) \\ \underline{\$} 1.$	\$24,644,064 (\$30,091) (\$30,001) (\$30,001) (\$30,001) (\$30,001) (\$30,001) (\$30,001) (\$30,001) (\$30,001) (\$30,001) (\$30,001) (\$30,001) (\$30,001) (\$30,001) (\$30,001)	\$26,759,480 (\$40,485) (\$40,485) (\$40,485) (\$40,485) (\$40,485) (\$40,485) (\$40,485) (\$40,485) (\$40,485) (\$40,485) (\$40,485) (\$40,485) (\$40,485) (\$40,485) (\$40,485)	\$28,967,405 (\$42,981) (\$42,981) (\$42,981) (\$42,981) (\$42,981) (\$42,981) (\$42,981) (\$42,981) (\$42,981) (\$42,981) (\$42,981) (\$42,981)	\$31,272,364 (\$46,661) (\$46,661) (\$46,661) (\$46,661) (\$46,661) (\$46,661) (\$46,661) (\$46,661) (\$46,661) (\$46,661) (\$46,661) (\$46,661)	\$33,679,114 (\$51,607) (\$51,607) (\$51,607) (\$51,607) (\$51,607) (\$51,607) (\$51,607) (\$51,607) (\$51,607) (\$51,607) (\$51,607) (\$51,607) (\$51,607)	\$36,134,288 (\$75,015) (\$75,015) (\$75,015) (\$75,015) (\$75,015) (\$75,015) (\$75,015) (\$75,015) (\$75,015) (\$75,015) (\$75,015) (\$75,015)	\$38,099,436 (\$55,526) (\$55,526) (\$55,526) (\$55,526) (\$55,526) (\$55,526) (\$55,526) (\$55,526) (\$55,526) (\$55,526) (\$55,526) (\$55,526)	\$41,395,336 (\$105,228) (\$105,228) (\$116,184) (\$105,228) (\$116,184) (\$105,229) (\$116,184) (\$105,228) (\$116,184) (\$105,228) (\$116,184) (\$105,228) (\$116,184) (\$105,228) (\$116,184) (\$105,228) (\$116,184) (\$105,228) (\$116,184) (\$105,228) (\$116,184)	\$47,163,502 (\$128,907) \$50,248,331 (\$128,907) (\$143,515) (\$128,907) (\$143,515) (\$128,907) (\$143,515) (\$128,907) (\$143,515) (\$128,907) (\$143,515) (\$128,907) (\$143,515) (\$128,907) (\$143,515)	\$53,475,913 (\$160,132) (\$160,132) (\$160,132) (\$160,132) (\$160,132) (\$160,132) (\$160,132)	\$56,853,374 (\$178,891) (\$178,891) (\$178,891) (\$178,891) (\$178,891) (\$178,891)	\$60,388,213 (\$199,930) (\$199,930) (\$199,930) (\$199,930) (\$199,930)	\$64,088,317 (\$223,397) (\$223,397) (\$223,397) (\$223,397)	\$67,961,985 (\$249,448) (\$249,448) (\$249,448)	\$72,017,949 (\$272,248) (\$276,248)	\$76,265,396 (\$309,970)	\$80,713,992		Year 22	Year 23	Year 24	Year 25	Year 26	Year 27	Year 28	Year 29	Year 30
Y Y Y Y Y Y Y Y Y Y Y Y Y Y Y Y Y Y Y	sar 1 (<u>54.942.776</u>) sar 2 (<u>54.942.776</u>) sar 2 (<u>54.942.776</u>) sar 3 (<u>54.942.776</u>) sar 4 (<u>54.942.776</u>) sar 6 (<u>54.942.776</u>) sar 7 (<u>54.942.776</u>) sar 7 (<u>54.942.776</u>) sar 1 (<u>54.942.776</u>)	$\begin{array}{r} \underline{s}_{15,43,457} & \underline{s}_{22,265,143} \\ \underline{s}_{15,44,457} & (\underline{s}_{30,434}) \\ \underline{s}_{15,44,457} & (\underline{s}_{30,434}) \\ \underline{s}_{15,42,457} & (\underline{s}_{30,434}) \\ \underline{s}_{15,42,457} & (\underline{s}_{30,434}) \\ \underline{s}_{15,424,457} & (\underline{s}_{30,434}) \\ \underline{s}_{15,424,57} & (\underline{s}_{30,434}) $	\$24,644,064 (530,001) (\$30,001) (\$30,001) (\$30,001) (\$30,001) (\$30,001) (\$30,001) (\$30,001) (\$30,001) (\$30,001) (\$30,001) (\$30,001) (\$30,001) (\$30,001) (\$30,001)	\$26,759,480 (\$40,485) (\$40,485) (\$40,485) (\$40,485) (\$40,485) (\$40,485) (\$40,485) (\$40,485) (\$40,485) (\$40,485) (\$40,485) (\$40,485) (\$40,485)	\$28.967.405 (\$42.961) (\$42.961) (\$42.961) (\$42.961) (\$42.961) (\$42.961) (\$42.961) (\$42.961) (\$42.961) (\$42.961) (\$42.961) (\$42.961) (\$42.961) (\$42.961)	\$31,272,364 (\$46,661) (\$46,661) (\$46,661) (\$46,661) (\$46,661) (\$46,661) (\$46,661) (\$46,661) (\$46,661) (\$46,661) (\$46,661)	\$33,679,114 (\$51,607) (\$51,607) (\$51,607) (\$51,607) (\$51,607) (\$51,607) (\$51,607) (\$51,607) (\$51,607) (\$51,607) (\$51,607)	\$36,134,288 (\$75,015) (\$75,015) (\$75,015) (\$75,015) (\$75,015) (\$75,015) (\$75,015) (\$75,015) (\$75,015) (\$75,015) (\$75,015)	\$38,699,436 (\$95,926) (\$95,926) (\$95,926) (\$95,926) (\$95,926) (\$95,926) (\$95,926) (\$95,926) (\$95,926) (\$95,926)	\$41,395,336 (\$105,228) \$44,214,650 (\$105,228) (\$116,184) (\$105,228) (\$116,184) (\$105,228) (\$116,184) (\$105,228) (\$116,184) (\$105,228) (\$116,184) (\$105,228) (\$116,184) (\$105,228) (\$116,184) (\$105,228) (\$116,184) (\$105,228) (\$116,184)	\$47,163,502 (\$128,907) \$50,248,331 (\$128,907) (\$143,515) (\$128,907) (\$143,515) (\$128,907) (\$143,515) (\$128,907) (\$143,515) (\$128,907) (\$143,515) (\$128,907) (\$143,515)	\$53,475,913 (\$160,132) (\$160,132) (\$160,132) (\$160,132) (\$160,132) (\$160,132)	\$56,853,374 (\$178,891) (\$178,891) (\$178,891) (\$177,891) (\$177,891)	\$60.388.213 (\$199.930) (\$199.930) (\$199.930) (\$199.930)	\$64,088,317 (\$223,397) (\$222,397) (\$222,397)	\$67,961,985 (\$249,448) (\$249,448)	\$72,017,949 (\$276,248)	\$76,265,396		Year 21 \$85,373,909 \$382,926)	Year 22	Year 23	Year 24	Year 25	Year 26	Year 27	Year 28	Year 29	Year 30
Y Y Y Y Y Y Y Y Y Y Y Y Y Y Y Y Y Y Y	sar 1 (<u>54.942.776</u>) sar 2 (<u>54.942.776</u>) sar 3 (<u>54.942.776</u>) sar 3 (<u>54.942.776</u>) sar 4 (<u>54.942.776</u>) sar 4 (<u>54.942.776</u>) sar 6 (<u>54.942.776</u>) sar 8 (<u>54.942.776</u>) sar 8 (<u>54.942.776</u>) sar 10 (<u>54.942.776</u>) sar 10 (<u>54.942.776</u>) ar 10 (<u>54.942.776</u>) ar 13 (<u>54.942.776</u>) ar 13 (<u>54.942.776</u>) ar 13 (<u>54.942.776</u>) ar 16 (<u>54.942.776</u>) ar 16 (<u>54.942.776</u>) ar 18 (<u>54.942.776</u>) ar 20 (<u>54.942.776</u>) ar 21 (<u>54.942.776</u>)	$\begin{array}{r} \underline{\$} 1.\underline{\$}.\underline{\$}.\underline{\$}.\underline{\$}.\underline{\$}.\underline{\$}.\underline{\$}.\underline{\$}$	\$24,644,064 (530,001) (530,001) (530,001) (530,001) (530,001) (530,001) (530,001) (530,001) (530,001) (530,001) (530,001) (530,001) (530,001) (530,001)	\$26,759,480 (\$40,485) (\$40,485) (\$40,485) (\$40,485) (\$40,485) (\$40,485) (\$40,485) (\$40,485) (\$40,485) (\$40,485) (\$40,485) (\$40,485) (\$40,485) (\$40,485) (\$40,485)	\$28.967.405 (\$42.961) (\$42.961) (\$42.961) (\$42.961) (\$42.961) (\$42.961) (\$42.961) (\$42.961) (\$42.961) (\$42.961) (\$42.961) (\$42.961) (\$42.961) (\$42.961) (\$42.961) (\$42.961)	\$31,272,364 (\$46,661) (\$46,661) (\$46,661) (\$46,661) (\$46,661) (\$46,661) (\$46,661) (\$46,661) (\$46,661) (\$46,661) (\$46,661) (\$46,661)	\$33,670,114 (\$51,607) (\$51,607) (\$51,607) (\$51,607) (\$51,607) (\$51,607) (\$51,607) (\$51,607) (\$51,607) (\$51,607) (\$51,607) (\$51,607)	\$36, 134, 288 (\$75,015) (\$75,015) (\$75,015) (\$75,015) (\$75,015) (\$75,015) (\$75,015) (\$75,015) (\$75,015) (\$75,015) (\$75,015) (\$75,015) (\$75,015)	\$38,699,436 (\$95,926) (\$95,926) (\$95,926) (\$95,926) (\$95,926) (\$95,926) (\$95,926) (\$95,926) (\$95,926) (\$95,926) (\$95,926) (\$95,926) (\$95,926)	\$41,395,336 (\$165,228) \$44,214,650 (\$165,228) (\$116,184) (\$105,228) (\$116,184) (\$105,228) (\$116,184) (\$105,228) (\$116,184) (\$105,228) (\$116,184) (\$105,228) (\$116,184) (\$105,228) (\$116,184) (\$105,228) (\$116,184) (\$105,228) (\$116,184) (\$105,228) (\$116,184)	\$47,163,502 (\$128,907) \$50,248,331 (\$128,907) (\$143,515) (\$128,907) (\$143,515) (\$128,907) (\$143,515) (\$128,907) (\$143,515) (\$128,907) (\$143,515) (\$128,907) (\$143,515) (\$128,907) (\$143,515) (\$128,907) (\$143,515)	\$53,475,913 (\$160,132) (\$160,132) (\$160,132) (\$160,132) (\$160,132) (\$160,132) (\$160,132) (\$160,132)	\$56,853,374 (\$178,891) (\$178,891) (\$178,891) (\$178,891) (\$178,891) (\$178,891) (\$178,891)	\$60,388,213 (\$199,930) (\$199,930) (\$199,930) (\$199,930) (\$199,930) (\$199,930)	\$64,088,317 (\$223,397) (\$223,397) (\$223,397) (\$222,397) (\$223,397)	\$67,961,985 (\$249,448) (\$249,448) (\$249,448) (\$249,448)	\$72,017,949 (\$276,248) (\$276,248) (\$276,248)	\$76,265,396 (\$309,970) (\$309,970)	\$80,713,992 (\$344,797)	\$85,373,909		Year 23	Year 24	Year 25	Year 26	Year 27	Year 28	Year 29	Year 30
Y Y Y Y Y Y Y Y Y Y Y Y Y Y Y Y Y Y Y	ear 1 (\$4.942.776) Far 1 (\$4.942.776) Far 2 (\$4.942.776) Far 3 (\$4.942.776) Far 4 (\$4.942.776) Far 4 (\$4.942.776) Far 6 (\$4.942.776) Far 7 (\$4.942.776) Far 10 (\$4.942.776) Far 10 (\$4.942.776) Far 10 (\$4.942.776) Far 14 (\$4.942.776) Far 16 (\$4.942.776) Far 10 (\$4.942.776) Far 20 (\$4.942	$\begin{array}{r} \underline{\$} 1.\underline{\$}.\underline{\$}.\underline{\$}.\underline{\$}.\underline{\$}.\underline{\$}.\underline{\$}.\underline{\$}$	\$24,644,064 (\$30,091) (\$33,001) (\$33,001) (\$33,001) (\$33,001) (\$33,001) (\$33,001) (\$33,001) (\$30,001) (\$30,001) (\$30,001) (\$33,001) (\$33,001) (\$33,001) (\$33,001) (\$33,001)	\$26,759,480 (\$40,485) (\$40,485) (\$40,485) (\$40,485) (\$40,485) (\$40,485) (\$40,485) (\$40,485) (\$40,485) (\$40,485) (\$40,485) (\$40,485) (\$40,485) (\$40,485) (\$40,485) (\$40,485) (\$40,485)	\$28,967,405 (\$42,981) (\$42,981) (\$42,981) (\$42,981) (\$42,981) (\$42,981) (\$42,981) (\$42,981) (\$42,981) (\$42,981) (\$42,981) (\$42,981) (\$42,981) (\$42,981)	\$31,272,364 (\$46,661) (\$46,661) (\$46,661) (\$46,661) (\$46,661) (\$46,661) (\$46,661) (\$46,661) (\$46,661) (\$46,661) (\$46,661) (\$46,661) (\$46,661) (\$46,661)	\$33,679,114 (\$51,607) (\$51,607) (\$51,607) (\$51,607) (\$51,607) (\$51,607) (\$51,607) (\$51,607) (\$51,607) (\$51,607) (\$51,607) (\$51,607) (\$51,607) (\$51,607) (\$51,607)	\$36,134,288 (\$75,015) (\$75,015) (\$75,015) (\$75,015) (\$75,015) (\$75,015) (\$75,015) (\$75,015) (\$75,015) (\$75,015) (\$75,015) (\$75,015) (\$75,015) (\$75,015)	\$38,699,436 (\$95,926) (\$95,926) (\$95,926) (\$95,926) (\$95,926) (\$95,926) (\$95,926) (\$95,926) (\$95,926) (\$95,926) (\$95,926) (\$95,926) (\$95,926)	\$41,395,336 (\$105,228) \$44,214,650 (\$105,228) (\$116,184) (\$105,228) (\$116,184)	\$47,163,502 (\$128,907) \$50,248,331 (\$128,907) (\$143,315) (\$128,907) (\$143,315) (\$128,907) (\$143,315) (\$128,907) (\$143,315) (\$128,907) (\$143,315) (\$128,907) (\$143,315) (\$128,907) (\$143,315) (\$128,907) (\$143,515) (\$128,907) (\$143,515)	\$53,475,913 (\$160,132) (\$160,132) (\$160,132) (\$160,132) (\$160,132) (\$160,132) (\$160,132) (\$160,132) (\$160,132)	\$56,853,374 (\$178,891) (\$178,891) (\$178,891) (\$178,891) (\$178,891) (\$178,891) (\$178,891) (\$178,891)	\$60,388,213 (\$199,930) (\$199,930) (\$199,930) (\$199,930) (\$199,930) (\$199,930) (\$199,930)	\$64.088.317 (\$223.397) (\$223.397) (\$223.397) (\$223.397) (\$223.397) (\$223.397) (\$222.397) (\$222.397)	\$67.961,985 (\$249,445) (\$249,445) (\$249,445) (\$249,445) (\$249,445) (\$249,445)	\$72,017,949 (\$278,245) (\$278,245) (\$278,248) (\$278,248) (\$278,248) (\$278,248)	\$76,265,396 (\$309,970) (\$309,970) (\$309,970)	\$80.713,992 (\$344,797) (\$344,797) (\$344,797)	\$85,373,909 (\$382,926)	\$90,255,851		Year 24	Year 25	Year 26	Year 27	Year 28	Year 29	Year 30
Y Y Y Y Y Y Y Y Y Y Y Y Y Y Y Y Y Y Y	aar 1 <u>64</u> 042.776) bar 3 <u>(54</u> 042.776) bar 3 <u>(54</u> 042.776) bar 4 <u>(54</u> 042.776) bar 5 <u>(54</u> 042.776) bar 5 <u>(54</u> 042.776) bar 6 <u>(54</u> 042.776) bar 6 <u>(54</u> 042.776) bar 7 <u>(54</u> 042.776) bar 7 <u>(54</u> 042.776) ar 10 <u>(54</u> 042.776) ar 10 <u>(54</u> 042.776) ar 10 <u>(54</u> 042.776) ar 14 <u>(54</u> 042.776) ar 14 <u>(54</u> 042.776) ar 14 <u>(54</u> 042.776) ar 16 <u>(54</u> 042.776) ar 16 <u>(54</u> 042.776) ar 16 <u>(54</u> 042.776) ar 18 <u>(54</u> 042.776) ar 19 <u>(54</u> 042.776) ar 19 <u>(54</u> 042.776) ar 12 <u>(54</u> 042.776) ar 21 <u>(54</u> 042.776) ar 21 <u>(54</u> 042.776) ar 21 <u>(54</u> 042.776) ar 21 <u>(54</u> 042.776) ar 22 <u>(54</u> 042.776) ar 24 <u>(54</u> 042.776) ar 25 <u>(54</u> 042.776)	$\begin{array}{r} \underline{s}_{15}\underline{s}_{15}\underline{s}_{25}\underline{s}_{25}, \underline{s}_{25}, \underline{s}_{14}\\ \underline{s}_{15}\underline{s}_{15}\underline{s}_{15}\underline{s}_{15}, (\underline{s}_{25}, \underline{s}_{35}, \underline{s}, \underline{s}_{35}, \underline{s}_{35}, \underline{s}_{35}, \underline{s}_{35}, \underline{s}_{35}$	\$24,644,064 (530,001) (530,001) (530,001) (530,001) (530,001) (530,001) (530,001) (530,001) (530,001) (530,001) (530,001) (530,001) (530,001) (530,001) (530,001) (530,001) (530,001) (530,001)	\$26,759,480 (\$40,485) (\$40,485) (\$40,485) (\$40,485) (\$40,485) (\$40,485) (\$40,485) (\$40,485) (\$40,485) (\$40,485) (\$40,485) (\$40,485) (\$40,485) (\$40,485) (\$40,485) (\$40,485) (\$40,485)	\$28.967.405 (\$42.961) (\$42.961) (\$42.961) (\$42.961) (\$42.961) (\$42.961) (\$42.961) (\$42.961) (\$42.961) (\$42.961) (\$42.961) (\$42.961) (\$42.961) (\$42.961) (\$42.961) (\$42.961) (\$42.961) (\$42.961)	\$31,272,364 (\$46,661) (\$46,661) (\$46,661) (\$46,661) (\$46,661) (\$46,661) (\$46,661) (\$46,661) (\$46,661) (\$46,661) (\$46,661) (\$46,661) (\$46,661)	\$33,670,114 (\$51,607) (\$51,607) (\$51,607) (\$51,607) (\$51,607) (\$51,607) (\$51,607) (\$51,607) (\$51,607) (\$51,607) (\$51,607) (\$51,607) (\$51,607) (\$51,607) (\$51,607)	\$36, 134, 288 (\$75,015) (\$75,015) (\$75,015) (\$75,015) (\$75,015) (\$75,015) (\$75,015) (\$75,015) (\$75,015) (\$75,015) (\$75,015) (\$75,015) (\$75,015) (\$75,015) (\$75,015) (\$75,015)	\$38,699,436 (\$95,926) (\$95,926) (\$95,926) (\$95,926) (\$95,926) (\$95,926) (\$95,926) (\$95,926) (\$95,926) (\$95,926) (\$95,926) (\$95,926) (\$95,926) (\$95,926) (\$95,926) (\$95,926)	\$41,305,330 (\$105,228) \$44,214,650 (\$105,228) (\$116,184) (\$105,228) (\$116,184)	\$47,163,502 (\$128,907) \$50,248,331 (\$128,907) (\$143,515) (\$128,907) (\$143,515)	\$53,475,913 (\$160,132) (\$160,132) (\$160,132) (\$160,132) (\$160,132) (\$160,132) (\$160,132) (\$160,132) (\$160,132) (\$160,132) (\$160,132) (\$160,132)	\$56,853,374 (\$178,891) (\$178,891) (\$178,891) (\$178,891) (\$178,891) (\$178,891) (\$178,891) (\$178,891) (\$178,891) (\$178,891)	\$60,388,213 (\$199,930) (\$199,930) (\$199,930) (\$199,930) (\$199,930) (\$199,930) (\$199,930) (\$199,930) (\$199,930) (\$199,930)	\$64,088,317 (\$223,397) (\$223,397) (\$223,397) (\$223,397) (\$223,397) (\$222,397) (\$222,397) (\$222,397)	\$67,961,985 (\$249,448) (\$249,448) (\$249,448) (\$249,448) (\$249,448) (\$249,448) (\$249,448) (\$249,448) (\$249,448)	\$72,017,949 (\$279,248) (\$279,248) (\$279,248) (\$279,248) (\$279,248) (\$279,248) (\$279,248) (\$279,248)	\$76,265,396 (\$309,970) (\$309,970) (\$309,970) (\$309,970) (\$309,970) (\$309,970)	\$80,713,992 (\$344,797) (\$344,797) (\$344,797) (\$344,797)	\$85,373,909 (\$382,926) (\$382,926) (\$382,926) (\$382,926)	\$90,255,851 (\$424,559) (\$424,559) (\$424,559)	\$95,371,081 (\$469,914) (\$469,914)	\$100.731.452 (\$519.219)	\$106,349,438		Year 27	Year 28	Year 29	Year 30
Y Y Y Y Y Y Y Y Y Y Y Y Y Y Y Y Y Y Y	ear 1 (56, 942,776) Far 2 (54, 942,776) Far 3 (54, 942,776) Far 4 (54, 942,776) Far 4 (54, 942,776) Far 4 (54, 942,776) Far 6 (54, 942,776) Far 7 (54, 942,776) Far 7 (54, 942,776) Far 10 (54, 942,776) Far 20 (5	$\begin{array}{r} \underline{\$} 1 \underline{\$} \underline{\$} \underline{\$} \underline{\$} \underline{\$} \underline{\$} \underline{\$} \underline{\$}$	\$24,644,064 (\$30,001) (\$33,001) (\$33,001) (\$33,001) (\$33,001) (\$33,001) (\$33,001) (\$33,001) (\$33,001) (\$33,001) (\$30,001) (\$30,001) (\$30,001) (\$30,001) (\$30,001) (\$30,001) (\$30,001) (\$30,001) (\$30,001)	\$26,759,480 (\$40,485) (\$40,485) (\$40,485) (\$40,485) (\$40,485) (\$40,485) (\$40,485) (\$40,485) (\$40,485) (\$40,485) (\$40,485) (\$40,485) (\$40,485) (\$40,485) (\$40,485) (\$40,485) (\$40,485) (\$40,485)	\$28,967,405 (\$42,961) (\$42,981) (\$42,981) (\$42,981) (\$42,981) (\$42,981) (\$42,981) (\$42,981) (\$42,981) (\$42,981) (\$42,981) (\$42,981) (\$42,981) (\$42,981) (\$42,981) (\$42,981) (\$42,981)	\$31,272,364 (\$46,661) (\$46,661) (\$46,661) (\$46,661) (\$46,661) (\$46,661) (\$46,661) (\$46,661) (\$46,661) (\$46,661) (\$46,661) (\$46,661) (\$46,661) (\$46,661) (\$46,661)	\$33,679,114 (\$51,607) (\$51,607) (\$51,607) (\$51,607) (\$51,607) (\$51,607) (\$51,607) (\$51,607) (\$51,607) (\$51,607) (\$51,607) (\$51,607) (\$51,607) (\$51,607) (\$51,607) (\$51,607) (\$51,607) (\$51,607) (\$51,607)	\$36,134,288 (\$75,015) (\$75,015) (\$75,015) (\$75,015) (\$75,015) (\$75,015) (\$75,015) (\$75,015) (\$75,015) (\$75,015) (\$75,015) (\$75,015) (\$75,015) (\$75,015) (\$75,015) (\$75,015) (\$75,015)	\$38,699,436 (\$95,926) (\$95,926) (\$95,926) (\$95,926) (\$95,926) (\$95,926) (\$95,926) (\$95,926) (\$95,926) (\$95,926) (\$95,926) (\$95,926) (\$95,926) (\$95,926) (\$95,926) (\$95,926) (\$95,926)	\$41,395,336 (\$105,228) (\$165,228) (\$165,228) (\$161,184) (\$105,228) (\$161,184) (\$105,228) (\$161,184) (\$105,228) (\$161,184) (\$105,228) (\$161,184) (\$105,228) (\$161,184) (\$105,228) (\$161,184) (\$105,228) (\$161,184) (\$105,228) (\$161,184) (\$105,228) (\$161,184) (\$105,228) (\$161,184) (\$105,228) (\$161,184) (\$105,228) (\$161,184) (\$105,228) (\$161,184) (\$105,228) (\$161,184) (\$105,228) (\$161,184) (\$105,228) (\$161,184)	\$47,163,502 (\$128,907) \$50,248,331 (\$128,907) (\$143,515) (\$128,907) (\$143,515)	\$53,475,913 (\$160,132) (\$160,132) (\$160,132) (\$160,132) (\$160,132) (\$160,132) (\$160,132) (\$160,132) (\$160,132) (\$160,132) (\$160,132) (\$160,132)	\$56,853,374 (\$178,891) (\$178,891) (\$178,891) (\$178,891) (\$178,891) (\$178,891) (\$178,891) (\$178,891) (\$178,891) (\$178,891) (\$178,891)	\$60,388,213 (\$199,930) (\$199,930) (\$199,930) (\$199,930) (\$199,930) (\$199,930) (\$199,930) (\$199,930) (\$199,930) (\$199,930)	\$64.088.317 (\$223.397) (\$223.397) (\$223.387) (\$223.387) (\$223.387) (\$223.397) (\$223.397) (\$222.397) (\$223.397)	\$67.961.985 (\$242.448) (\$249.448) (\$249.448) (\$249.448) (\$249.448) (\$249.448) (\$249.448) (\$249.448) (\$249.448)	\$72.017.949 (\$278.248) (\$278.248) (\$278.248) (\$278.248) (\$278.248) (\$278.248) (\$278.248) (\$278.248) (\$278.248)	\$76.265.396 (\$309.970) (\$309.970) (\$309.970) (\$309.970) (\$309.970) (\$309.970) (\$309.970)	\$80,713,992 (\$344,797) (\$344,797) (\$344,797) (\$344,797) (\$344,797)	\$85,373,909 (332,926) (332,926) (332,926) (332,926) (332,926)	\$90,255,851 (\$424,559) (\$424,559) (\$424,559)	\$95,371,081 (\$469,914) (\$469,914) (\$469,914)	\$100,731,452 (\$519,219) (\$519,219)	\$106,349,438 (\$572,717)	\$112,238,166		Year 28	Year 29	Year 30
Y Y Y Y Y Y Y Y Y Y Y Y Y Y Y Y Y Y Y	aar 1 <u>42</u> , <u>43</u> , <u>42</u> , <u>42</u> , <u>43</u> , <u>42</u> , <u>716</u> , bar 3 <u>(54, 942, 776)</u> bar 3 <u>(54, 942, 776)</u> bar 4 <u>(54, 942, 776)</u> bar 5 <u>(54, 942, 776)</u> bar 6 <u>(54, 942, 776)</u> bar 6 <u>(54, 942, 776)</u> bar 7 <u>(54, 942, 776)</u> ar 10 <u>(54, 942, 776)</u> ar 10 <u>(54, 942, 776)</u> ar 10 <u>(54, 942, 776)</u> ar 11 <u>(54, 942, 776)</u> ar 12 <u>(54, 942, 776)</u> ar 14 <u>(54, 942, 776)</u> ar 15 <u>(54, 942, 776)</u> ar 16 <u>(54, 942, 776)</u> ar 16 <u>(54, 942, 776)</u> ar 16 <u>(54, 942, 776)</u> ar 16 <u>(54, 942, 776)</u> ar 17 <u>(54, 942, 776)</u> ar 20 <u>(54, 942, 776)</u> ar 20 <u>(54, 942, 776)</u> ar 24 <u>(54, 942, 776)</u> ar 24 <u>(54, 942, 776)</u> ar 24 <u>(54, 942, 776)</u> ar 24 <u>(54, 942, 776)</u> ar 25 <u>(54, 942, 776)</u> ar 26 <u>(54, 942, 776)</u> ar 26 <u>(54, 942, 776)</u> ar 27 <u>(54, 942, 776)</u>	$\begin{array}{r} \underline{s}_{1} \underline{s}_{2} \underline{s}_{2} \underline{s}_{2} z_{2} z_{2} z_{3} z_{4} z_{3} \\ \underline{s}_{1} \underline{s}_{2} \underline{s}_{2} \underline{s}_{2} z_{3} z_{3} z_{4} z_{3} \\ \underline{s}_{1} \underline{s}_{2} \underline{s}_{2} \underline{s}_{2} z_{3} z_{4} z_{3} z_{3} z_{3} \\ \underline{s}_{1} \underline{s}_{2} \underline{s}_{2} \underline{s}_{2} z_{3} z_{3} z_{3} z_{4} z_{3} z_{3} \\ \underline{s}_{1} \underline{s}_{2} \underline{s}_{2} \underline{s}_{2} z_{3} z_{3} z_{3} z_{3} z_{3} \\ \underline{s}_{1} \underline{s}_{2} \underline{s}_{2} \underline{s}_{2} z_{3} z_{3} z_{3} z_{3} z_{3} z_{3} z_{3} \\ \underline{s}_{1} \underline{s}_{2} \underline{s}_{2} \underline{s}_{2} z_{3} \\ \underline{s}_{1} \underline{s}_{2} \underline{s}_{2} \underline{s}_{2} z_{3} z_{$	\$24,644,064 (530,001)	\$26,759,480 (\$40,465) (\$40,465) (\$40,465) (\$40,465) (\$40,465) (\$40,465) (\$40,465) (\$40,465) (\$40,465) (\$40,465) (\$40,465) (\$40,465) (\$40,465) (\$40,465) (\$40,465) (\$40,465)	\$28.967.405 (\$42.981) (\$42.961)	\$31,272,364 (\$46,661) (\$46,661) (\$46,661) (\$46,661) (\$46,661) (\$46,661) (\$46,661) (\$46,661) (\$46,661) (\$46,661) (\$46,661) (\$46,661) (\$46,661) (\$46,661)	\$33,670,114 (\$51,607) (\$51,607) (\$51,607) (\$51,607) (\$51,607) (\$51,607) (\$51,607) (\$51,607) (\$51,607) (\$51,607) (\$51,607) (\$51,607) (\$51,607) (\$51,607) (\$51,607) (\$51,607) (\$51,607)	\$36, 134, 288 (\$75,015) (\$75,015) (\$75,015) (\$75,015) (\$75,015) (\$75,015) (\$75,015) (\$75,015) (\$75,015) (\$75,015) (\$75,015) (\$75,015) (\$75,015) (\$75,015) (\$75,015) (\$75,015) (\$75,015) (\$75,015)	\$38,699,436 (\$95,926) (\$95,926) (\$95,926) (\$95,926) (\$95,926) (\$95,926) (\$95,926) (\$95,926) (\$95,926) (\$95,926) (\$95,926) (\$95,926) (\$95,926) (\$95,926) (\$95,926) (\$95,926) (\$95,926)	\$41,305,330 (\$105,228) \$44,214,650 (\$105,228) (\$116,184) (\$105,228) (\$116,184)	\$47,163,502 (\$128,907) \$50,248,331 (\$128,907) (\$143,515) (\$128,907) (\$143,515)	\$53,475,913 (\$160,132) (\$160,132) (\$160,132) (\$160,132) (\$160,132) (\$160,132) (\$160,132) (\$160,132) (\$160,132) (\$160,132) (\$160,132) (\$160,132) (\$160,132) (\$160,132)	\$56,853,374 (\$178,891) (\$178,891) (\$178,891) (\$178,891) (\$178,891) (\$178,891) (\$178,891) (\$178,891) (\$178,891) (\$178,891) (\$178,891) (\$178,891)	\$60,388,213 (\$199,930) (\$199,930) (\$199,930) (\$199,930) (\$199,930) (\$199,930) (\$199,930) (\$199,930) (\$199,930) (\$199,930) (\$199,930)	\$64,088,317 (\$223,397) (\$223,397) (\$223,397) (\$223,397) (\$222,397) (\$222,397) (\$222,397) (\$222,397) (\$222,397) (\$222,397)	\$67,961,985 (\$249,448) (\$249,448) (\$249,448) (\$249,448) (\$249,448) (\$249,448) (\$249,448) (\$249,448) (\$249,448) (\$249,448) (\$249,448)	\$72,017,949 (\$278,248) (\$278,248) (\$278,248) (\$278,248) (\$278,248) (\$278,248) (\$278,248) (\$278,248) (\$278,248) (\$278,248)	\$76,265,396 (\$309,970) (\$309,970) (\$309,970) (\$309,970) (\$309,970) (\$309,970) (\$309,970) (\$309,970)	\$80,713,992 (\$344,797) (\$344,797) (\$344,797) (\$344,797) (\$344,797) (\$344,797)	\$85,373,909 (332,926) (332,926) (332,926) (332,926) (332,926) (332,926)	\$90,255,851 (\$424,559) (\$424,559) (\$424,559) (\$424,559)	\$95,371,081 (\$469,914) (\$469,914) (\$469,914) (\$469,914)	\$100.731.452 (\$519.219) (\$519.219) (\$519.219)	\$106,349,438 (\$572,717) (\$572,717)	\$112,238,166 (\$530,662)	\$118.411.454		Year 29	Year 30
Y Y Y Y Y Y Y Y Y Y Y Y Y Y Y Y Y Y Y	ear 1 (\$4.942.776) Far 1 (\$4.942.776) Far 2 (\$4.942.776) Far 3 (\$4.942.776) Far 1 (\$4.942.776) Far 2	$\begin{array}{r} \underline{\$} 1 \underline{\$} \underline{\$} \underline{\$} \underline{\$} \underline{\$} \underline{\$} \underline{\$} \underline{\$}$	\$24,644,064 (\$30,001) (\$33,001) (\$33,001) (\$33,001) (\$33,001) (\$33,001) (\$33,001) (\$33,001) (\$33,001) (\$33,001) (\$33,001) (\$30,001) (\$30,001) (\$33,001) (\$33,001) (\$33,001) (\$33,001) (\$33,001) (\$33,001) (\$33,001) (\$33,001) (\$33,001)	\$26,759,480 (\$40,485) (\$40,485) (\$40,485) (\$40,485) (\$40,485) (\$40,485) (\$40,485) (\$40,485) (\$40,485) (\$40,485) (\$40,485) (\$40,485) (\$40,485) (\$40,485) (\$40,485) (\$40,485) (\$40,485) (\$40,485) (\$40,485)	\$28,967,405 (\$42,961) (\$42,961) (\$42,981) (\$42,981) (\$42,981) (\$42,981) (\$42,981) (\$42,981) (\$42,981) (\$42,981) (\$42,981) (\$42,981) (\$42,981) (\$42,981) (\$42,981)	\$31,272,364 (\$46,661) (\$46,661) (\$46,661) (\$46,661) (\$46,661) (\$46,661) (\$46,661) (\$46,661) (\$46,661) (\$46,661) (\$46,661) (\$46,661) (\$46,661) (\$46,661) (\$46,661) (\$46,661)	\$33,679,114 (\$51,607)	\$36,134,288 (\$75,015) (\$75,015) (\$75,015) (\$75,015) (\$75,015) (\$75,015) (\$75,015) (\$75,015) (\$75,015) (\$75,015) (\$75,015) (\$75,015) (\$75,015) (\$75,015) (\$75,015) (\$75,015) (\$75,015) (\$75,015) (\$75,015)	\$38,699,436 (\$55,526)	\$41,395,336 (\$105,228) \$44,214,650 (\$105,228) \$(\$16,184) (\$105,228) \$(\$16,184) (\$105,228) \$(\$116,184) (\$105,228) \$(\$116,184)	\$47,163,502 (\$128,907) \$50,248,331 (\$128,907) (\$143,515) (\$128,907) (\$143,515)	\$53,475,913 (\$160,132) (\$160,132) (\$160,132) (\$160,132) (\$160,132) (\$160,132) (\$160,132) (\$160,132) (\$160,132) (\$160,132) (\$160,132) (\$160,132) (\$160,132) (\$160,132)	\$56,853,374 (\$178,891) (\$178,891) (\$178,891) (\$178,891) (\$178,891) (\$178,891) (\$178,891) (\$178,891) (\$178,891) (\$178,891) (\$178,891) (\$178,891)	\$60,388,213 (\$199,930) (\$199,930) (\$199,930) (\$199,930) (\$199,930) (\$199,930) (\$199,930) (\$199,930) (\$199,930) (\$199,930) (\$199,930)	\$64.088.317 (\$223.397) (\$223.397) (\$223.397) (\$223.397) (\$223.397) (\$223.397) (\$223.397) (\$223.397) (\$223.397) (\$223.397) (\$223.397)	\$67.961.985 (\$249.443) (\$249.443) (\$249.443) (\$249.443) (\$249.443) (\$249.443) (\$249.4443) (\$249.4443) (\$249.4443) (\$249.4443) (\$249.4443)	\$72.017.949 (\$278.248) (\$278.248) (\$278.248) (\$278.248) (\$278.248) (\$278.248) (\$278.248) (\$278.248) (\$278.248) (\$278.248)	\$76.265.396 (\$309.970) (\$309.970) (\$309.970) (\$309.970) (\$309.970) (\$309.970) (\$309.970) (\$309.970) (\$309.970)	\$80,713,992 (\$344,787) (\$344,787) (\$344,787) (\$344,787) (\$344,787) (\$344,787) (\$344,787)	\$85.373.909 (\$382.926) (\$382.926) (\$382.926) (\$382.926) (\$382.926) (\$382.926) (\$382.926)	\$90,255,851 (\$424,559) (\$424,559) (\$424,559) (\$424,559) (\$424,559)	\$95,371,081 (\$469,914) (\$469,914) (\$469,914) (\$469,914) (\$469,914)	\$100,731,452 (\$519,219) (\$519,219) (\$519,219) (\$519,219)	\$106,349,438 (\$572,717) (\$572,717)	\$112,238,166 (\$530,662) (\$530,662)	\$118,411,454 (\$693,323)	\$124,883,841		Year 30
Y Y Y Y Y Y Y Y Y Y Y Y Y Y Y Y Y Y Y	aar 1 <u>42</u> <u>432</u> ,776 bar 3 <u>(54,042,776)</u> bar 3 <u>(54,042,776)</u> bar 3 <u>(54,042,776)</u> bar 3 <u>(54,042,776)</u> bar 5 <u>(54,042,776)</u> bar 6 <u>(54,042,776)</u> bar 7 <u>(54,042,776)</u> bar 8 <u>(54,042,776)</u> ar 10 <u>(54,042,776)</u> ar 10 <u>(54,042,776)</u> ar 11 <u>(54,042,776)</u> ar 12 <u>(54,042,776)</u> ar 14 <u>(54,042,776)</u> ar 14 <u>(54,042,776)</u> ar 15 <u>(54,042,776)</u> ar 16 <u>(54,042,776)</u> ar 16 <u>(54,042,776)</u> ar 16 <u>(54,042,776)</u> ar 16 <u>(54,042,776)</u> ar 16 <u>(54,042,776)</u> ar 10 <u>(54,042,776)</u> ar 21 <u>(54,042,776)</u> ar 21 <u>(54,042,776)</u> ar 21 <u>(54,042,776)</u> ar 21 <u>(54,042,776)</u> ar 24 <u>(54,042,776)</u> ar 24 <u>(54,042,776)</u> ar 25 <u>(54,042,776)</u> ar 25 <u>(54,042,776)</u> ar 25 <u>(54,042,776)</u> ar 25 <u>(54,042,776)</u> ar 25 <u>(54,042,776)</u> ar 26 <u>(54,042,776)</u> ar 28 <u>(54,042,776)</u>	$\begin{array}{r} \underline{\$} 1 \underline{\$} \underline{\$} \underline{\$} \underline{\$} \underline{\$} \underline{\$} \underline{\$} \underline{\$}$	\$24,644,064 (530,001)	\$26,759,480 (\$40,465) (\$40,465) (\$40,465) (\$40,465) (\$40,465) (\$40,465) (\$40,465) (\$40,465) (\$40,465) (\$40,465) (\$40,465) (\$40,465) (\$40,465) (\$40,465) (\$40,465) (\$40,465)	\$28.967.405 (\$42.981) (\$42.961)	\$31,272,364 (\$46,661) (\$46,661) (\$46,661) (\$46,661) (\$46,661) (\$46,661) (\$46,661) (\$46,661) (\$46,661) (\$46,661) (\$46,661) (\$46,661) (\$46,661) (\$46,661)	\$33,670,114 (\$51,607) (\$51,607) (\$51,607) (\$51,607) (\$51,607) (\$51,607) (\$51,607) (\$51,607) (\$51,607) (\$51,607) (\$51,607) (\$51,607) (\$51,607) (\$51,607) (\$51,607) (\$51,607) (\$51,607)	\$36, 134, 288 (\$75,015) (\$75,015) (\$75,015) (\$75,015) (\$75,015) (\$75,015) (\$75,015) (\$75,015) (\$75,015) (\$75,015) (\$75,015) (\$75,015) (\$75,015) (\$75,015) (\$75,015) (\$75,015) (\$75,015) (\$75,015)	\$38,699,436 (\$95,926) (\$95,926) (\$95,926) (\$95,926) (\$95,926) (\$95,926) (\$95,926) (\$95,926) (\$95,926) (\$95,926) (\$95,926) (\$95,926) (\$95,926) (\$95,926) (\$95,926) (\$95,926) (\$95,926) (\$95,926)	\$41,305,330 (\$105,228) \$44,214,650 (\$105,228) (\$116,184) (\$105,228) (\$116,184)	\$47,163,502 (\$128,907) \$50,248,331 (\$128,907) (\$143,515) (\$128,907) (\$143,515)	\$53,475,913 (\$160,132) (\$160,132) (\$160,132) (\$160,132) (\$160,132) (\$160,132) (\$160,132) (\$160,132) (\$160,132) (\$160,132) (\$160,132) (\$160,132) (\$160,132) (\$160,132)	\$56,853,374 (\$178,891) (\$178,891) (\$178,891) (\$178,891) (\$178,891) (\$178,891) (\$178,891) (\$178,891) (\$178,891) (\$178,891) (\$178,891) (\$178,891)	\$60,388,213 (\$199,930) (\$199,930) (\$199,930) (\$199,930) (\$199,930) (\$199,930) (\$199,930) (\$199,930) (\$199,930) (\$199,930) (\$199,930)	\$64,088,317 (\$223,397) (\$223,397) (\$223,397) (\$223,397) (\$222,397) (\$222,397) (\$222,397) (\$222,397) (\$222,397) (\$222,397)	\$67,961,985 (\$249,448) (\$249,448) (\$249,448) (\$249,448) (\$249,448) (\$249,448) (\$249,448) (\$249,448) (\$249,448) (\$249,448) (\$249,448)	\$72,017,949 (\$278,248) (\$278,248) (\$278,248) (\$278,248) (\$278,248) (\$278,248) (\$278,248) (\$278,248) (\$278,248) (\$278,248)	\$76,265,396 (\$309,970) (\$309,970) (\$309,970) (\$309,970) (\$309,970) (\$309,970) (\$309,970) (\$309,970)	\$80,713,992 (\$344,797) (\$344,797) (\$344,797) (\$344,797) (\$344,797) (\$344,797)	\$85,373,909 (332,926) (332,926) (332,926) (332,926) (332,926) (332,926)	\$90,255,851 (\$424,559) (\$424,559) (\$424,559) (\$424,559)	\$95,371,081 (\$469,914) (\$469,914) (\$469,914) (\$469,914)	\$100.731.452 (\$519.219) (\$519.219) (\$519.219)	\$106,349,438 (\$572,717) (\$572,717)	\$112,238,166 (\$530,662)	\$118.411.454		Year 29 \$131,670,632 (\$833,946)	

Pro Forma - 2800 Ridge Avenue

Development Accounts		
<u>ltem</u>	Year -1	Year 0
Land Purchase Price	\$2,041,830	
Soft Costs (incl. Synd.)	\$1,803,064	
Construction Loan Fees	\$248,457	
Construction Loan Cash In	\$849,425	
Construction Interest Costs		\$332,168
Permanent Loan Points		\$319,808
Additional Cash-in (Cash-out) at Tak	e-out	(\$2,195,433)
►Cash In This Year	\$4,942,776	(\$1,543,457)
► Total Cash In	\$4,942,776	\$3,399,318
Discounted Cash-flow S	Summary	/
for Sale in Year	100	
	IRR	NPV
Year 1		<u>NPV</u> \$12,921,372
	130.1%	
Year 1	130.1% 81.8%	\$12,921,372
Year 1 Year 2	130.1% 81.8% 60.8%	\$12,921,372 \$12,457,328
Year 1 Year 2 Year 3	130.1% 81.8% 60.8% 49.0%	\$12,921,372 \$12,457,328 \$11,954,784
Year 1 Year 2 Year 3 Year 4	130.1% 81.8% 60.8% 49.0% 41.5%	\$12,921,372 \$12,457,328 \$11,954,784 \$11,423,554

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Year 4	49.0%	\$11,423,554
Year 5	41.5%	\$10,872,018
Year 6	36.2%	\$10,307,311
Year 7	32.3%	\$9,714,425
Year 8	29.3%	\$9,117,170
Year 9	26.9%	\$8,526,272
Year 10	24.9%	\$7,944,651
Year 11	23.2%	\$7,374,687
Year 12	21.8%	\$6,818,292
Year 13	20.6%	\$6,276,971
Year 14	19.6%	\$5,751,883
Year 15	18.7%	\$5,243,887
Year 16	17.9%	\$4,753,585
Year 17	17.1%	\$4,281,363
Year 18	16.5%	\$3,827,421
Year 19	15.9%	\$3,391,804
Year 20	15.4%	\$2,974,425
Year 21	14.9%	\$2,575,089
Year 22	14.4%	\$2,193,513
Year 23	14.0%	\$1,829,339
Year 24	13.6%	\$1,482,152
Year 25	13.2%	\$1,151,491
Year 26	12.9%	\$836,858
Year 27	12.6%	\$537,731
Year 28	12.3%	\$253,568
Year 29	12.0%	(\$16,185)
 Year 30	11.7%	(\$286,635)

Sources and Uses Sun	nmary	
<u>Sources</u>		
Permanent Mortgage	\$9,840,258	74%
Investor's Equity	\$3,399,318	<u>26%</u>
Total Sources	#########	100%
<u>Uses</u>		
Land Acquisition	\$2,041,830	15%
Soft Costs	\$1,803,064	14%
Hard Costs	\$8,494,250	64%
Construction Loan Fees	\$248,457	2%
Construction Interest	\$332,168	3%
Permanent Loan Fees and Points	\$319,808	2%
Total Uses	#########	100%



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06

END NOTES

01 CONTEXT AND CONDITIONS

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- 4. Charles S. Keyser, Fairmount Park: Sketches of its Scenery, Waters, and History (Philadelphia: Claxton, Remsen, and Haffelfinger, c1871), 69.
- 5. Theodore Hershberg, Harold E. Cox, Dale B. Light, Jr., and Richard R. Greenfield, "The 'Journey-to-Work': An Empirical Investigation of Work, Residence and Transportation, Philadelphia, 1850 and 1880," in Hershberg, Philadelphia: Work Space, Family and Group Experience in the Nineteenth Century, 142-143, 146. In 1850, a round-trip streetcar fare amounted to 13% of an unskilled worker's average daily wage, or 8.7% of that of a skilled worker. By 1880, these percentages had decreased to 9.2 and 6 percent, respectively. An analysis of 1880 census data found that members of working class minority ethnic groups were more likely to live near their jobs (Greenburg, in Hershberg, Philadelphia: Work Space, Family and Group Experience in the Nineteenth Century, 208-211).
- 6. Elise Vider, "Philadelphia Register of Historic Places Nomination: East Park" (unpublished manuscript, April 1992),7.
- 7. George W. & Walter S. Bromley, Civil Engineers, Atlas of the City of Philadelphia (Philadelphia: G. W. Bromley and Co., 1895, 1901, and 1910).
- 8. Meredith Savery, "Instability and Uniformity: Residential Patterns in Two Philadelphia Neighborhoods, 1880-1970," in The Divided Metropolis: Social and Spatial Dimensions of Philadelphia, 1800-1975, ed. William W. Cutler, III and Howard Gillette, Jr. (Westport, CT: Greenwood, 1980), 201. It is not clear whether the 1880 and 1900 census data draws from the same physical area, as the neighborhood's boundary may have been expanded between these years, and the author does not give precise boundaries for the 1900 data.
- 9. Sam Bass Warner, Jr., The Private City: Philadelphia in Three Periods of Growth. (Philadelphia: University of Pennsylvania Press, 1968), 198.
- 10. Savery, "Instability and Uniformity," 214.
- 11. Savery, "Instability and Uniformity," 215. See pages 209-215 for more information about residential mobility in the neighborhood from 1900-1940.

- 12. Elise Vider, "East Park," 5.
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- (Philadelphia: Temple University Press, 1993), 79.
- 15. Adams, et al., Philadelphia: Neighborhoods, Division, and Conflict, 79-81.
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- 17. Adams, et al., Philadelphia: Neighborhoods, Division, and Conflict, 105.
- al., Philadelphia: Neighborhoods, Division, and Conflict, 107.
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- Neighborhoods, Division, and Conflict, 109.

02 SIGNIFICANCE

- 1970". In The Divided Metropolis, (Vancouver, 1980),196.
- hiddencityphila.org/2015/01/the-last-synagogues-of-strawberry-mansion/

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16. James Wolfinger, Philadelphia Divided: Race and Politics in the City of Brotherly Love (Chapel Hill:

18. Community Renewal Program, The Redevelopment Authority Program, 1945-1962, City of Philadelphia, Community Renewal Program Technical Report No. 6 (Philadelphia, 1963), Appendix A, cited in Adams, et

20. Matthew J. Countryman, Up South: Civil Rights and Black Power in Philadelphia (Philadelphia: University of

21. Strawberry Mansion community meetings, October 8 and November 15, 2017. Adams, et al., Philadelphia:

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INTERVIEWS CONDUCTED

The following is a list of all who were interviewed in connection with this project:

Rebecca Chan, LISC

Julia Choseed, Brickhouse Builders, LLC

Denise Clark, Strawberry Mansion CDC

Preston Hull, Building Conservation Associates

David Fecteau, Philadelphia City Planning Commission

David Ferris, LISC

Tonnetta Graham, Strawberry Mansion CDC

Lenora Jackson-Evans, Strawberry Mansion CDC

Larry Kingfish, Community Member

Amber Knee, Pennsylvania Horticultural Society



Molly Lester, PennPraxis

Charlotte Lewis, Communit Member

Kevin Mathisen, Catalyst Builders

Adela Park, Fairmount Park Conservancy

Jill Roberts, Healthy Rowhouse Project

Judith Robinson, Strawberry Mansion Civic Association

Ellen Ryan, Fairmount Park Conservancy

Beth Uzwiak, Cultural Asset Mapping Residency

C. M. Williams, Community Member

Tyrone Williams, Strawberry Mansion NAC/CDC