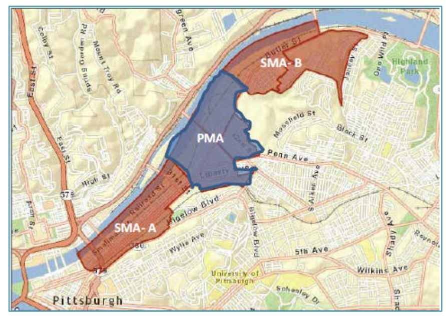
ECONOMIC MARKET ANALYSIS

Introduction

The Market Analysis for the Strip District is an important element for the Plan. The development potential will help inform the land use and complementary transportation Improvements. Fortunately, there were recent mallet studies that formed the basis of this more-narrowly focused assessment. In fact, it relies on those market studies and allows a deeper dive into the opinions and attitudes of owners and businesses in the Strip. The result is a potential market development program achievable for the Strip District.

Review Previous Studies

Two previous studies were reviewed to establish baseline market conditions, understand the competitive market environment, utilize their market demand analyses, and understand the larger market development forecasts for office and residential uses in the Strip District. No additional office and residential market analysis were completed outside of the information reviewed within these documents.



Market areas defined by Partners for Economic Solutions (PES) for the Strip District

The documents were: “The Allegheny Riverfront Property – Produce Terminal and Buncher Parcels: Market and Financial Analysis,” prepared for The Urban Redevelopment Authority of Pittsburgh by AECOM dated October 18, 2010, and the “Allegheny Riverfront Green Boulevard Market Analysis,” prepared for The Urban Redevelopment Authority of Pittsburgh by Partners for Economic Solutions (PES), dated January 10, 2012. A summary of the key issues and findings is presented below.

Residential – Market demand for housing in the Downtown area is much deeper than the current supply, especially for projects that include smaller units and those more moderately priced. The rental market is particularly strong. This was based upon a relatively low vacancy rate of less than 4% combined with fast rental rate increases (almost 10% on an aggregate price level and 6% on a per square foot basis) and active residential development for the CBD/fringe area submarket. Some of the challenges for increased residential in the area include the higher income tax rate for residents of the City of Pittsburgh; perceived lack of parking; inability to finance for-sale units; conflict between industrial and residential uses; and older infrastructure resulting in cost and time delays as higher density product requires additional services. The PES residential demand is shown in Table 1 (Source: Partners for Economic Solutions, 2011).

Table 1: Study Area Residential Demand

	Near-Term	Mid-Term	
	2012 to 2013	2017 to 2021	Total
For Sale			
Townhouses (renovated)	207	202	**409**
Townhouses (new)	175	175	**350**
Condominiums	100	150	**250**
Rental			
Townhouses (renovated)	23	23	**46**
Apartments	405	380	**785**
Total New Residential	**910**	**930**	**1,840**

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Retail – The retail in the Strip District is dominated by local and regional tenants. In fact, the few national tenants previously located in the area (such as Subway, Starbucks, and Panera Bread) are no longer operating. This reflects the strength and desire for the one-of-a-kind establishments that are intrinsic to the Strip District and demanded by Pittsburghers. The issues facing retailers include traffic, limited hours of operation (where many wholesalers are closed by 3:00 to 4:00 pm), and lack of resident population. However, the cluster of commercial activities, including retailers, wholesalers, and office workers within the study area and potential expansion of the residential base will support a series of new and existing niche service providers. The most important thing for the Strip District is to maintain its competitive advantage by encouraging and retaining independent/regional operators.


Penn Liberty Plaza I, property owned by Buncher on Penn Avenue between 12th and 14th Streets

Some of the challenges identified are that the combination of wholesalers and retailers can create conflict in terms of confusion for the buyers as well as the addition of considerable truck traffic generated by wholesalers. In addition, the limited residential population is unlikely to generate demand for substantial new retail space. The area currently has a limited daytime weekday market. PES did not complete a retail demand for the Strip District.

Industrial and Office – The industrial uses are the uses which launched the Strip District as a significant place. Today there is predominantly a mix of industrial users focusing on distribution and warehousing. The Strip District represents a fringe office market on the outskirts of Downtown, presenting an opportunity for new traditional office development that could eventually house finance, institutional, and emerging technology sector anchors. The general office development will focus on locations in the Strip District closer to the Downtown office market with higher visibility. The PES demand for office and industrial is provided in Table 2.

Table 2: Supportable Industrial and Office Space by 2025

Types of Space	Strip District	Lawrenceville	Total
Based on Job Growth			
Traditional Industrial	74,700	75,800	15,000
Flex Industrial	128,900	130,800	259,700
R&D Office	26,400	160,500	186,900
General Office	200,900	11,200	212,100
Neighborhood Office	13,900	9,400	23,300
Total	**444,800**	**387,700**	**832,500**
Total Projected Demand			
Traditional Industrial	74,700	75,800	15,000
Flex Office/ R&D/Industrial	171,000	408,000	579,000
General Office	331,000	11,000	342,000
Neighborhood Office	17,000	11,000	28,000
Total	**593,700**	**505,800**	**1,099,500**
Source: Southwestern Pennsylvania Commission, Cycle 9: Partners for Economic Solutions, 2011.			

Overall, the tone of both reports was positive for the opportunity in the Strip District for a variety of land uses.

Retail Market Update

A retail demand analysis was completed to address gaps in both the original PES and AECOM studies. The AECOM study completed in 2010 did include a robust retail analysis for the Produce Terminal and Buncher Parcels but did not, however, forecast the retail demand for the entire Strip District. Their retail analysis is provided as RCLCO Appendix 2. A summary of the key issues is provided below.

2010 AECOM Retail Market Study

AECOM evaluated vacancy, net absorption, and rental rates in both the Greater Downtown area and the Central Business District.

In 2010, the retail vacancy rates were 3.1 percent in the Greater Downtown area and 8.2 percent in the Central Business District, both decreasing for several quarters prior to 2010. The retail rental rates for both areas also decreased during the same time period, landing at $13.84 per square foot in Greater Downtown and $27.03 in the Central Business District. Although the Greater Downtown area only added 3,638 square feet of new retail from 2008 to 2010, the Central Business District had positive absorption in early 2010 of 47,826 square feet after three quarters of negative absorption of 39,861 square feet, resulting in a net absorption gain of 7,965 square feet.

AECOM determined that local and regional tenants would be most successful in the Strip District as these tenants would differentiate the Strip District from nearby shopping districts with largely national tenants. New tenants in this category have included local popcorn, donut and coffee merchants. Furthermore it was noted the Strip District's early closing hours, limited residential daytime weekday traffic, limited evening traffic and constrained parking do not provide an environment for national chains. Despite a strong daytime employee market, Starbucks, Panera Bread and Subway were not successful while regional retailers have been profitable and have even expanded into the Downtown area. The study further stressed the importance of maintaining and capitalizing upon the unique characteristics of the Strip District, as well as linkages to the Downtown area and surrounding neighborhoods, in order to draw visitors to the area and counter the competitive retail offerings in the surrounding areas.

The study found four main customer bases for the Strip District including visitors from the Downtown Convention Center, daytime employees, weekend destination shoppers, along with a small demand from nearby residents. Due to this array of customer bases, restaurant and specialty food offerings and service-oriented retail would likely be successful, particularly if the unique characteristics of the Strip District outlined above are maintained and marketed.

Although newly constructed housing in the Downtown area (1,000+ additional residents) would add to the 480 residents in the Strip District and the 16,000 residents in a one mile radius, AECOM determined there would not be sufficient demand to support more than 10,000 square feet of new, local service-oriented retail as the residents in the Downtown area are significantly less affluent than Allegheny County as a whole. However, these Downtown residents are essential to creating an active mixed-use product with character. Furthermore, the 10,000 square feet of demand is independent of the public market and restaurant demand as outlined as a regional attraction by the AECOM market study.

At the time of the AECOM report, retail development plans included a 10,000 square foot public market with vendor areas and booths and a 45,000 square foot retail center at the corner of 21st and Smallman Streets with proposed tenants providing seafood and fine wine. A 22,000 square foot affordable natural foods store also opened in the Strip District prior to the report. Also, the Pittsburgh Public Market, which is currently operating in the Produce Terminal, has met the need for a public market and is moving to a new, expanded location on Penn Avenue in late summer 2013.

Overall, the report suggested providing 30,000 to 35,000+ square feet of public market retail, 10,000 square feet of service-oriented retail, 45,000 square feet of small/mid-scale office space, and 30,000 to 40,000 square feet of restaurant and dining space.

2012 Retail Market Update

To provide a retail market update, the retail market in the Pittsburgh area was studied, with the aforementioned reports serving as background material. The following observations were made about retail trends in the United States as a whole in addition to the Pittsburgh metropolitan statistical area (MSA), with a primary emphasis on the Downtown area.

U.S. Retail Market

The U.S. retail market is experiencing major divisions in performance by different product types and markets, allowing certain assets and markets to lead a path to recovery while others lag behind. In terms of product type, luxury retail (including high-end department stores and grocers) and low-end discount/outlet retailers are performing well, while mid-market retail, power centers, and traditional grocery are all struggling to rebound from post-recession lows in occupancy, absorption, and rental rates. As a whole, the retail sector is at the very early stages of recovery, with 2012 projected to mark the first year of positive absorption and rental growth since the start of the recession, while vacancy rates continue to inch down.

U.S. consumer spending has been increasing at a steady but slow pace since 2009, although 2012 retail spending has outpaced 2011 YTD spending by more than five percent, particularly in the areas of motor vehicle dealers, furnishing & home furnishing stores, and food services & drinking places.

Absorption is projected to increase for the fourth straight year in 2012, and has now been positive for the past 18 months. Given the historic lows in completions, or development of new retail space, over the past few years (2012 deliveries are forecasted to be down from 2011, reaching a historic low), absorption does not need to be very strong to continue the downtrend in vacancy.

REIS, a real estate performance information and analytics firm, has developed pipeline forecasts which indicate that completions of neighborhood/community retail are expected to increase nearly five-fold from 2012 to 2016, back up to 2008 levels and above the historical average. Effective rents are just above cyclical lows in 2010 and 2011, yet still on par with 2009 and just six percent off 2007 highs. Most industry observers predict this will be the first year of rent growth in the past five years.

General Pittsburgh and Downtown Market

Pittsburgh's MSA retail market as a whole continues to expand as retail vacancy is at 4.5 percent for the third quarter of 2012, a significant improvement from approximately 5.5 percent at this time in fall, 2011. Rental rates for the MSA have remained stable at $11.77 per square foot. However, both leasing activity and absorption have slowed down since 2011 as leasing is down 42.6 percent year-over-year and absorption is down 33 percent.

The 2011 year-end retail vacancy rate for the Greater Downtown area and the Central Business District hovered around 7.5 percent, a slight improvement from the 2010 year-end rate. Consistent with recent historical trends, the asking rent in the Greater Downtown area and Central Business District fell from $27.00 to $25.00, reflecting a situation where reduced rents have triggered increases in occupancy to the point where there is now very little remaining inventory, likely putting upward pressure on retail rents in coming years.

The above scenarios of increased occupancy, generally static or even slightly reduced rents, and reduced leasing activity and absorption are largely due to the fact that there has not been any significant completion of retail projects in the market since 2008. Given that well-located existing retail spaces are becoming increasingly scarce, and rent prices will likely increase by two to four percent per year over the next several years, these improving market fundamentals should trigger significant additions to the retail pipeline in coming years, and REIS and brokerage data suggests several hundred thousand square feet of new product could be added in the Pittsburgh metro area, of which Downtown and Downtown-adjacent areas can capture a fair-share percentage.

Recent development interest in Pittsburgh has primarily focused on the Downtown area, as the core of Pittsburgh undergoes renewal efforts from retailers and residents. Many new restaurants within the past year have opened in historic Market Square in the heart of the Downtown Pittsburgh CBD, and several new development projects, including PNC's new $400 million headquarters, were announced. These include Millcraft Industries' $76.6 million mixed-use project, The Gardens, which is expected to be completed in 2013, as well as Oxford Development's 350 Fifth Street mixed-use redevelopment project. There is also institutional development such as the $244 million Academic Village at Point Park University included the $45 million Playhouse.

Although the 2010 AECOM report did not find that Downtown residents would provide enough demand to vastly expand retail in the Strip District, there has been strong growth in residential development in the Greater Downtown area and Central Business District. Currently, the Greater Downtown area has 2,262 residential units, 200 units under construction, 750 planned units, and 1,000 units proposed over the next 24 months. Due to residential development, interest has escalated in opening a full-service grocery store in the Downtown area, which could include the Strip District, further adding to the overall amenity mix.

Within the Strip District, Buncher Company continues to work with the City on permitting and financing plans for a large project including offices, retail, and residences. The project will cover 55 acres of riverfront property that is currently a parking lot.

With renewed interest in revitalizing Downtown Pittsburgh with projects such as Market Square, development in the Strip District, and a significant increase in Downtown living, the retail opportunities are relatively strong within the Downtown area, particularly as retail occupancy is projected to remain high with increasing rental rates.

Retail Development Projections

The amount of retail development square footage that could be expected from new households and office employment within the Strip District over the next twenty years was estimated.

It is anticipated that up to 300,000 square feet of additional retail could be supported in the coming decades based on retail demand from four distinct and primary sources:

- Existing households: By analyzing existing retail expenditures per household in the Strip District and then applying subject site capture percentages and sales per square foot thresholds, it was estimated that the Strip District was presently under-retailed by approximately 8,000 square feet.

- New Households: Using estimated retail expenditures from new households that are expected to migrate to the Strip District over the next 20 years, this yields an additional retail demand of approximately 40,000 square feet. New residents to the Strip District are assumed to be more affluent than Pittsburgh overall and this is reflected in the new retail demand.

- New Employees: Using observed employee spending trends from the International Council of Shopping Centers, new employees are expected to contribute additional demand for retail in excess of 33,000 square feet.

- Potential Regional Demand: The analysis also assumed a modest additional capture of overall regional retail in select categories where case studies have suggested that these types of retailers tend to locate in similar locations as the Strip District. Examples include specialty food and beverage services and a variety of merchandising, general goods, furniture and clothing stores. This analysis, however, assumes that this additional capture of regional demand will only occur if a vibrant place and destination is created. Increased levels of tourism to the Strip District are also assumed to bolster additional retail demand.

Retail Demand Summary
The anticipated retail breakdown is outlined in Table 3.

Table 3: Total Retail Demand Summary

Source of Demand	Total Demand Potential[2]					
	2012	2016	2021	2026	2031	Total
Existing Households	7,981					7,981
New Households		10,535	10,767	10,998	8,238	40,538
New Employees		9,232	9,232	7,903	6,725	33,091
Potential Regional Demand1		54,028	54,028	54,028	41,339	203,423
Total Potential	7,981	73,795	74,027	72,929	56,302	285,033
Assumed Growth Rate after 2026: **1.00%**						
[1]Assumes a capture of regional market since the Strip District is vibrant and will grow as a place.						
[2]This analysis is based on PES Market Study projection data to 2026 and then additional 5-year estimate based on assumed growth rates thereafter.						

Business and Property Owner Surveys
A series of interviews were conducted with business and property owners in the Strip District to better understand their needs as well as their expansion and contraction plans. Key issues include the following:

- **Customers** vary by business owner. Some businesses target professionals as they travel Downtown and those that work in the Strip District while the wholesalers rely on patrons as destination locations.
- **Parking** is an issue (or lack of parking). A shuttle was suggested for busy and peak weekends. Others suggested that there is a need for a centralized public parking structure, as it is inefficient or impractical for each property owner to pursue parking individually. Furthermore, there is a conflict between the increased numbers of tech firms drawn to the area due to its unique physical characteristics and their intense parking requirements. These intense parking requirements are due to the increased employment density of many tech firms given their typical efficient use of space.
- **Business Hours** are challenging because of the lack of weekday and evening traffic. A possible solution includes creating a grant/seed fund to provide money for retailers to stay open later for a significant period of time (e.g., six months) in order to establish new consumer habits for the area and brand the area as a destination for evening retail.

- **Open Space** needs to be addressed as several respondents indicated that there is simply a lack of a signature open space that would act as a destination while, also providing a magnet for increased residential and office development. Open space can also increase overall visitation to the Strip District as well as encourage longer stays for existing visitors.
- **Riverfront Access** is seen as a key driver of the continued development of the Strip District for several reasons. First, it will help shed the negative image of the area as one of post-industrial blight. Second, it will provide a significant recreational amenity for residents, workers, and visitors. And finally, it will expand upon the initial segments of bike paths that have already been implemented to provide additional bike and pedestrian linkages to Downtown and other Pittsburgh neighborhoods.
- **Linkages** are important as the Strip District occupies a strategic location between the Downtown cultural district and burgeoning neighborhoods in Pittsburgh's East End, such as Lawrenceville. Key linkages *through* the neighborhood and not *around* the neighborhood are desired so that the Strip District can emerge as the next logical progression of development in Pittsburgh.
- **Safety** is also a key concern from several perspectives. Liberty Avenue, on the edge of the Strip District, is perceived as unsafe due to the high speed of automobile traffic. It was noted that truck routes on the internal streets of the neighborhood need to be better marked to avoid issues associated with the increasing size of trucks. Sidewalks were also described as an area of needed improvement as pedestrian activity is limited when there are hazardous roadway conditions to navigate. Finally, it was suggested by several respondents that there could be targeted street closures on weekend market days to respond to the peak pedestrian crush loads that occur at select time periods.
- **Neighborhood Services** were also noted by many respondents as necessary to create a complete neighborhood. Examples include items such as a drugstore, bank, dry cleaners, food marts, gas stations, etc. Entertainment options including a movie theater and additional bars and restaurants were cited as other items of need.
- **Catalytic Development Projects** are desired to provide significant momentum in the Strip District. Most respondents were focused on the largest vacant parcels closes to the Downtown, as well as those major historic properties that provided ample adaptive reuse opportunities.
- **Public Transportation** was seen as the element that ties all of the above together through both access and placemaking. A clear preference was stated for rail transportation that provided not only access to other destinations within the Strip District, but also to the Downtown cultural district as well as other East End neighborhoods.

Case Studies

Three overview case studies of comparable areas in the United States were conducted to further understand the opportunity in the Strip District. These case studies, in Raleigh, Seattle, and New York City, are summarized briefly below:

Raleigh Warehouse District was an active warehouse district and industrial area until the 1950's and has recently become a hub for both art and entertainment. The roughly five-block area features many individual building owners, a diverse mix of land uses, and a clientele that is a mixture of locals and tourists. The area's successful adaptive reuse was a culmination of many important factors including, but not limited to:

- *Centralized parking garages* and a *circulator bus system* to counter the limited street parking;
- *Mix of retail and nightlife* uses with different operating hours to minimize conflict while promoting longer daily activity;

- *Focus on luring creative office companies* to the area to foster increased activity;
- *Branding and awareness* from a new website that promotes the district;
- *Establishment of a Tax Increment Financing (TIF)* district to promote infrastructure investment in the area; and
- *Promotion of sponsored events* to promote harmony between the diverse users of the district.

Based on the above tactics, market interest for mixed-use development has increased and expectations of new development include a significant number of new dwelling units (~200 per year), as well as a total of over 200,000 square feet of new commercial development, all over a 20-year period.

Pike Place Market in Seattle, Washington is one of the larger urban markets in the country that, although now primarily catering to tourists, has a long and continuous history of selling food and produce directly to the public. The market does feature extensive and relatively inexpensive parking but is also walkable from the Central Business District which contains a significant amount of hotels, critical to driving visitation. The market was originally started in the early 1900's but in 2012 has completed substantial renovations, recognizing the need to provide current infrastructure that will allow the market to remain competitive. Success factors include:

- *Wide tenant mix* of farmers, artisans, and retailers that typically operate during daily hours, while bars and restaurants are open much later into the evening to provide a balance;
- *Effective design* to cater to different needs within the building to counter potentially challenging relationships between craftsmen and farmers;
- *Mission-driven ownership structure* - The success of the market is in no small part attributable to a form of ownership known as an authority, a not-for-profit legal corporation which provides a level of government independence as well as a consistency of purpose and advocacy.
- *Small Business Incubator* - The Pike Place Market Preservation and Development Authority (PDA) understands its role as a business incubator and certain major corporations have been launched from the market including Starbucks and Sur La Table.
- *Accessible location* - A waterfront location with a diversity of users, vendors, and visitors are also instrumental in the overall success as well.

Chelsea Market in New York City is a collection of 18 buildings within a condensed format of one superblock in Manhattan. The 1+ million square feet, 11-story market features significant upper floor office and warehousing space, as well as ground-floor retail offerings. A significant component of these ground-floor retail spaces also are comprised of production and wholesaling space. The building has been highly successful in recent years due to:

- *Provision of subsidized food retail space* as an amenity to lure higher paying tech and media tenants as a major component of the adaptive reuse plan that focused on the upper floor office space.
- *Complementary customer base* - these office workers provide a substantial customer base for the retail tenants in a virtuous cycle.
- *Creation of the High Line* - The High Line, an elevated rail trestle converted to a linear park, passes directly through the upper floors of the building and has brought an additional 3.7 million annual visitors to the area.
- *Multi-modal accessibility* for the combination of office workers, local residents, and High Line tourists has resulted in a visitation count in excess of 15,000 people per day.
- *Marketing and Promotion* – The market has been featured in high-profile television shows focusing on the food industry.

The combination of the above elements creates significant space demand, evidenced by the current expansion plans to add almost 300,000 square feet to the existing historic structure.

Potential Impact of Streetcar

The information below about how streetcars impact the market was prepared for a Washington, D.C. context but contains important information to be considered for the Strip District.

In 2009, the D.C. Surface Transit (DCST) commissioned the Brookings Institution to conduct a preliminary assessment of the funding alternatives, beyond Federal and DC government financing, for a streetcar system. The Brookings Institution completed a study “Value Capture and Tax-Increment Financing Options for Streetcar Construction.” Case studies were completed as a portion of this study, and have applicability to the Strip District. There were two findings of interest from these case studies that are relevant to understand the impact of the streetcar in the Strip District.

First, underutilized properties adjacent to Downtown that are just far enough out to not be walkable to Downtown (like those in the Strip District) should be seen as possible places for developers who want to connect districts and create new ones. The *streetcar offers a powerful connection between vacant and underutilized districts and Downtown*. A new streetcar in the Strip District should have the benefit of bringing the Downtown daytime population into the District.

Second, single-family residential properties grew at a slower rate than industrial, commercial, and multi-family space in the case studies. It is likely that different property types are affected at different times in the process. Commercial properties tend to enjoy the benefits during planning and construction, while residential properties tend to see the benefit after the streetcar line has been constructed.

The streetcar should accelerate development in the Strip District. Eventually it should exert enough upward demand that it would result in rent and price increases within the Strip District. Its initial impact should be felt on existing businesses that feel the enhanced link to the Downtown core. This latter point is significant, since a specific goal of the streetcar is a more direct connection with Downtown, including the Convention Center, Cultural District and Downtown residential areas. In essence, the streetcar removes the perceived “distance factor” between the two dynamic places.

The Strip is changing now, and over the next few years it will transition further into a fully developed neighborhood. Its unique setting on the Allegheny, historic industrial role, one-of-a-kind market and emerging loft conversions and residential properties reinforces the need for the streetcar. Serving as a redevelopment catalyst, the streetcar also becomes the focus of a new way to travel within – as well as beyond – the Strip. Taken together, the population, development and employment opportunities will make the Strip “the place” within the region.

An important dimension of the streetcar connecting into Downtown is the linkage with the T at the Wood Street station. Now, the Strip is connected into the larger regional context, including the Northshore Connector and the sports and entertainment venues on the Northshore. So the Strip begins to see benefits beyond the its defined boundaries.

Development Programs

The development program trajectory took into account the above analyses, as well as incorporation of the PES market study and input from the planning process to identify “soft sites” that may be suitable for development/redevelopment. These soft sites, including those that are currently vacant, expected to be vacant in the near-term, currently feature obsolete buildings that are prime candidates for adaptive reuse, have already announced development plans, etc. may be the areas for additional residential, office, and industrial/tech development, and perhaps additional retail/wholesale development.

- 11th Street to 16th Street: This area comprises the bulk of the vacant land parcels along the riverfront, as well as some select parcels targeted for redevelopment within the existing urban street grid. This area is expected to primarily be office and Central Business District-type development.
- 16th Street to 24th Street: This area encompasses the historic produce terminal area, as well as additional retail and market areas. The bulk of new retail development in the Strip District, as well as a significant portion of residential along the riverfront, is expected to locate here.
- 24th Street to 33rd Street: This portion of the Strip District is where the retail and market areas transition to working flex industrial and office space, and where growth in R&D and tech flex space is expected to be concentrated. The expanded waterfront also contains certain strategic development parcels that can support substantial additional residential development.
- Waterfront Industrial – 33rd to 40th Street: This area of the Strip contains a significant amount of industrial legacy uses, and growth in this area is expected to remain primarily industrial in nature.
- Lower Lawrenceville: The area where the Strip District transitions to the Lawrenceville neighborhood is comprised primarily of residential uses. A minor amount of new retail and residential is expected in this area as it becomes more directly linked to the adjacent neighborhoods outside its borders.

Overall Development Projections

Ten-year and twenty-year growth projections were developed in the various land uses based upon the PES study for office, industrial, and residential and this project for retail. The only exception to this is that the PES study only provided projections through 2026. As the Design Team needed projections to 2030, RCLCO assumed static, modest growth rates of one to two percent per year after 2026 were utilized.

The twenty-year growth projections were distributed into the development zones outlined above, based upon the Design Team's understanding of the development potential of each area. Overall, approximately 3.5 million square feet of total new development is expected over a 10-year time horizon, with another 1.1 million square feet in the 10-year period thereafter, resulting in almost 4.6 million square feet projected over the next 20 years. As the tables below demonstrate, the development square footage by land use is distributed by zone in accordance with the existing urban fabric and development potential as determined by the market studies, developer interviews and Design Team expertise.

As noted above, the only new projections completed for this project were the retail projections. Projections for the other land uses were based upon the PES study completed in January 2012.

Tables 4 through 7 summarize the economic market analysis for 10-year and 20-year demands.

Table 4: Ten-Year Demand Projections

Marketing Analysis – 10-Year Demand Projections	Square Footage
Industrial and Office	
Traditional Industrial	86,140
Flex Office/R&D/Industrial	297,000
General/Neighborhood Office	256,430
Total Industrial & Office Square Footage	**639,570**
Retail	
Household Retail Demand	29,280
Employee Supportable Retail SF	18,460
Regional Retail Demand	108,060
Total Retail Square Footage	**155,800**
Residential	
For Sale	
For-Sale Townhouses (renovated)	736,200
For-Sale Townhouses (new)	630,000
For-Sale Condominiums	300,000
Rental	
Rental Townhouses (renovated)	82,800
Rental Apartments	942,000
Total Residential Square Footage	**3,486,370**

Table 5: 10-Year Demand Projected Distribution

"Neighborhood" Distribution of Demand	Industrial/Flex	Office	Retail	Residential	Total
11th to 16th Streets	0	230,790	19,480	134,550	**384,820**
16th to 24th Streets	14,850	12,820	109,060	1,210,950	**1,347,680**
24th to 33rd Streets	246,210	6,410	15,580	1,210,950	**1,479,150**
Waterfront Industrial (33rd to 40th)	122,080	6,410	3,890	0	**132,380**
Lower Lawrenceville	0	0	7,790	134,550	**142,340**
Total	**383,140**	**256,430**	**155,800**	**2,691,000**	**3,486,370**

Table 6: 20-Year Demand Totals

Marketing Analysis – 20-Year Demand Projections	Square Footage
Industrial and Office	
Traditional Industrial	135,820
Flex Office/R&D/Industrial	468,260
General/Neighborhood Office	404,290
Total Industrial & Office Square Footage	**1,008,370**
Retail	
Household Retail Demand	48,520
Employee Supportable Retail SF	33,090
Regional Retail Demand	203,420
Total Retail Square Footage	**285,030**
Residential	
For Sale	
For-Sale Townhouses (renovated)	897,420
For-Sale Townhouses (new)	767,970
For-Sale Condominiums	365,700
Rental	
Rental Townhouses (renovated)	100,930
Rental Apartments	1,148,290
Total Residential Square Footage	**3,280,310**
Total New Square Footage	**4,573,710**

Table 7: 20-Year Demand Projected Distribution

"Neighborhood" Distribution of Demand	Industrial/Flex	Office	Retail	Residential	Total
11th to 16th Streets	0	363,860	35,630	164,020	**563,510**
16th to 24th Streets	23,410	20,210	199,520	1,476,140	**1,719,280**
24th to 33rd Streets	388,190	10,110	28,500	1,476,140	**1,902,940**
Waterfront Industrial (33rd to 40th)	192,480	10,110	7,130	0	**209,720**
Lower Lawrenceville	0	0	14,250	164,010	**178,260**
Total	**604,080**	**404,290**	**285,030**	**3,280,310**	**4,573,710**