

Michigan State University
School of Planning, Design, and Construction
Urban Planning Practicum

Recommendations for Diversifying the Tax Base of Luna Pier, Michigan

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Executive Summary

Luna Pier is located in Southeast Michigan between the metropolitan areas of Detroit, Michigan and Toledo, Ohio. Its eastern boundary lies on the western shore of Lake Erie and its western boundary is adjacent to Interstate 75. Currently, uncertainties exist regarding the future stability of Luna Pier's tax base. To establish a stable tax base, Luna Pier is seeking to capture revenue from tourism by capitalizing on its beach front and other local assets. The practicum team has assembled data regarding city demographics, regional tourism, physical infrastructure, market growth potential, and tax increment finance scenario to determine recommendations for diversifying the tax base through tourism.

To understand the social and physical characteristics of Luna Pier the practicum team utilized a demographic assessment and a block assessment. Through the demographic assessment the practicum team concluded that the majority of Luna Pier's population is between 45 and 65 years old with an average household income of \$45,139. It was also concluded that Luna Pier's population is expected to grow. The block assessment also concluded that Luna Pier's downtown district is in need of more tourism friendly infrastructure such as an interconnecting system of sidewalks.

To determine suitable businesses for Luna Pier's transformation the Luna Pier practicum team also utilized tourism profile data and a local market analyses. The tourism assessment supplied insight into the habits displayed by tourists in Michigan and Southeast Michigan. The data concluded that Luna Pier needs to attract 18 to 34 year old tourists from Michigan and the Midwest. The local market analysis provided information on what types of businesses are most suitable for the study area. It was concluded that Luna Pier needs to attract businesses that focus on clothing, clothing accessories, and sporting equipment stores. This data can be utilized for marketing campaigns as well as ideas for tourists businesses.

The practicum team conducted a tax increment finance analysis (TIF). This analysis is presented from three scenarios based on the fluctuations in property value. These three scenarios include property values increasing steadily throughout the duration of the TIF, property values quickly increasing due a large investment into the study area, and an initial depreciation in property value followed by a property increase.

From the previously mentioned assessments and analyses the practicum team developed recommendations for diversifying its tax base. The first recommendation for Luna Pier is to apply for a Community Development Block Grant (CDBG) in two categories. The first category involves improving sidewalks and façades for the entire study area which will aid in the development of a tourist town. The second category involves applying for a signature building grant and creating a "First Taste of Michigan" themed building that sells Michigan products.

This building will help in attracting tourists to the region. Additional thematic branding can be applied throughout the study area to include districts such as market, beach, entertainment, service, highway, and marina. This provides further identity within the City of Luna Pier by establishing distinct tourist activities within each district.

Additionally, the practicum recommends various physical improvements throughout the study area that can be funded with TIF revenue. Some priority improvements include sidewalks, façade, and streetscape to Blocks 2, 3, and 12 in the market district. Additional physical improvements can be applied to the beach and park. Improvement to the beach should include better lighting along the pier and beach. Similarly, the park should include an iconic fountain with surrounding space to implement a diverse set of activities. Supplementary TIF revenue can be utilized for attracting businesses in the market district such as clothing, clothing accessory, and sporting goods stores.

Chapter 1 – Project Overview

Explanation of Practicum

Practicum is a capstone course taught by the Michigan State University's (MSU) Urban and Regional Planning program. This course offers undergraduate and graduate students practical planning experience by collaborating with community partners that are in need of planning assistance. It is the responsibility of the student team and the community to determine the project's scope of study that meets the community's planning needs. The aforementioned responsibilities are guided by MSU's practicum faculty, Dr. Zenia Kotval and Dr. Rex LaMore. This report is a result and reflection of such responsibilities and collaboration.

Project Information

Currently, the City of Luna Pier's goal is to transform the downtown area into a destination that offers a beach town atmosphere for both tourists and regional residents. This transformation is expected to increase tax revenue from tourists' spending at local businesses and attractions. In an attempt to attract tourists and suitable businesses, Luna Pier is beautifying a portion of the city. The scope of work for the practicum team was to assess the physical conditions of the study area, assess market conditions, assess the potential tourist market, and make recommendations to expand the tax base with a special focus on tourism. The team also suggests a tax increment financing funding mechanism to support infrastructure and amenities associated with a diversified tax base.

Scope of Services

It has been determined by both the practicum team and the City of Luna Pier that the practicum team will provide assessments and analyses that will guide recommendations to attract suitable businesses to the downtown area to expand its tax base.

Table 1.1 – Scope of Service for Luna Pier:

Procedure	Practicum Team's Responsibilities	Methods	Purpose
Profile Assessment	Note historical significance; regional urban centers; demographic data	Analyze Census, American Community Survey, Southeast Michigan Council of Governments	Seek an understanding of regional, historical and social characteristics of Luna Pier
Block Assessment	Report the physical characteristics of Luna Pier	Conduct a block-by-block survey of the physical condition of blocks within Luna Pier	To determine critical blocks for beautification process
Tourism Analysis	Identify profile of tourists in the Luna Pier Region	Conduct a tourism analysis using data from Travel Michigan and Michigan Tourism Bureau	Provide a tourism and economic profile to determine suitable businesses and activities
Market Gap Analysis	Identify tourist-oriented businesses that are in demand by the local population	Compare Economic and Social Research Institute (ESRI) data regarding potential market growth at a 1 and 3 mile trade area	
Tax Increment Financing Analysis	Options involving scenarios based on changes in property values and borrowing	Use changes in property value to estimate potential capture value	Spending plan options

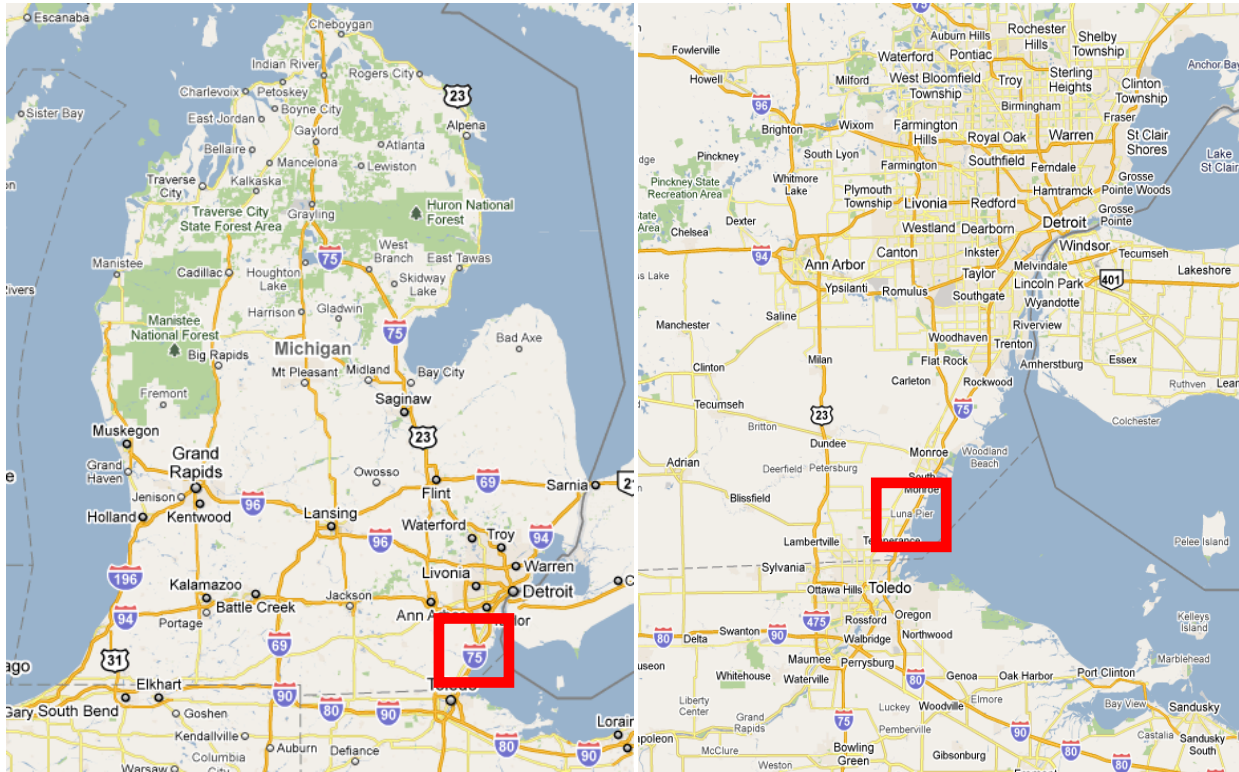
The practicum team has conducted two assessments and three analyses as shown in Table 1.1. The two assessments include a profile assessment and a block assessment which are used to determine the characteristics of Luna Pier. The analytical methods include a tourism analysis, market gap analysis, and a tax increment financing analysis. The tourism analysis includes methods for determining characteristics such as market assessment, targeting, positioning, and communicating. The market gap analysis includes methods for determining suitable businesses

based on the spending nature of the local residents within a 1 and 3 mile trade area of Luna Pier. The tax increment financing analysis will determine the revenue Luna Pier may capture over a specified set of years through various scenarios. The combination of these analytical methods will guide the practicum team in developing strategic recommendations that transform Luna Pier into a tourist destination therefore, diversifying its tax base.

The Location of Luna Pier

Figure 1.1 –Luna Pier in Michigan

Figure 1.2 – Luna Pier in Southeast Michigan



Source: Google Maps

The City of Luna Pier is located in Southeastern Michigan, near the major population centers of Toledo, OH, Monroe, MI, and Detroit, MI, as shown in Figure 1.1 and 1.2. Luna Pier is 6 miles from Toledo, OH, 10 miles from Monroe, MI, and 46 miles from Detroit, MI. Traveling north on Interstate 75 from the Ohio-Michigan border, Luna Pier is located off the first and second exits.

Figure 1.3 –Luna Pier City Limits

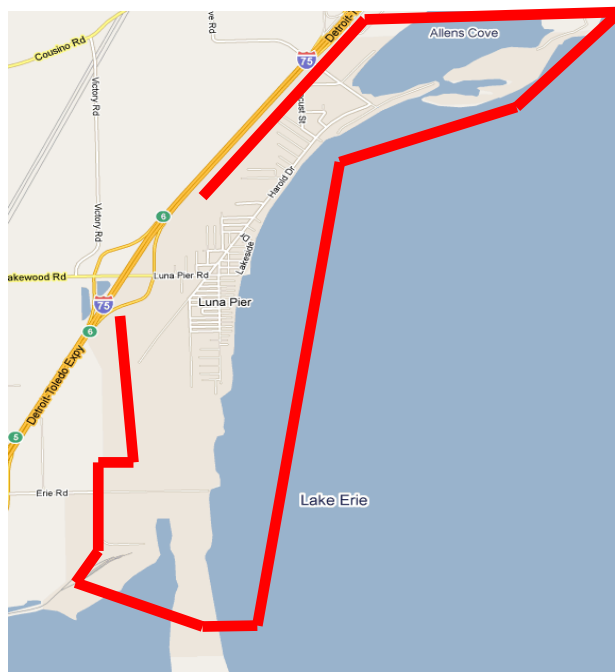


Figure 1.4 – Boundary of Luna Pier Study Area



Source: Google Maps

Luna Pier is a Great Lakes coastal city that encompasses 1.7 square miles and is situated between I-75 to the west and Lake Erie to the east, as shown in Figure 1.3. As shown in Figure 1.4, the practicum team’s area of focus is delineated by the Marina to the south, the pier to the east, the on and off ramps of the I-75 Expressway to the west and the school playground to the north. Intersecting the downtown district is Luna Pier Road, which contains the area’s most intense land use with 67 parcels consisting of commercial, residential, industrial, and governmental uses.

Client Information

The practicum team’s project is coordinated with Luna Pier directly through Greg Stewart, the city’s administrator. In addition to the city administrator, the project was guided by the Luna Pier Downtown Development Authority and the Economic and Community Development Commission. Additionally, Luna Pier has a variety of commissions and committees that are dynamically pursuing the transformation of Luna Pier.

Commissions and Committees:

1. Planning Commission
2. Parks and Recreation Commission
3. Economic and Community Development Commission
4. Beautification Committee
5. Shoreline Committee

Each one of the aforementioned commissions and committees has a specific role as displayed in Table 1.2:

Table 1.2: Commissions and Committees within Luna Pier and their Current Role

Commission or Committee	Current Role
Planning Commission	Update zoning ordinances and design codes
Downtown Development Authority	Oversee the construction of a new replica lighthouse and renovated pier
Parks and Recreation Commission	Acquire outside funding to update parks and park equipment, establish program for park maintenance, pursue trail connections to larger regional trails, create community programs that promote social and physical activities
Economic and Community Development Commission	Redevelop Luna Pier School
Beautification Committee	Organize group of volunteers that promotes downtown beauty, plant flowers in the spring, weed and water in the summer decorate Luna Pier with corn stalks in the fall
Erosion and Flood Control Committee	Redevelop Beach
Ferryboat Committee	Coordinate ferry service to Luna Pier along designated Detroit-Toledo routes

Source: Downtown Development Authority of Luna Pier, Planning Commission of Luna Pier, and Parks and Recreation of Luna Pier

Chapter 2 –Background Information

This chapter contains information regarding Luna Pier’s history, surrounding urban centers, and demographics. This data provides a background into the character of Luna Pier.

The History of Luna Pier

Luna Pier began as a part of Erie Township in Southeast Michigan. During the 1920s and 1930s, Luna Pier became a popular entertainment destination. Many visitors traveled the interurban lines that connected Detroit and Toledo on what is now known as Harold Drive. Eventually, Luna Pier built a pier on Lake Erie that would later contain an open air dance pavilion and band shell. Throughout the 1930s, the area increased in popularity as a destination for locals and Lake Erie boaters who enjoyed live music.

During the 1940’s the pier began to decrease in popularity. Once World War II began, funding for maintenance of the dance pavilion and pier was redirected towards war efforts, resulting in a degraded pavilion and pier. In 1954, the pavilion caught fire, destroying any remnants. Despite the loss of a popular tourist attraction, Luna Pier experienced industrial and residential development.

In 1952, the J.R. Whiting Plant, a coal fired electric power plant, opened south of Luna Pier. The facility initially began with two generating units and expanded by adding one more in 1953. Currently, the plant is owned and operated by Consumers Energy and employs over 100 people. In 2010, the power plant contributed approximately \$3 million per year in taxes to the City of Luna Pier.

The Surrounding Region

Surrounding Luna Pier are five metropolitan areas: Detroit, Michigan, Monroe, Michigan, Ann Arbor, Michigan, Toledo, Ohio, and Windsor, Ontario. These large urban centers offer citizens and nearby communities a variety of opportunities ranging from recreation and entertainment to offices and industry.

Table 2.1: Tourist Attraction in Detroit, Ann Arbor and Monroe, Michigan, Toledo, Ohio and Windsor, Ontario.

Features	Detroit, MI	Monroe, MI	Ann Arbor, MI	Toledo, OH	Windsor, ON
State Park	X	X	--	X	X
Marina	X	X	--	X	X
Zoo	X	--	--	X	--
Museum	X	X	X	X	X
Major Sports Venues	X	--	X	X	--
Golf Courses	X	X	X	X	X
Festivals	X	X	X	X	X
Casino	X	--	--	X	X
Universities	X	--	X	X	X
International Airport	X	--	--	--	X
Hotels	X	X	X	X	X
Shopping Malls	X	X	X	X	X
Theaters	X	X	X	X	X

Source: Detroit Metro Convention and Visitors Bureau, 2011; Trip Advisor – Detroit Attractions, 2011; City of Toledo, 2010; Destination Toledo, 2005; Toledo.com, 2010; Monroe County Convention and Tourism Bureau, 2010; City of Monroe, 2007; and Monroe County; Visit Ann Arbor, 2010; Tourism Windsor Essex, 2010

Currently, Detroit is able to offer local citizens and tourists a variety of activities in the downtown area including: casinos, sporting events, concerts, theatrical plays, and festivals. Some of the more common gathering places in the Detroit area include: MGM Grand, Greektown Casino, the Motor City Casino, Ford Field, Joe Louis Arena, Comerica Park, Belle Isle Park, Detroit Zoo, and Cobo Hall. Table 2.1, shows some of the more popular destinations for tourists (Detroit Metro Convention and Visitors Bureau, 2011 and Trip Advisor – Detroit Attractions, 2011).

Similar to Detroit, Toledo offers both local citizens and tourists a wide variety of activities including: museums, opera houses, and Fifth Third Field, home to the Toledo Mud Hens baseball team. Additionally, people are attracted to: Cedar Point Amusement Parks, Toledo Speedway, Kelly’s Island, and Put-in-Bay peninsula in Ohio on Lake Erie. Table 2.1 displays the common destinations for tourists (City of Toledo, 2010; Destination Toledo, 2005; and Toledo.com, 2010).

The third largest metropolitan area near Luna Pier is Monroe. Monroe is known as the golf capital of Michigan; home to ten golf courses within the city limits and over two dozen

throughout the county. Additionally, Monroe contains the La-Z-Boy World Headquarters, DTE Energy Company, and Premier Industries Incorporated. Currently, a national park is being established near Monroe commemorating the River Raisin Battle in the War of 1812 (Monroe County Convention and Tourism Bureau, 2010; City of Monroe, 2007; and Monroe County).

Ann Arbor, Michigan is home to the University of Michigan and Dominos Pizza. With such a large enrolment, the university was able to create large attractions. These attractions include: Michigan Theater, the Michigan “Diag,” and Michigan Stadium, one of the biggest sporting venues in the nation. Additionally, Ann Arbor hosts the Hands-on Museum, the Nichols Arboretum, and Dominos Farms (visit Ann Arbor, 2010).

Windsor, Ontario is known as the City of Roses. Windsor offers visitors an array of attractions including the Odette Sculpture Park, Dieppe Garden and the Art Gallery of Windsor. These attractions are accompanied by an assortment of activities such as the Windsor International Festival, Bluesfest International, and the Ambassador Golf Club. Table 2.1 displays more tourist features commonly found in Windsor (Tourism Windsor Essex, 2010).

These five areas offer numerous activities that are suited not just for local residents, but for regional residents seeking a day’s worth of entertainment, whether those activities involve attending a sporting event in Detroit or watching a reenactment of the Battle of the River Raisin in Monroe. Since there are several attractions in this region, Luna Pier has the potential to capture a portion of these passing tourists.

Demographic Assessment

Demographic assessment provides insight into the social characteristics of communities. By examining current and future population, income, age, and educational attainment trends, communities can plan accordingly for adjusting community policy to mitigate any potential negative effects associated with those trends.

Population

When examining the city’s population trend, it is useful to compare it with its county and state. This comparison is possible with population counts conducted every 10 years from 1970 to 2010 by the United States Census Bureau. After 2010, The Southeast Michigan Council of Government (SEMCOG) estimates the projected population in Luna Pier.

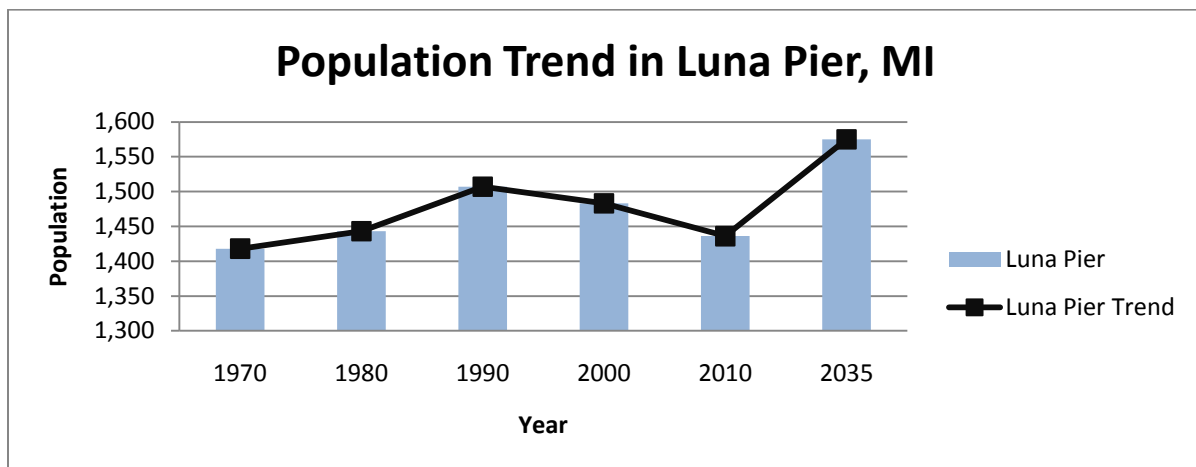
Table 2.2: Yearly Population Total for Luna Pier, Monroe County, and Michigan

Year	Luna Pier		Monroe County		Michigan	
	Total	Rate of Change	Total	Rate of Change	Total	Rate of Change
1970	1,418	--	118,479	--	8,881,826	--
1980	1,443	1.76%	134,659	13.66%	9,262,078	4.28%
1990	1,507	4.44%	133,600	-0.79%	9,295,297	0.36%
2000	1,483	-1.59%	145,945	9.24%	9,938,444	6.92%
2010	1,436	-4.18%	152,021	3.75%	9,883,640	- 1.01%
2035*	1,575	10.84%	170,213	12.41%	--	--

Source: United States Census Bureau and Southeast Michigan Council of Government, 2011

* Denotes Southeast Michigan Council of Government’s estimated projection

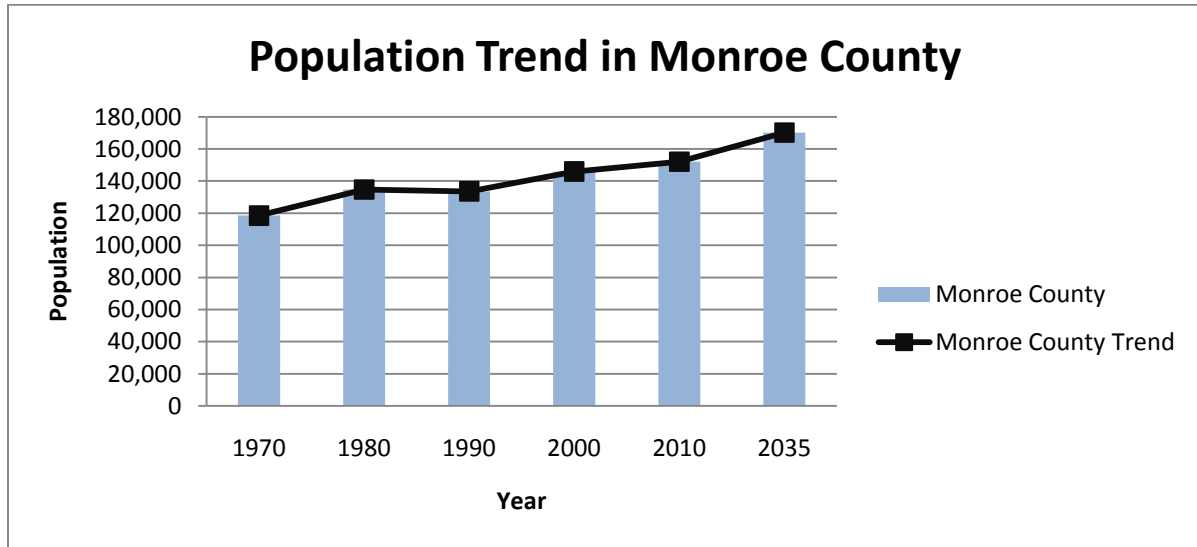
Figure 2.1– Population Trends for Luna Pier, MI from 1970 to 2035



Source: United States Census Bureau and Southeast Michigan Council of Government, 2011

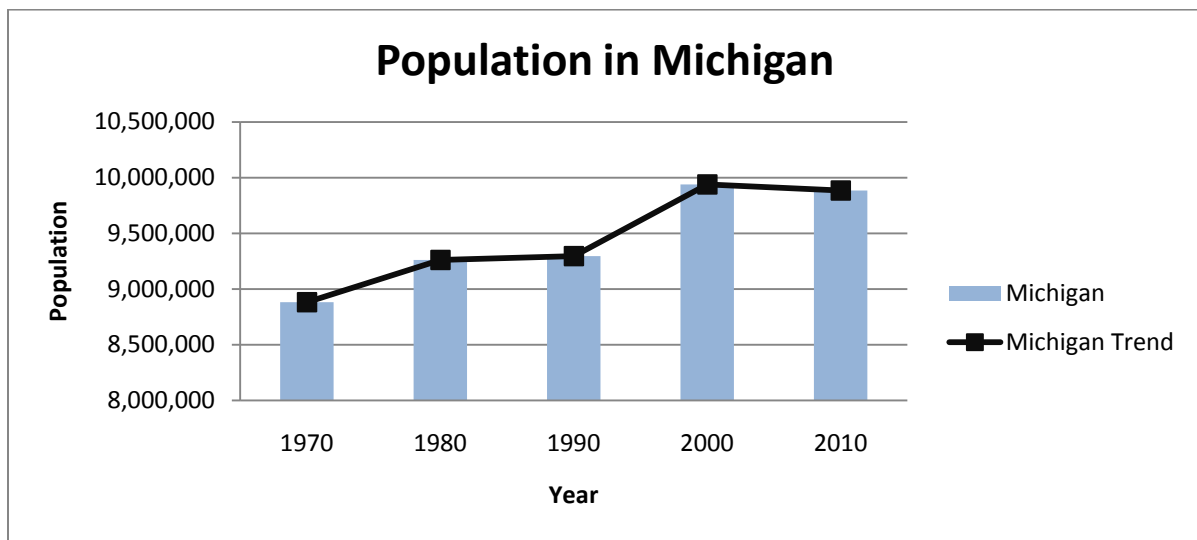
According to Table 2.2 and Figure 2.1, Luna Pier’s population has been relatively stable despite slight increases and decreases from 1970 to 2010. Population within the city grew until it peaked at 1,507 residents in 1990. From 1990 to 2010, the population has been slowly decreasing. By 2035, SEMCOG has projected the population of Luna Pier to be over 1,550, as shown in Table 2.2.

Figure 2.2 – Population Trends for Monroe County, MI from 1970 to 2009



Source: United States Census Bureau and Southeast Michigan Council of Government, 2011

Figure 2.3 – Population Totals for the State of Michigan from 1970 to 2009.



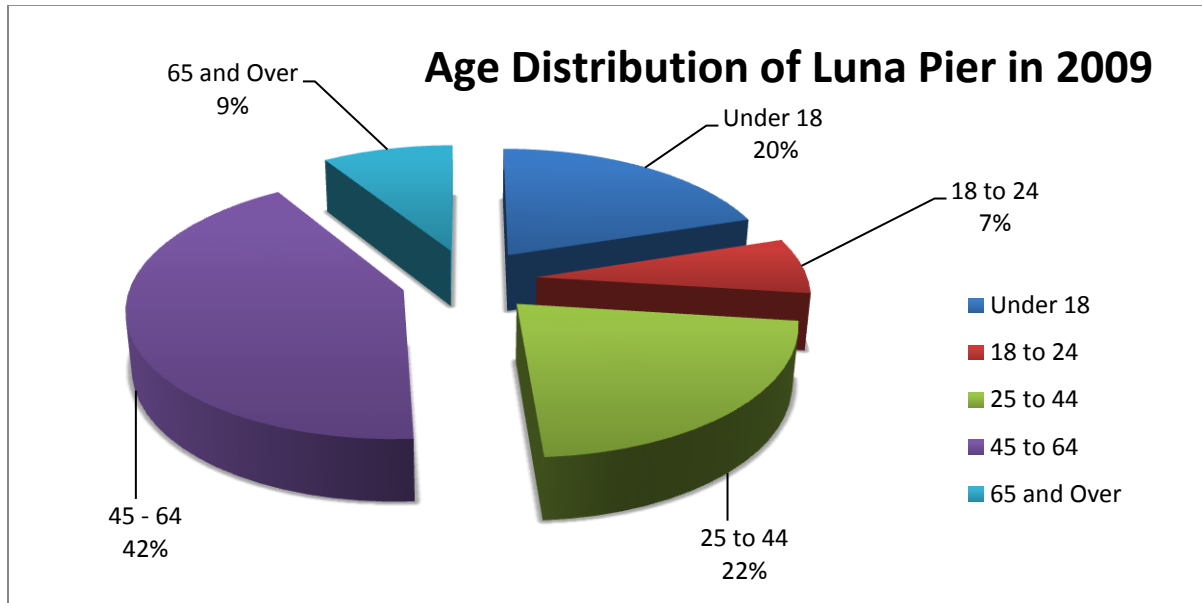
Source: United States Census Bureau and Southeast Michigan Council of Government, 2011

According to Figure 2.2, Monroe County has continuously increased its population from 1970 to 2010. The State of Michigan traversed a similar trend; however, the state’s population decreased over the decade from 2000 to 2010, as shown in Figure 2.3. Both Monroe County and the State of Michigan have experienced different population trends from Luna Pier. According to SEMCOG, both Monroe County and Luna Pier are expected to continue to grow to 170,213 and 1,575 by 2035 respectively. This data suggests that the increase in population may provide more taxes for Luna Pier.

Age

Another social characteristic communities often consider is the age composition of their population, which ranges from under 18, 18 to 24, 25 to 44, 45 to 64, and over 65.

Figure 2.4 – Age Distribution in Luna Pier.



Source: American Community Survey, 2009

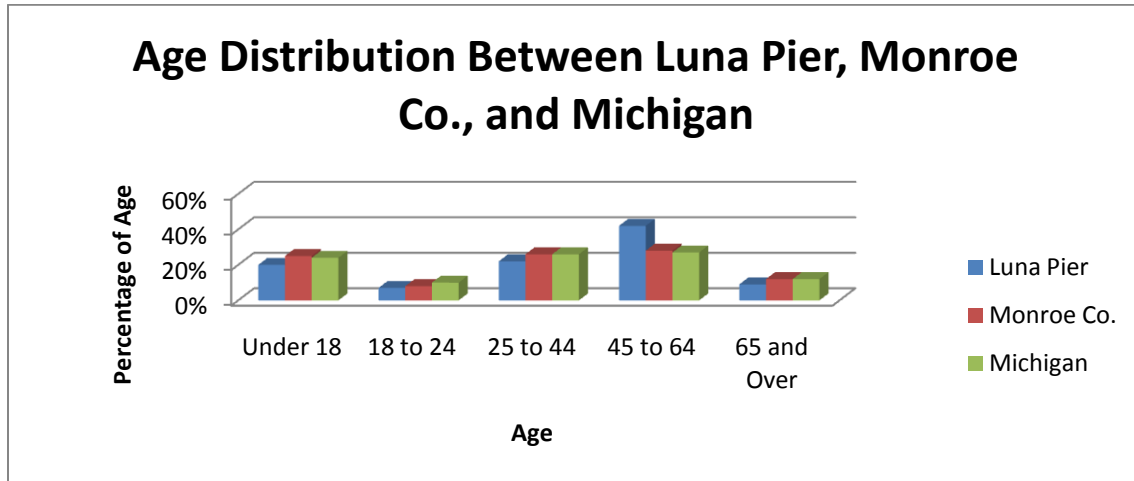
Of the 1,418 Luna Pier residents, 20% are below the age of 18, while only 9% are 65 years old or older, as shown in Figure 2.4. The largest age cohort within Luna Pier, at 42% of the total population, is 45-64 years old. The smallest cohort is between the ages of 18 to 24, representing 7% of the total population, as shown in Figure 2.4.

Table 2.3: Age Distribution Comparison between Luna Pier, Monroe County, and the State of Michigan in 2009

Age Range	Luna Pier		Monroe County		State of Michigan	
	Percent	Total	Percent	Total	Percent	Total
Under 18	20%	280	25%	38,225	24%	2,409,410
18 – 24	7%	98	8%	12,232	10%	1,003,921
25 – 44	22%	308	26%	39,754	26%	2,610,194
44 – 65	42%	588	28%	42,811	27%	2,710,586
Over 65	9%	126	12%	18,347	12%	1,204,705
Total	100%	1,400	100%	151,369	100%	9,938,816

Source: American Community Survey, 2009

Figure 2.5: Age Distribution Comparison between Luna Pier, Monroe County, and the State of Michigan in 2009



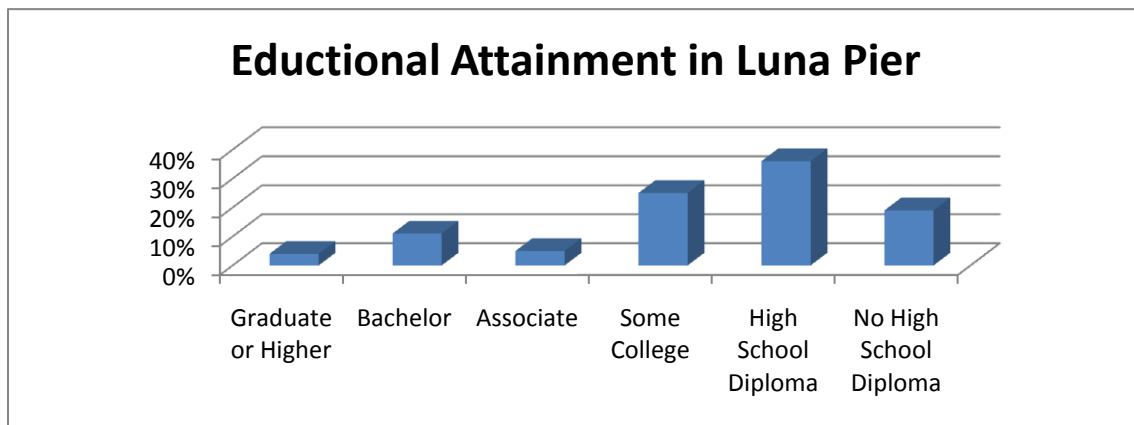
Source: American Community Survey, 2009

Both Table 2.3 and Figure 2.5, compare Luna Pier age groups to Monroe County and Michigan. According to Table 2.3 and Figure 2.5, Luna Pier contains roughly 14 percentage points more than Monroe County and 15 percentage points more than Michigan for the 45 – 65 year old cohort. This data suggests that a large portion of Luna Pier’s population will be entering retirement within the next 15 years.

Educational Attainment

Data for educational attainment involves determining the percentage of people within an area and the highest level of education they received. The categories for educational attainment include: no high school diploma, high school diploma, some college, associate degree, bachelor degree, and graduate degree or higher.

Figure 2.6 – Educational Attainment of Luna Pier Residents in 2009



Source: American Community Survey, 2009

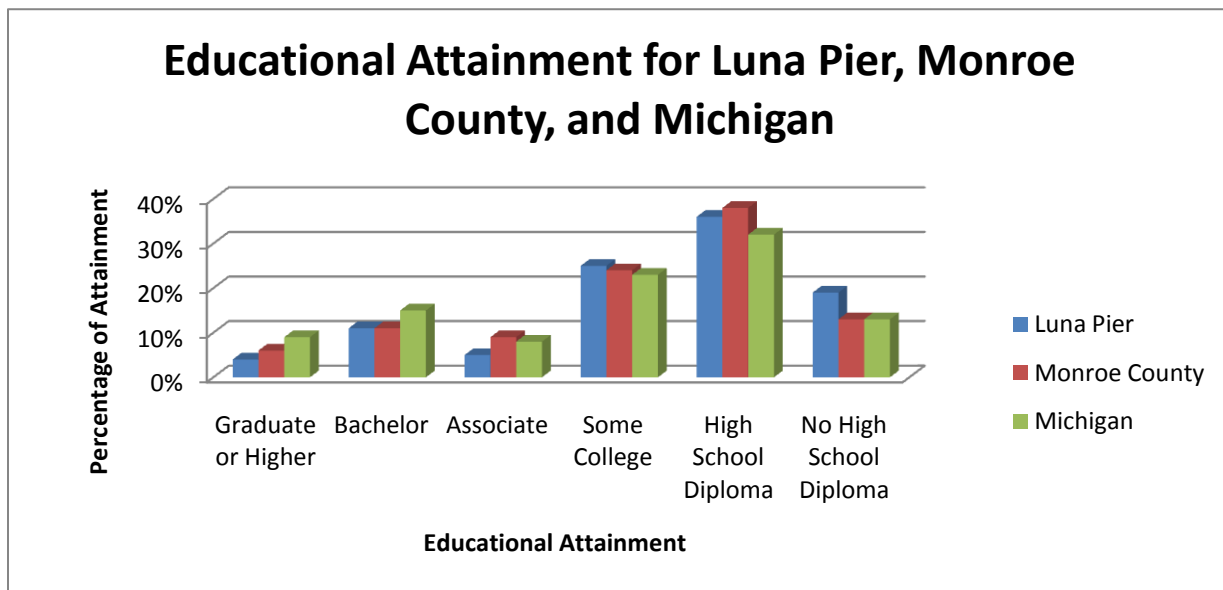
Figure 2.6 displays the educational attainment of residents in Luna Pier who are at least 25 years old. Of the Luna Pier residents, 36% have completed high school or its equivalent. Roughly 11% of Luna Pier residents have obtained a bachelors degree. Approximately 4% have obtained a graduate or professional degree.

Table 2.4 – Educational Attainment of Luna Pier Residents in 2009

Educational Attainment	Luna Pier	Monroe County	Michigan
Graduate or Higher	4%	6%	9%
Bachelor	11%	11%	15%
Associate	5%	9%	8%
Some College	25%	24%	23%
High School Diploma	36%	38%	32%
No High School Diploma	19%	13%	13%

Source: American Community Survey, 2009

Figure 2.7 – Educational Attainment of Luna Pier, Monroe County, and Michigan



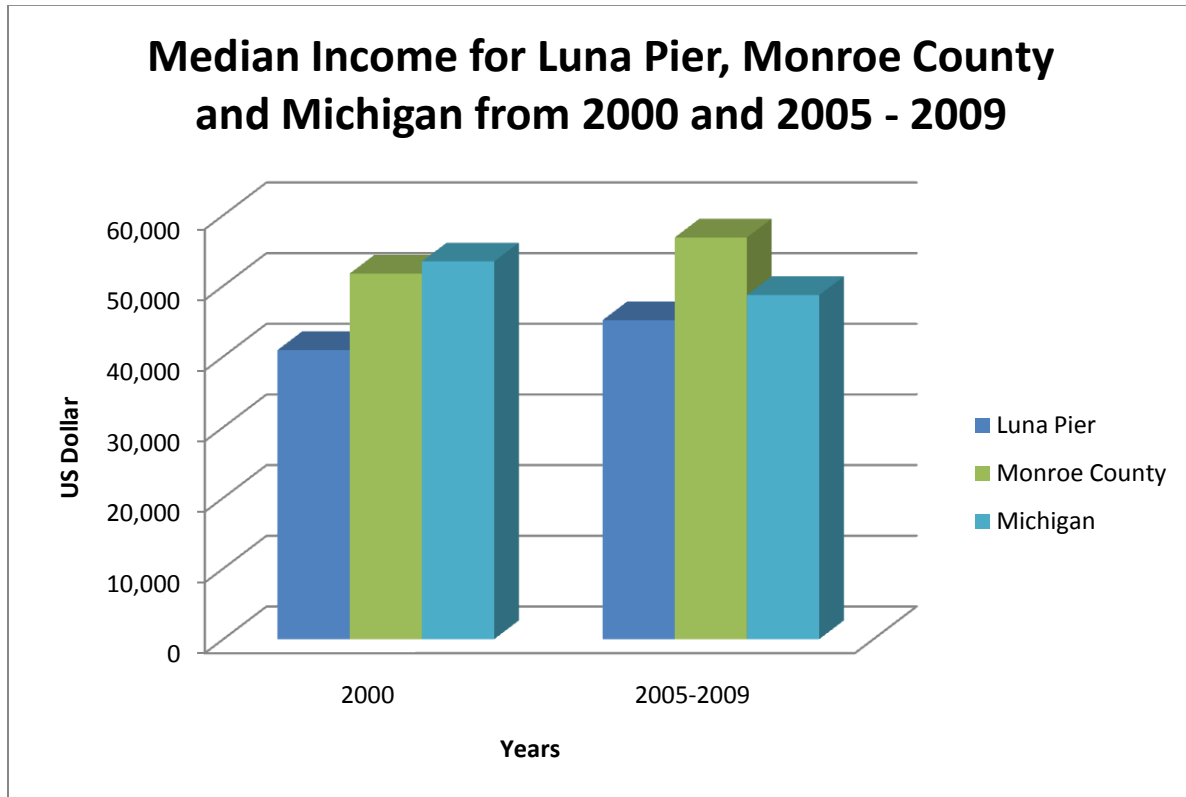
Source: American Community Survey, 2009

Both Table 2.4 and Figure 2.7, display a comparison of educational attainment with Monroe County and Michigan. When compared to Monroe County and Michigan, Luna Pier contains 6 percentage points more than Monroe County and Michigan for residents that have no high school diploma, as shown in Table 2.4.

Income

The US Census Bureau provides income data in various sources. This report uses median household income that compares Luna Pier to Monroe County and Michigan.

Figure 2.8: Median Household Income in 2009 for Luna Pier, Monroe County, and Michigan



Source: US Census and American Community Survey 2009

According to Figure 2.8, Luna Pier's average household income is lower than Monroe County's and Michigan's. In 2010, Luna Pier had an average income of \$45,139, an increase of approximately \$5,000 from 2000. However, Luna Pier's average household income in 2010 is nearly \$10,000 less than Monroe County's and about \$3,000 less than the State of Michigan's.

Summary

Chapter 2 presents data that is used to describe Luna Pier's regional features and demographics. Luna Pier is located near Lake Erie and is surrounded by five large metropolitan areas: Detroit, Toledo, Monroe, Ann Arbor, and Windsor. These areas provide regional tourism amenities that may be beneficial to Luna Pier. Demographically speaking, Luna Pier is a small town that is expected to experience population growth by 2035. Additionally, Luna Pier's population appears to be ageing, potentially creating a retirement community that may be beneficial for a tourist beach town.

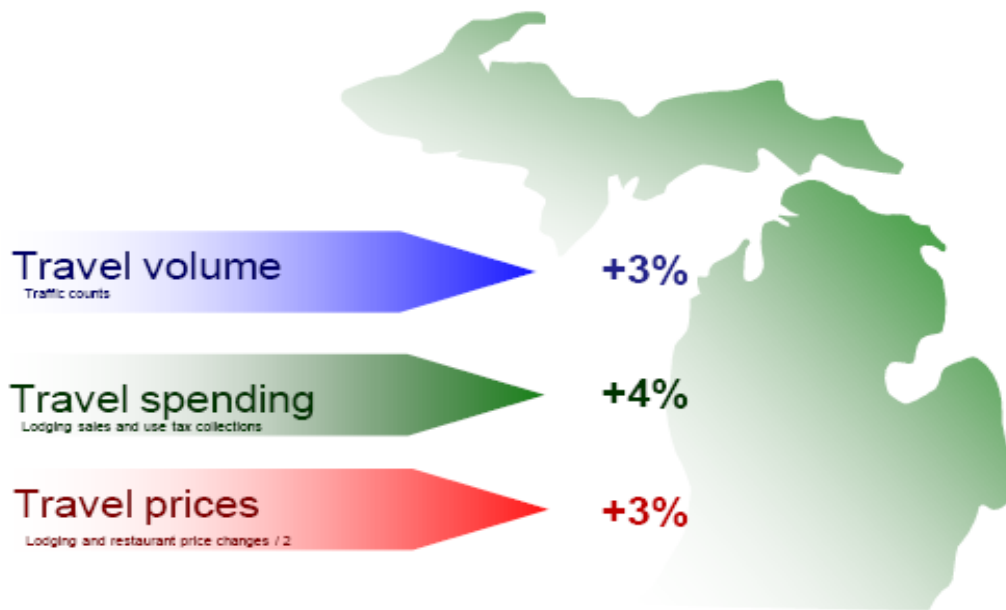
Chapter 3 – Tourism in Luna Pier

A portion of the practicum team’s analyses was focused on tourist datasets. The practicum team examined these datasets to determine the habits and profile of tourists that travel to the Luna Pier region.

Tourism is an important portion of the Michigan economy because it is the second most profitable industry in the state (University of Michigan). A study conducted by the Michigan State University Department of Community, Agriculture, Recreation and Resource Studies projects tourism within Michigan to grow 3-4% in travel volume, travel spending, and travel prices in 2011, as shown in Figure 3.1.

Figure 3.1: Growth Projections for Michigan Tourism in 2011

MSU GROWTH PROJECTIONS FOR MICHIGAN TOURISM IN 2011



Source: www.carrs.msu.edu

Defining Tourism

According to the World Tourism Organization of the United Nations, tourism is “activities of persons traveling to and staying in places outside their usual environment for not more than one consecutive year for leisure, business, or other purposes” (Goeldner and Ritchie, 2009). These tourists are traveling for either vacation, business travel, sight-seeing or for the attendance of a special event. Regardless of the reason, tourists travel for activities. These activities may include: natural or man-made scenic settings, historic, cultural, and ethnic settings, recreational opportunities, and/or special events such as, festivals, conferences or concerts.

If planned correctly, the tourism industry can have profound impacts on communities. These impacts are usually through the form of revenue from sales, income, and employment for industries such as, lodging, restaurants, transportation, amusement, and retail. As tourism continues to grow in a community it can create secondary effects on other business sectors. However, economic prosperity is not the only rationale for creating a tourism industry. Tourism can also bring a feeling of vitality and pride throughout the community. Despite the benefits of tourism, negative impacts can ensue.

While tourism has potential to expand the economic base of a community it can also create adverse effects on the local economy. If improperly planned, tourism can inflate prices on various goods and services. This effect fluctuates throughout the year based on popular traveling trends of tourists. Similarly, the quality of goods, services, and property may also increase or decrease depending on the availability of services (Pure Michigan). To avoid the negative effects of tourism, communities need to determine their tourist profile and plan accordingly.

Tourism Profile

According to the 2009 visitor profile prepared for the Michigan Economic Development Corporation by D.K. Shifflet and Associates Ltd., there are four main segments when defining tourism. Those four segments are market assessment, targeting, positioning, and communicating. The market assessment presents how many visitors the area attracts, as well as defining the size and scope of the market for tourism in a community; this is often referred as travel volume. Targeting defines who the most important visitors are based on their demographics (i.e. age, household income). Positioning evaluates how the area should position their product and compares the tourism product attributes, or tourism activities, to the competition. Communicating locates where to promote the tourism destination based on the markets that generate the largest share of visitors; this is often measured through travel distance. The Michigan Economic Development Corporation's 2009 visitor profile indicates the range of tourist activities in Michigan and Southeast Michigan.

Market Assessment

According to the 2009 Michigan visitor profile, Michigan hosted about 93 million visitors in 2009, compared to over 1 billion domestic travel groups throughout the United States. In 2009, the Southeast region hosted the largest number of visitors within the state, capturing 43 million out of 93 million visitors. Roughly, 60% of Michigan leisure visitors are from in-state, while 40% are from out-of-state.

Targeting

Demographic analysis of Michigan and Southeastern Michigan visitors provides information that identifies the largest market segment, such as who is traveling to the region and who is spending the most. This information assists in the planning and marketing of creating a tourist destination.

Figure 3.2: Demographics of Leisure Visitors in Michigan

	Michigan	Southeast
Average Age	43	43
Average Household Income	\$78,580	\$84,347
Have Children in Household	50%	52%
Dominant Lifestage	Young Family	Young Family
Dominant Generation	Generation X	Generation X

Source: Michigan Economic Development Corporation

According to the 2009 Michigan Visitor Profile, the largest share of leisure visitors in Southeast Michigan is filled by the 18-34 year old age group. Overall, approximately 50% of leisure visitors are families with an average household income of \$84,373. Typically, these visitors spent the least amount of money during their stay, when compared to other demographic groups.

Positioning

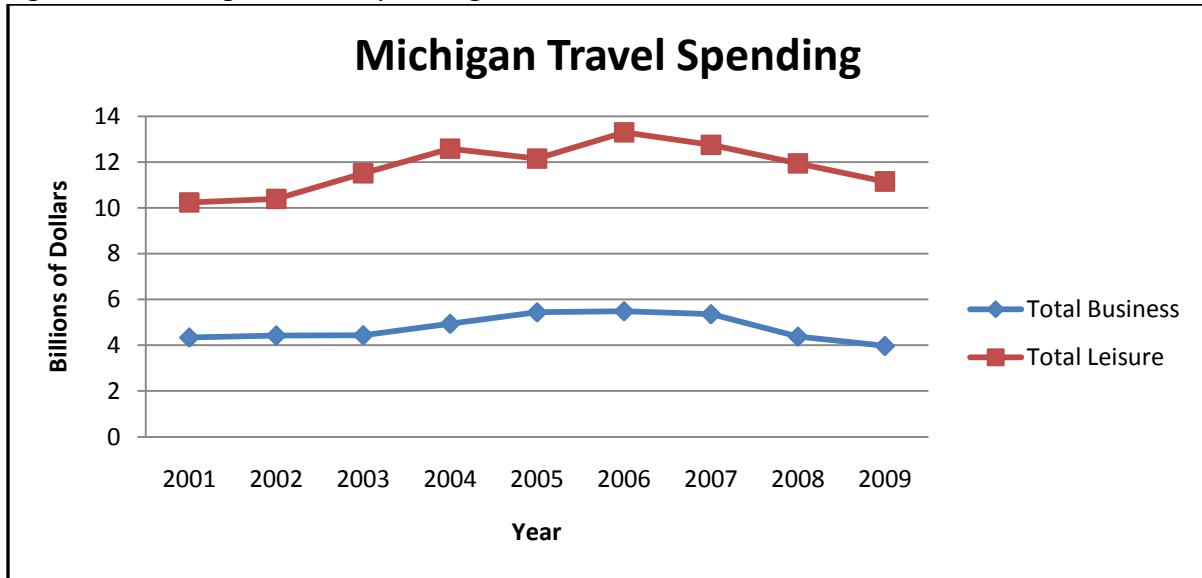
Michigan and Southeast Michigan visitors tend to travel to visit friends and relatives (VFR), with the preferred accommodation of private homes, resulting in travelers spending less than \$400 during their stay. Day trips are the most common length of stay in the area.

Figure 3.3: Travel Behavior of Leisure Visitors in Michigan and Southeast Michigan

	Michigan	Southeast Michigan
Dominate Purpose of Stay	Visit Friends and Relatives	Visit Friends and Relatives
Avg. Party Size (Persons)	2.45	2.23
Dominate Travel Party	Families	One Adult
Avg. Stay Length (Nights)	1.19	1.11
Dominant Stay Length	Day Trip	Day Trip
Avg. Spending per Person	\$75	\$80
Avg. Party per Trip Spending	\$364	\$352
Accommodation of Choice	Private Home	Private Home

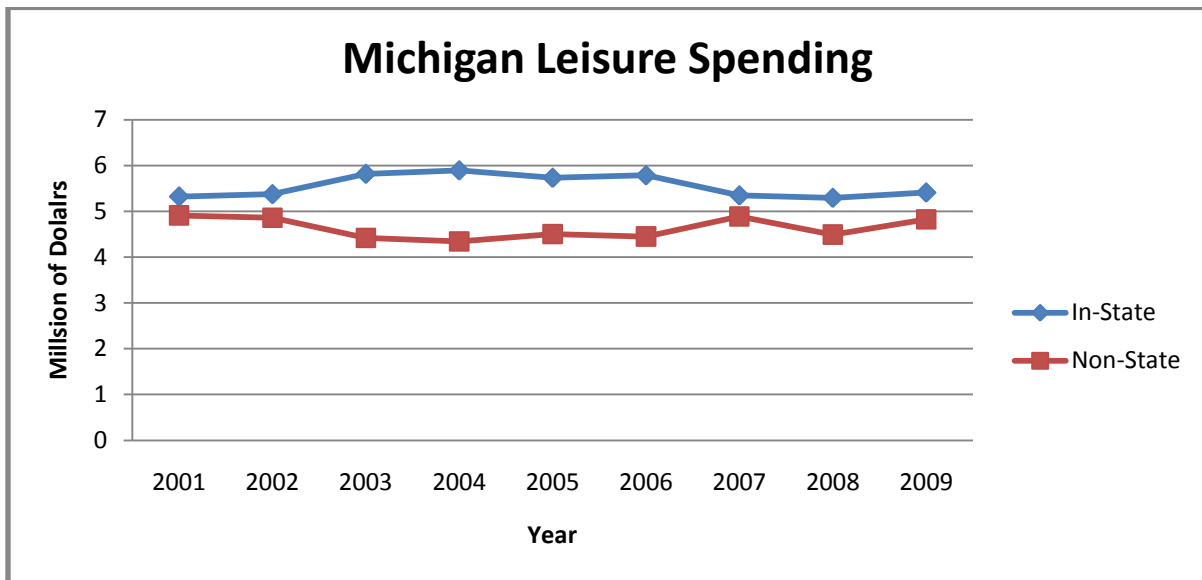
Source: Michigan Economic Development Corporation

Figure 3.4: Michigan Travel Spending from Tourism



Source: Pure Michigan

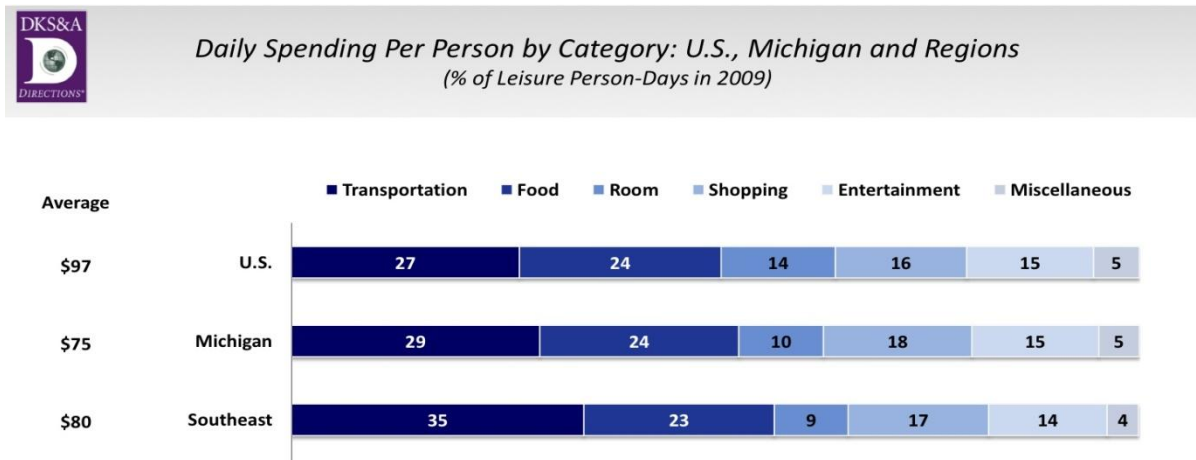
Figure 3.5: Michigan Leisure Spending for Tourism



Source: Pure Michigan

In 2009, shown in Figure 3.4, the total leisure travel spending for tourism in Michigan was roughly \$11.15 billion, a 6.6% decline from 2008; however it ranked 7th most visited state in the United States. The in-state leisure spending in Michigan during 2009 was approximately \$5.41 billion as shown in Figure 3.5. This amount has increased by about 2.2% from the previous year (Pure Michigan). Tourism is often associated with certain spending habits.

Figure 3.6: Average Daily Spending Habits of Tourists in the United States, Michigan, and Southeast Michigan



Source: Michigan Economic Development Corporation

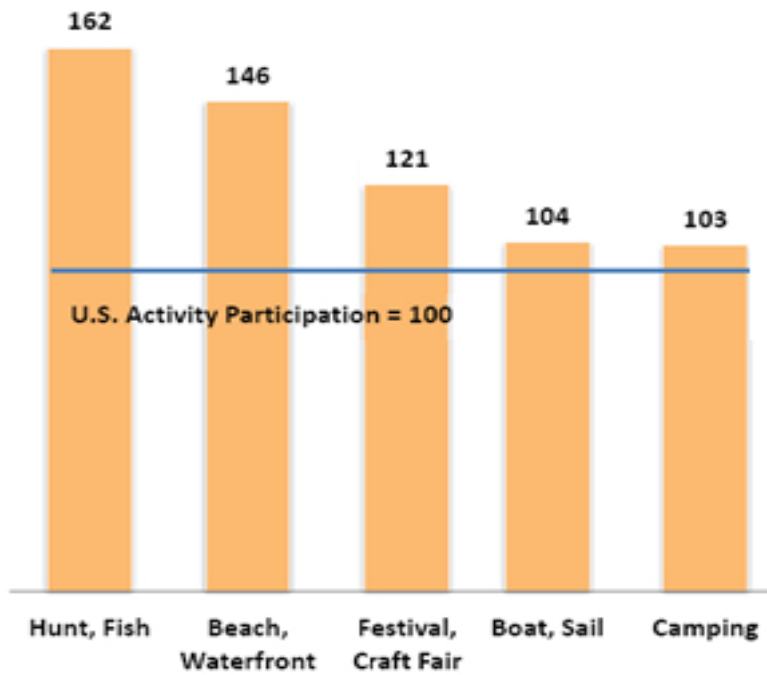
As shown in Figure 3.6, a typical Michigan leisure visitor spent an average of \$75 per day with the majority spent on transportation and food. This is compared to the national average of \$97 spent per day of which the majority is also spent on transportation and food. Southeast Michigan visitors mainly participate in dining and shopping while in the area. According to Figure 3.6, the average Southeast Michigan traveler spends \$80 per day, with 35% on transportation, 23% on food, 17% on shopping, 14% on entertainment, 9% on room, and 4% for miscellaneous accommodations. Currently, Luna Pier minimally provides opportunities for fulfilling the needs of tourist spending. The lack of shopping and entertainment presents opportunities for investment in these segments to diversify their tax base.

Figure 3.7: Popular Tourist Activities in the United States, Michigan, and Southeast Michigan

Activity	U.S.	Michigan	Southeast
Dining	29%	20%	20%
Shopping	23%	20%	18%
Entertainment	21%	17%	15%
Sightseeing	15%	14%	12%
Festival, Craft Fair	4%	5%	5%
Visit Historic Site	4%	3%	2%
Museum, Art Exhibit	4%	1%	2%
Beach, Waterfront	6%	8%	2%
National or State Park	5%	4%	2%
Hunt, Fish	2%	4%	1%
Hike, Bike	3%	3%	1%
Camping	2%	2%	1%
Nature, Eco-Travel	3%	1%	1%
Boat, Sail	1%	1%	1%
Golf	1%	1%	1%

Source: Michigan Economic Development Corporation

Figure 3.8: Michigan Tourism Activity Index



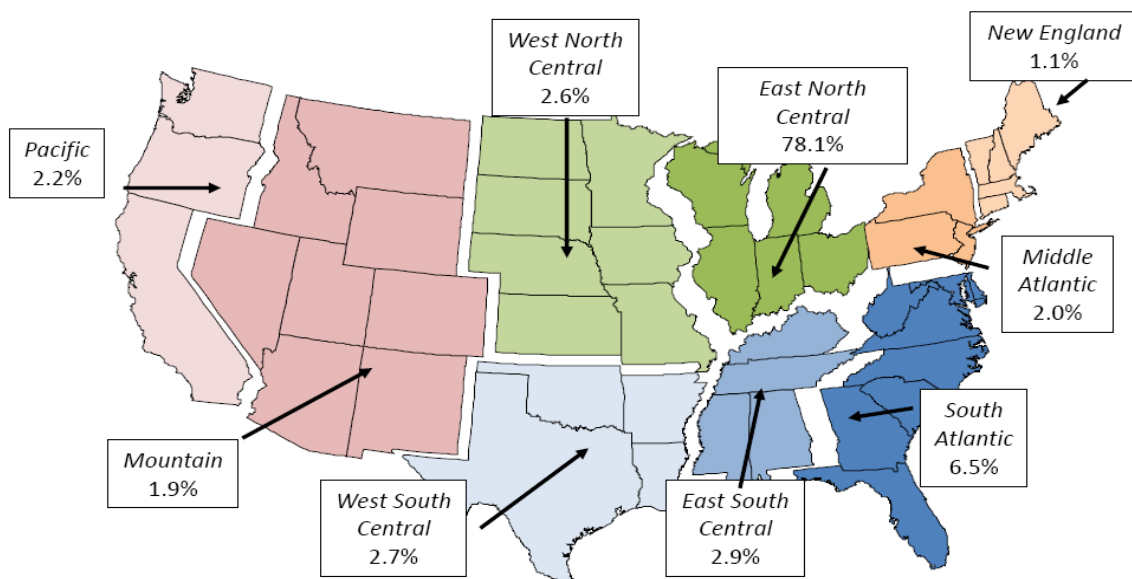
Source: Michigan Economic Development Corporation

When tourists travel to Michigan and Southeast Michigan, there are specific tourist activities that are popular. According to Figure 3.7, the top activities of tourists within Southeast Michigan are dining, shopping, and entertainment. Though Luna Pier does offer some dining options, there is little offered for shopping and entertainment. Luna Pier contains an abundance of activities that tourists in Michigan tend to partake in while on vacation. Opportunities for activities such as, visiting the beach, fishing, and boating already exist in Luna Pier, due to its proximity next to Lake Erie. Figure 3.8 represents the tourists average participation activities in Michigan above the national average. The activity index shows a higher level of traveler participation in beach and waterfront activity in Southeast Michigan than the United States. Therefore, Luna Pier needs to capitalize on beach activity including waterfront and boating and sailing.

Communicating

The 2009 Michigan Visitor Profile identifies communicating as a tool to find where travelers are coming from by providing a comprehensive overview of where their visitors reside. This information assists in locating where to position marketing and advertising.

Figure 3.9: National Origin Divisions for Travel to Michigan (Percent of Leisure Visitor-Days in 2009)



Source: www. Michigan Economic Development Corporation

Most of Michigan’s visitors come from the Midwest, representing 78.1% of all visitors, while the next highest region is the South Atlantic with 6.5%. Nearly 87% of Michigan Leisure visitor-days came from Illinois, Ohio, Indiana, Florida, Wisconsin, Georgia, Tennessee, California, and New York. This data suggests that the aforementioned states would be the best location for marketing out-of-state tourism.

Figure 3.10: Regional Origin Divisions for Travel to Michigan (Percent of Leisure Visitor-Days in 2009)



Source: Michigan Economic Development Corporation

About 60% of Michigan leisure visitors were from in-state, while only 17% of visitors came from regional states such as Ohio, Indiana, Illinois, and Wisconsin. Of these states, Illinois contains the highest visitor percentage at 6.0% of the total. Approximately 0.4% of visitors in the Southeast region come from South Bend, Indiana; while approximately 2.7% of Southeast visitors come from Chicago, Illinois, as shown in Table 3.8.

Table 3.8 Top Out-of-State Origin Designated Marketing Areas to Michigan

Cities Outside of Michigan	US	Michigan	Southeast
Chicago, IL	2.9%	6.3%	2.7%
South Bend, IN	0.2%	2.4%	0.4%
Toledo, OH	0.4%	1.8%	3.3%
Atlanta, GA	2.2%	1.3%	1.6%

Source: Michigan Economic Development Corporation

Table 3.9 Top In- State Origin Designated Marketing Areas to Michigan

Michigan Cities	US	Michigan	Southeast
Detroit	1.5%	24.7%	29.4%
Grand Rapids-Kalamazoo-Battle Creek	0.7%	13.5%	7.1%
Traverse City-Cadillac	0.3%	7.6%	3.7%
Flint-Saginaw-Bay City	0.3%	6.8%	7.6%
Lansing	0.2%	3.8%	3.9%
Marquette	0.2%	2.7%	0.4%

Source: Michigan Economic Development Corporation

In Table 3.9, the Designated Marketing Area indicates that most visitors came from Michigan cities such as Detroit, Lansing, Grand Rapids, Kalamazoo, Battle Creek, Traverse City, Flint, and Saginaw. Detroit was the origin for 29.4% of the in-state travelers to the Southeast region, the most from any in-state city.

Summary

A profile of tourism in Southeast Michigan can be generated by examining the market assessment, targeting, positioning, and communicating of tourist habits. The market assessment suggested that Southeast Michigan attracts 43 million visitors each year. Luna Pier needs to target 18 to 34 year olds with families. Positioning in Southeast Michigan involves slightly more than one person per travel party staying with their friends or family and spending less than \$400 per day. Finally, Luna Pier needs to communicate its tourism potential to travelers within the Midwest.

Chapter 4 – City Assessment

While the previous chapter provides data for tourism market assessment, targeting, positioning, and communicating of tourist habits of Luna Pier, the practicum team needs to understand the physical condition of the study area in relation to tourism. Therefore, an overview and a block assessment were conducted. Each provides a different perspective into the physical character of Luna Pier.

Overview of Study Area

A windshield survey was used by the practicum team to gain an understanding of the physical characteristics of Luna Pier. This was conducted by examining the downtown area noting any defining features.

Figure 4.1: Location of Amenities within Luna Pier Downtown District



Some of the unique features within the Luna Pier study area include: the closed school, a pier, a beach, RV park, and marina as shown in Figure 4.1.

Table 4.1: Features within Luna Pier and their Attributes.

Amenity	Negative Attributes	Positive Attributes
Closed Elementary School	Needs Repair	Adaptive reuse
Pier	Odor from seaweed	Visually appealing
Beach	Pollution and odor	Visually appealing
RV Park	Near Waste Water Treatment Plan	Open space
Marina	Odor from seaweed	Additional access to the city
Waste Water Treatment Plant (WWTP)	Odor	Environmentally friendly city

Additionally, the practicum team conducted a block-by-block assessment for identifying critical improvements.

Block Assessment

A block-by-block inventory was completed to observe the present conditions of the study area. Parcels were individually surveyed on specific criteria and this information was used to assess the blocks as a whole. The table below represents the criteria used in the survey.

Table 4.2: Blue Print for Block Assessment

Figure 4.2 Study Area

Block Number	
Land Use	
Land Use	Commercial, Residential or Mixed Use
Vacancies?	Yes/No
Streetscaping	
Is landscaping present?	Yes/No
Is lighting present?	Yes/No
Condition of façade	Good/Poor
Any street furniture present?	Yes/No
Meet future design criteria?	Yes/No
Walkability	
Are sidewalks in good condition?	Yes/No
Any crosswalks present?	Yes/No
Buffers from the street?	Yes/No
Parking	
Parking?	Yes/No
Type of parking	Parking lot, structure, parallel etc.



Criteria

When assessing the downtown district, the practicum team delineated the district into 13 blocks and assessed each one based on land use, streetscape, walkability, and parking. Within each of these categories, the practicum team examined certain criteria. Land use consisted of commercial, residential, undeveloped or mixed-use. Mixed use was used to describe a block with a combination of commercial and residential uses. Vacancies were used to describe existing buildings without occupancy, and undeveloped characterizes a lot without a structure.

Streetscaping refers to the existing condition and view of the block. This entails lighting, landscaping, façade condition, street furniture and design. Lighting refers to any type of lighting on the block including street lights or building lights. Landscaping describes any planned plant growth including bushes, trees, planters or flowered areas. Façade condition was described simply as good or poor. The façades were assessed based on the observed quality of the structure and major or minor areas of repair. Street furniture is any furniture in front of buildings or throughout the block including benches, flower beds or other structures created for pedestrians. The conditions of the individual buildings were used to assess the block as a whole. The design criteria were based on the master plan and design plan, which can be found in Appendices I and II.

Walkability was used to describe the ease of movement for pedestrians. This was assessed as the team walked through the blocks and includes sidewalk condition, crosswalks and street buffers. Sidewalks were assessed on the overall condition, including cracked and uneven surfaces, uneven widths. Crosswalks were defined as a marked crossing across a street or intersection. Street buffers were based on any material used to block noise or visual pollution from buildings or sidewalk areas.

Lastly, parking was based on the type of existing parking including parallel, lot, meter or structures.

Block 1 is located east of Harold Drive and north of Elm Street. It includes the City Hall building and four residential properties. The buildings in the block are all in fair condition. There are no sidewalks in this block but due to low traffic and open streets, walkability is not an issue. A small parking lot is offered at the City Hall building.

Table 4.3: Block Number 1

Block Number 1	
Land Use	
Land Use	Residential
Vacancies?	No
Streetscaping	
Is landscaping present?	Yes
Is lighting present?	Yes
Condition of façade	Good
Any street furniture present?	Yes
Meet future design criteria?	No
Walkability	
Are sidewalks in good condition?	None
Any crosswalks present?	No
Buffers from the street?	No
Parking	
Parking?	Yes
Type of parking	Parking lot at City Hall

Figure 4.3: Block 1 (Shaded)



Figure 4.4: Luna Pier City Hall in Block 1



Figure 4.5: Example of Housing in Block 1



Block 2 is located on Luna Pier Road between Harold Drive and Northern Avenue. It contains a commercial center consisting of a quick stop market, post office and two vacant buildings formerly used as restaurants. There are parking lots in the rear of every building and parallel parking on Luna Pier Road. The block faces several challenges including sidewalk quality and lighting. The sidewalks within this block are severely cracked and uneven creating a potential hazard for pedestrians. While there is street lighting within the area, only one of the buildings offers storefront lighting but is currently vacant. The block does not offer any landscaping or street furniture for pedestrians.

Table 4.4: Block Number 2

Block Number 2	
Land Use	
Land Use	Commercial
Vacancies?	Yes
Streetscaping	
Is landscaping present?	No
Is lighting present?	Yes
Condition of façade	Good
Any street furniture present?	No
Meet future design criteria?	No
Walkability	
Are sidewalks in good condition?	No
Any crosswalks present?	No
Buffers from the street?	No
Parking	
Parking?	Yes
Type of parking	Parking lots and parallel parking

Figure 4.6 Block 2 (Shaded)



Figure 4.7: Vacant Building in Block



Figure 4.8: Quick Stop Market in Block 2



Block 3 is located on the northwest corner of Luna Pier Road and Lakeside Drive. It is characterized as low-density and consists of six residential parcels. The block contains minimal lighting and no sidewalks, curbs, or streetscaping. This low density development is incongruous with the city’s future land use map, which show this block as a commercial area with attached multi-story buildings, as shown in Appendix III.

Table 4.5: Block Number 3

Block Number 3	
Land Use	
Land Use	Residential
Vacancies?	No
Streetscaping	
Is landscaping present?	Yes
Is lighting present?	Yes
Condition of façade	Good
Any street furniture present?	No
Meet future design criteria?	No
Walkability	
Are sidewalks in good condition?	None
Any crosswalks present?	No
Buffers from the street?	No
Parking	
Parking?	Yes
Type of parking	Driveways

Figure 4.9: Block 3 (shaded)



Figure 4.10 Housing in Block 3



Figure 4.11 Housing in Block 3



Block 4 consists of eleven parcels on the east side of Lakeside Drive. Lakeside Drive is a narrow street without curbs or sidewalks. This block is exclusively residential. There are seven houses and a public park on the lake. These properties are in compliance with the future land use map (residential), and some are in compliance with the city’s nautical-themed future design codes, as shown in Appendix III and II respectively.

Table 4.6: Block Number 4

Block Number 4	
Land Use	
Land Use	Residential
Vacancies?	No
Streetscaping	
Is landscaping present?	Yes
Is lighting present?	Yes
Condition of façade	Good
Any street furniture present?	No
Meet future design criteria?	Some
Walkability	
Are sidewalks in good condition?	None
Any crosswalks present?	No
Adequate buffers from the street?	No
Parking	
Parking?	Yes
Type of parking	Driveways

Figure 4.12: Block 4 (Shaded)



Figure 4.13 Lakefront Housing in Block 4



Figure 4.14 Lakefront Housing in Block 4



Block 5 is located west of Harold Drive and southwest of Industrial Drive. The block includes a multi-business industrial building, a Super 8 Motel and a large vacant parcel south of the Super 8 Motel. The buildings in the block are all in good condition and both the industrial complex and the Super 8 Motel have large parking lots. This block faces challenges such as sidewalks, lighting, and street furniture for pedestrians. The vacant parcel is inaccessible from roads and is undeveloped.

Table 4.7: Block Number 5

Figure 4.15: Block 5 (Shaded)

Block Number 5	
Land Use	
Land Use	Commercial
Vacancies?	Yes
Streetscaping	
Is landscaping present?	No
Is lighting present?	No
Condition of façade	Good
Any street furniture present?	No
Meet future design criteria?	No
Walkability	
Are sidewalks in good condition?	No
Any crosswalks present?	No
Buffers from the street?	No
Parking	
Parking?	Yes
Type of parking	Parking lot



Figure 4.16: Super 8 Motel in Block 5

Figure 4.17: Industrial Structure in Block 5



Harold Drive intersects Block 6. This block contains a marina, storage facility, and an RV campground. Opposite of the Marina, there is a wastewater treatment plant. There are sidewalks and decorative street lamps within the block. This area contains minimal streetscaping in the form of tall grasses. Additionally, this area contains parking lots for the marina, wastewater treatment plant, and storage facility. Finally, this block contains two residential structures, one on the north end of the marina, the other on the south end.

Table 4.8: Block Number 6

Block Number 6	
Land Use	
Land Use	Commercial
Vacancies?	No
Streetscaping	
Is landscaping present?	Yes
Is lighting present?	No
Condition of façade	Good
Any street furniture present?	No
Meet future design criteria?	No
Walkability	
Are sidewalks in good condition?	None
Any crosswalks present?	No
Buffers from the street?	Yes
Parking	
Parking?	Yes
Type of parking	Parking lot

Figure 4.18: Block 6 (Shaded)



Figure 4.19: Luna Pier Campground



Figure 4.20: Luna Pier Marina



Block 7 is located south of Luna Pier Road and east of the I-75 exit ramp. This block consists of four parcels including an outlet store, a restaurant, a car wash and a vacant piece of property. All the buildings are in good condition. The only sidewalk present is along Luna Pier Road; however, the sidewalk on Luna Pier road only extends half-way across the block. The small portion of sidewalk that remains is in good condition: it does not contain cracks and has an even surface. The side streets in this block contain no sidewalks. Block 7 contains parking in the front of the buildings; however the streets provide no parking.

Table 4.9: Block Number 7

Block Number 7	
Land Use	
Land Use	Commercial
Vacancies?	Yes
Streetscaping	
Is landscaping present?	No
Is lighting present?	Yes
Condition of façade	Good
Any street furniture present?	Yes
Meet future design criteria?	No
Walkability	
Are sidewalks in good condition?	No
Any crosswalks present?	No
Adequate buffers from the street?	No
Parking	
Parking?	Yes
Type of parking	Parking lot

Figure 4.21: Block 7 (Shaded)



Figure 4.22: Ganders Resturant in Block 7



Figure 4.23: Outlet Store in Block 7



Block 8 is located south of Luna Pier Road and between Harold Drive and Industrial Drive. This block contains two parcels: a house and a church. Both of these structures are in good condition. Block 8 contains a sidewalk adjacent to Luna Pier Road that is in good condition. However, there are no sidewalks present on any other road within the block. The church contains parking in the front of the parcel. There are no parking spaces delineated on Luna Pier road.

Table 4.10: Block Number 8

Block Number 8	
Land Use	
Land Use	Mixed use
Vacancies?	No
Streetscaping	
Is landscaping present?	Yes
Is lighting present?	Yes
Condition of façade	Good
Any street furniture present?	No
Meet future design criteria?	No
Walkability	
Are sidewalks in good condition?	Yes
Any crosswalks present?	No
Buffers from the street?	No
Parking	
Parking?	Yes
Type of parking	Parking lot

Figure 4.24: Block 8 (Shaded)



Figure 4.25: Example of Housing in Block 8



Figure 4.26 Church in Block 8



Block 9 is adjacent to the I-75 North entrance ramp from Luna Pier. It contains a Sunoco gas station and a vacant building. The Sunoco station includes an attached restaurant, called Luna Kitchen. The parcel contains a small amount of parking for the restaurant. There are no sidewalks present along Luna Pier Road. The vacant property has parking for the building and a circular driveway. Both buildings are relatively new and therefore, are in good condition.

Table 4.11: Block Number 9

Block Number 9	
Land Use	
Land Use	Commercial
Vacancies?	Yes
Streetscaping	
Is landscaping present?	No
Is lighting present?	Yes
Condition of façade	Good
Any street furniture present?	No
Meet future design criteria?	No
Walkability	
Are sidewalks in good condition?	None
Any crosswalks present?	No
Buffers from the street?	No
Parking	
Parking?	Yes
Type of parking	Parking lot

Figure 4.27: Block 9 (Shaded)



Figure 4.28: Commercial Building



Figure 4.29: Sunoco Gas Station



Block 10 is north of Luna Pier Road, east of Madison Street and west of Valleywood Avenue. This block contains two buildings that face Luna Pier Road. On the corner of Madison Street and Luna Pier Road is a small apartment building. Directly east of the apartment building is a commercial building with a parking lot. There is a wide sidewalk along the apartment building that connects to a narrow sidewalk along the commercial building. There is also minor landscaping in front of the commercial building. North of these buildings are two residential homes.

Table 4.12: Block number 10

Block Number 10	
Land Use	
Land Use	Mixed Use
Vacancies?	No
Streetscaping	
Is landscaping present?	No
Is lighting present?	Yes
Condition of façade	Good
Any street furniture present?	No
Meet future design criteria?	No
Walkability	
Are sidewalks in good condition?	Yes
Any crosswalks present?	No
Buffers from the street?	No
Parking	
Parking?	Yes
Type of parking	Parking lot

Figure 4.30: Block 10 (Shaded)

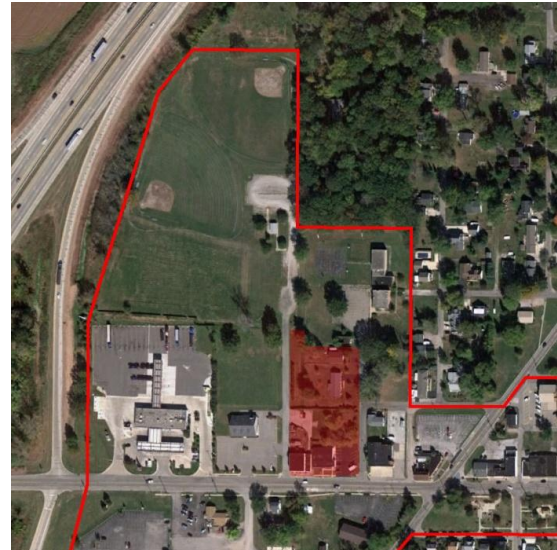


Figure 4.31: Apartment Building on Luna Pier Rd.



Figure 4.32: Commercial Building



Block 11 is located near the I-75 interstate, north of Luna Pier Road and contains the vacant Luna Pier Elementary School building. Valleywood Avenue ends in the parking lot of the vacant school. The school building is in poor condition. Within the property, there are basketball hoops and other playground equipment that is in disrepair. There is no lighting or sidewalks present on this parcel.

Table 4.13: Block Number 11

Block Number 11	
Land Use	
Land Use	School
Vacancies?	Yes
Streetscaping	
Is landscaping present?	No
Is lighting present?	No
Condition of façade	Poor
Any street furniture present?	No
Meet future design criteria?	No
Walkability	
Are sidewalks in good condition?	Yes
Any crosswalks present?	No
Buffers from the street?	No
Parking	
Parking?	Yes
Type of parking	Parking lot

Figure 4.33: Block 11 (Shaded)

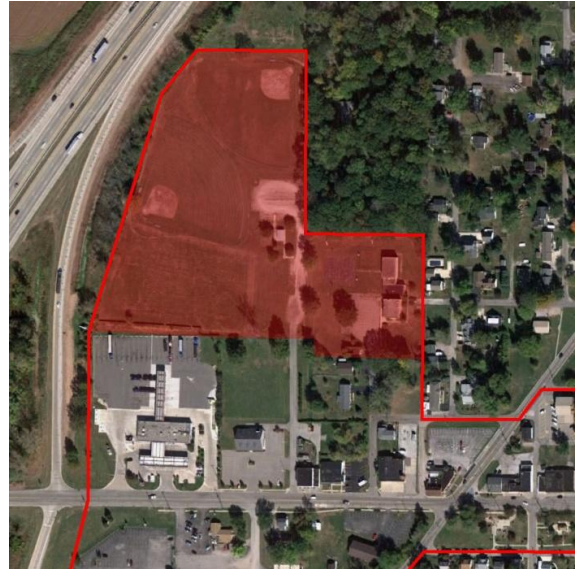


Figure 4.34: Playground of Vacant School



Figure 4.35: Vacant School Building



Block number 12 is located between Luna Pier Road and Erie Street. The parcel on the west side of this block contains the fire department for the City of Luna Pier. The property has a large sidewalk along Luna Pier Road. Next to the fire department on the corner of Luna Pier Road and Harold Drive is the Chateau Louise restaurant. There is a small amount of parking along the east side of the fire department and numerous parking spaces available behind the restaurant. The parcel has a sidewalk along both sides of the restaurant. Both the fire department and restaurant buildings are in good condition. There is landscaping with shrubs along the building on Harold Drive.

Table 4.14: Block Number 12

Block Number 12	
Land Use	
Land Use	Commercial
Vacancies?	No
Streetscaping	
Is landscaping present?	Yes
Is lighting present?	Yes
Condition of façade	Good
Any street furniture present?	No
Meet future design criteria?	No
Walkability	
Are sidewalks in good condition?	Yes
Any crosswalks present?	No
Buffers from the street?	No
Parking	
Parking?	Yes
Type of parking	Parking lot

Figure 4.36: Block 12 (Shaded)



Figure 4.37: Restaurant Chateau Louise



Figure 4.38: Luna Pier Fire Department



The downtown area of Luna Pier does offer open space for residents and visitors. The open space includes both the park on Luna Pier Road and the local beach at the end of Luna Pier Road. The park is a large, green area with a variety of landscaping. The park offers a gazebo and children’s play structures. The park also includes walking paths and furniture. The beach area is at the end of the downtown area and includes a pier that extends into Lake Erie which can be used for fishing and sightseeing. The beach currently offers a beach house with restrooms, a shelter, and a parking lot for visitors.

Table 4.15: Block Number 13

Block Number 13	
Land Use	
Land Use	Open Space
Vacancies?	N/A
Streetscaping	
Is landscaping present?	Yes
Is lighting present?	Yes
Condition of façade	N/A
Any street furniture present?	Yes
Meet future design criteria?	N/A
Walkability	
Are sidewalks in good condition?	Yes
Any crosswalks present?	N/A
Buffers from the street?	Yes
Parking	
Parking?	Yes
Type of parking	Parking lots and parallel parking

Figure 4.39: Block 13 (Shaded)



Figure 4.40: Beach at Luna Pier



Figure 4.41: Park in Luna Pier



Summary of Block Assessment

Table 4.16: Summary of Block Assessment

Block Number	Land Use	Landscaping	Lighting	Façade Condition	Street Furniture	Sidewalk Condition	Parking
1	Residential	--	--	--	--	X	--
2	Commercial	X	--	X	X	X	--
3	Residential	--	--	--	X	X	--
4	Residential	--	--	--	X	X	--
5	Commercial	X	X	--	X	X	--
6	Commercial	--	X	--	X	X	--
7	Commercial	X	--	--	--	X	--
8	Mixed Use		--	--	X	--	--
9	Commercial	X	--	--	X	X	--
10	Mixed Use	X	--	--	X	--	--
11	School	X	X	X	X	--	--
12	Commercial	--	--	--	X	--	--
13	Open Space	--	--	--	--	--	--

"X" – Denotes Improvements Needed

Improvements need to be made to the sidewalk in all the blocks except 8 and 10 through 13. Street furniture needs to be added in every block except in 1, 7, and 13. Throughout the study area parking exists in various forms. This allows locals and non-locals quick access to businesses in Luna Pier. Lighting is absent in every block except 5, 6, and 11.

Table 4.17: Summary of Parcels

BLOCK #	1	2	3	4	5	6	7	8	9	10	11	12	13	ALL
Residential	4	-	7	10	-	2	-	1	-	4	-	1	-	29
<i>Single Family</i>	4	-	4	7	-	2	-	1	-	2	-	1	-	21
<i>Multifamily</i>	-	-	2	-	-	-	-	-	-	1	-	-	-	3
<i>Accessory*</i>	-	-	1	3	-	-	-	-	-	1	-	-	-	5
Commercial	-	1	-	-	1	7	3	-	1	1	-	2	-	16
<i>Retail</i>	-	1	-	-	-	-	1	-	-	-	-	-	-	2
<i>Dining</i>	-	-	-	-	-	-	1	-	-	-	-	1	-	2
<i>Services</i>	-	-	-	-	-	-	-	-	-	1	-	-	-	1
<i>Highway</i>	-	-	-	-	1	-	1	-	1	-	-	-	-	3
<i>Recreation</i>	-	-	-	-	-	2	-	-	-	-	-	-	-	2
<i>Other</i>	-	-	-	-	-	2	-	-	-	-	-	-	-	2
<i>Accessory*</i>	-	-	-	-	-	3	-	-	-	-	-	1	-	4
Industrial	-	-	-	-	1	-	-	-	-	-	-	-	-	1
Religious	-	-	-	-	-	-	-	1	-	-	-	-	-	1
Public	2	1	-	2	1	-	-	-	-	-	2	2	3	13
Vacant	-	2	-	-	-	-	1	-	1	-	-	-	-	4
Undeveloped	-	-	-	-	-	-	-	-	1	2	-	-	-	3
TOTAL:	6	4	7	12	3	9	4	2	2	7	2	5	3	67

* Denotes parcel is driveway, garage or storage shed that is part of another parcel

After assessing the parcels in Luna Pier, the practicum team found 4 vacant parcels, 2 of which are located in Block 2, suggesting that this block needs business infill. In addition, there are 3 undeveloped parcels, 2 of which are located in Block 10. Additionally, Block 4 contains the most parcels; therefore, any improvement made to Block 4 could positively improve property value.

Summary

Chapter 4 provided insight into the physical conditions of Luna Pier through a general overview of the city and a block assessment. The general overview described how certain amenities of Luna Pier are positively and negatively attributing to the transformation of Luna Pier. Amenities need to be addressed so that they possess more positive rather than negative attributes. The block assessment provided a more detailed inspection of the study area. The block assessment was conducted using predetermined criteria. Using the criteria, the practicum team determined that Blocks 2, 3, and 12 are critical blocks that need infrastructure improvements and business infill.

Chapter 5 – Business Infill

One of the analytical methods being conducted by the practicum team involves assessing the local market conditions. This assessment examined two aspects of the local market: retail marketplace and consumer spending. Both datasets are delineated at 1 mile (primary trade area) and 3 mile (secondary trade area) radii from downtown Luna Pier, as shown in Figure 5.1. By combining these two datasets, potential businesses can be identified for vacant properties. Ideally, these businesses should also cater to the needs of tourists.

Figure 5.1: Trade Area Radii for Local Market Analysis



Source: Google Maps

Market Growth Potential

Determining market growth potential requires a retail marketplace profile that compares the trade activity in a market area. Once the retail potential, or demand, is known, it can be compared with the actual sales or supply of that business. If the demand exceeds the current supply of the business then there is a higher potential for business growth. Likewise, if the actual sales of a business are greater than the potential sales then there is little growth potential.

Analysis

Using datasets provided by Economic and Social Research Institute (ESRI), the practicum team was able to identify high potential growth businesses that are tourist-oriented. The business types are based on the North American Industry Classification System (NAICS).

Table 5.1: Potential Market Growth in Primary and Secondary Trade Areas

Potential Market Growth For Luna Pier						
	Primary Trade Area			Secondary Trade Area		
Category/ NAICS code	Est. Potential Sales (Demand)	Est. Actual Sales (Supply)	Market Growth Potential in dollars	Est. Potential Sales (Demand)	Est. Actual Sales (Supply)	Market Growth Potential in dollars
Clothing and Clothing Accessories/448	\$401,580	\$0	\$401,580	\$1,117,034	\$26,840	\$1,090,194
Shoe Stores 4482	\$52,017	\$0	\$52,017	\$141,801	\$0	\$141,801
Sporting Goods, Hobby, Book, and Music Stores/451	\$198,717	\$0	\$198,717	\$548,394	\$59,224	\$489,170
Sporting Goods/Hobby/4511	\$150,699	\$0	\$150,699	\$416,830	\$59,224	\$357,606
Book, Periodical, and Music/4512	\$48,018	\$0	\$48,018	\$131,564	\$0	\$131,564

Table 5.1, displays the growth potential of businesses based on differences between local supply and demand. The businesses sectors in Table 5.1 have more growth potential within the secondary trade area, suggesting Luna Pier is located in an area that may attract local consumer spending as far away as 3 miles. Additionally, the businesses presented in Table 5.1 have the potential to cater to the needs of tourists as indicated in Chapter 3 regarding tourism spending habits.

Findings

Businesses with the highest potential for growth that supply to both local demand and tourist spending habits, such as clothing, clothing accessories, and sporting goods stores are ideal businesses for downtown Luna Pier based on two reasons. First, the market potential for these businesses ranges from about \$200,000 to over \$1,000,000 dollars. Secondly, these businesses can be visually attractive in the downtown area by providing window shopping for walking pedestrians. While the Marketplace Retail analysis provides a snapshot of the supply-demand gap of various businesses sectors, it does not provide information on expenditures within each business sector.

Recreation Expenditures

Similar to retail marketplace reports, ESRI also generates consumer spending reports. These reports provide information on the spending potential of households within a specified trade area. The spending potential is indexed on the national average of 100. A number below 100 signifies that spending is below the national average. A number above 100 implies that spending is above the national average. The practicum team has analyzed consumer spending for recreation businesses.

Analysis

When analyzing recreational expenditures, the practicum team examined businesses that would be suitable for both the local residents and tourists.

Table 5.2: Potential Recreation Expenditures within Primary and Secondary Trade Areas

Recreational Expenditures						
Category	Primary Trade Area			Secondary Trade Area		
	Index	Average Spent	Total Spent	Index	Average Spent	Total Spent
Admission to Movies, Theater, Opera, Ballet	75	\$113.75	\$71,778	93	\$140.79	\$213,579
Fees for Recreational Lessons	75	\$102.36	\$64,590	99	\$134.85	\$204,564
Docking and Landing Fees for Boats and Planes	83	\$5.88	\$3,713	106	\$7.53	\$11,428
Bicycles	75	\$14.78	\$9,325	93	\$18.35	\$27,843
Camping Equipment	35	\$5.04	\$3,181	39	\$5.71	\$8,662
Hunting and Fishing Equipment	58	\$22.41	\$14,143	62	\$23.95	\$36,327
Winter Sports Equipment	74	\$4.80	\$3,027	85	\$5.52	\$8,373
Water Sports Equipment	99	\$6.60	\$4,164	108	\$7.23	\$10,969
Other Sports Equipment	96	\$9.10	\$5,739	109	\$10.32	\$15,661

Findings

Table 5.2 displays the local expenditures for recreation within the primary and secondary trade areas. The secondary trade area contains a higher index of spending than the primary trade area, suggesting that residents in the secondary trade area are more apt to spend on recreation within Luna Pier than residents in the primary trade area. According to Table 5.2, water sport and “other” sporting equipment business sectors provide the strongest index score for the primary and secondary trade areas. These businesses also potentially cater to the needs of tourists, as suggested in Chapter 3. Additional businesses such as admission fees to movie theaters and opera houses are below the national average but, as reported in Chapter 3, these businesses may capture revenue from tourists.

Summary

Chapter 5 provided an analysis of the potential market growth and recreational expenditure within a specific radius. The market growth analysis provided a snapshot of economic activity based on the gap between the supply and demand of a business sector. Additionally, these businesses may capture revenue from tourists. Strong businesses that cater to both local residents and tourists include clothing, clothing accessories, and sporting equipment.

Similarly, the expenditures analysis allows Luna Pier to know which businesses residents patronize compared to the national average. Residents within the secondary trade area spend above average on businesses such as water sports and other sports equipment, and docking and landing fees for boats and planes. These businesses may also be attractive to tourists. A more detailed version of Table 5.1 and 5.2 can be viewed in Appendices IV and V.

Chapter 6 – Tax Increment Financing

In January 1980, the State of Michigan passed the Tax Increment Finance Authority Act to provide cities with an economic development tool used to revitalize declining areas. The tax increment financing (TIF) process allows a city to capture tax from property values and funnel that captured tax back into a specified district for improvements.

Cities creating a TIF plan are required by state law to meet several requirements. The city must create a Downtown Development Authority (DDA) and delineate a district for the application of improvements. To prove need for a TIF arrangement, the city must demonstrate that the area is blighted or underdeveloped, and that it would continue in stagnation if a TIF were not executed. Any captured tax revenue must be spent within that district.

Tax Increment Financing

Determining the Baseline

Tax increment financing involves calculating the difference between the present value of properties in a downtown district, and their future value. The city “captures” the difference between these values, and makes improvements to the area using this revenue. The first step is thus to calculate the “baseline” value of all properties within the TIF’s boundaries. This is found by multiplying the combined taxable value of these properties by the local millage rate. “Local millage” is defined as all non-debt millage issued by local authorities such as the city, county, libraries, community colleges, and school districts. However, local millage does not include state taxes. The local millage rate in Luna Pier is 23.8091 mills per year, and the combined taxable value of properties in the study area was \$5,154,549 at the beginning of 2011. Multiplying these yields a baseline of \$122,725. A complete table of millages can be viewed in Appendix VI.

Estimating the Capture Value

The second component of tax increment financing involves determining the tax capture value. For a downtown district to capture TIF revenue, it must collect property tax that is higher than the baseline in a given year. There are two primary ways in which the total value of the downtown district increases. The first is through new development. The second is through Normal Market Appreciation (NMA), which expresses a general increase in property values over time. This can occur both through normal inflationary pressures, and through a multiplier effect due to physical improvements made to the downtown. NMA is usually expressed as a percentage, similar to the rate of inflation.

The formula for executing the total capture value (CV) of any year (y) is:

$$CV_y = (\sum \text{taxable value}_y \times \text{local millage}) - \text{baseline}$$

The following three scenarios for TIF revenue were created by using the capture value formula, and varying assumptions about the NMA rate and prospects for new development. Additionally, all three scenarios use the following assumptions:

- The total local (capturable) millage in Luna Pier is 23.8091. All millage rates are assumed to remain constant throughout the duration of the TIF.
- A new pier and replica lighthouse are finished by 2014, which, while providing no new tax revenue of their own, will create a one-time 5% multiplier on nearby commercial uses (defined as those properties in Blocks 1 through 3, as described in Chapter 4).
- Half of the currently vacant and undeveloped parcels in the TIF boundary (three parcels total) are redeveloped and each is assessed at \$150,000 (roughly the mean value of taxable properties in the district). Development is spaced evenly over the 20 year duration of the TIF.
- Personal property in the study area was ignored; only real property was considered.

For complete tables of calculation for the three following scenarios, please see Appendix VII.

Property Value Scenarios

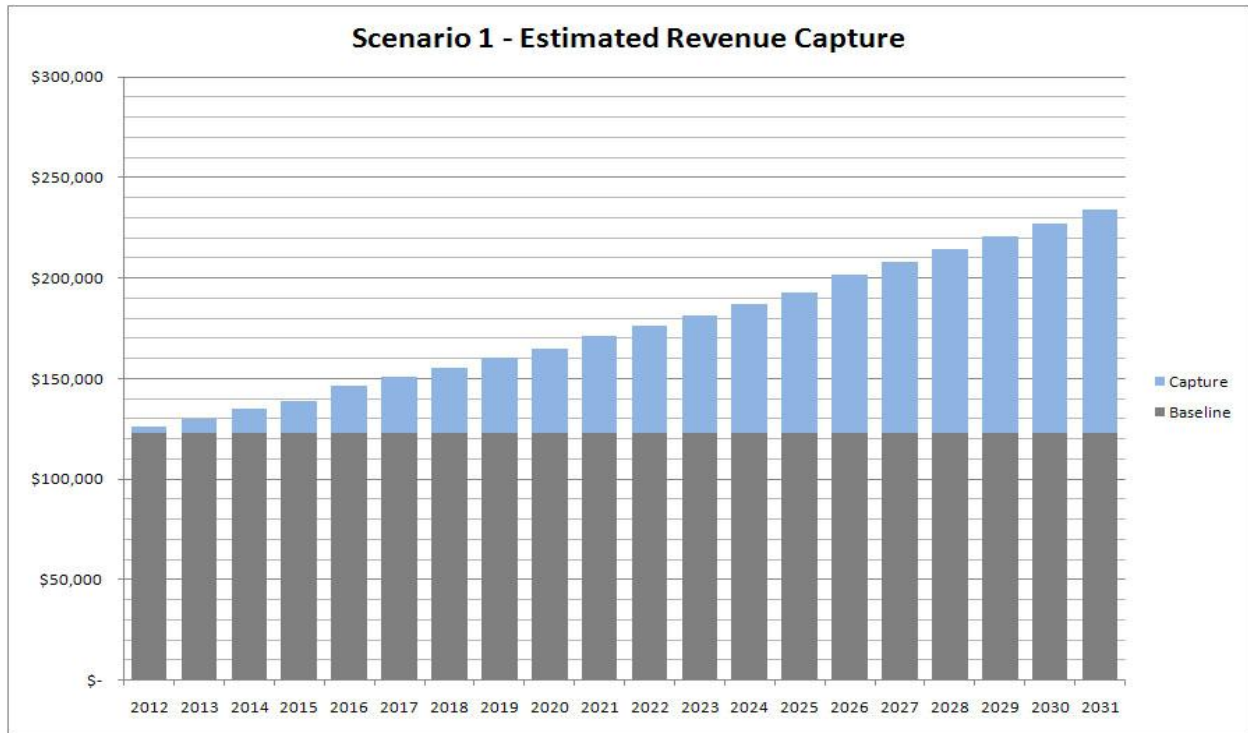
Scenario 1: Steady Growth with 3% NMA

This scenario assumes a steady increment increase in property values. Rather than calculating a normal market appreciation rate specific to Luna Pier, it utilizes a generic 3% inflation rate, which is applied each year over the 20 year course of the TIF. This 3% increase is applied evenly over the span of the TIF, ending with property values 80.6% higher than they are today. This type of scenario is useful for understanding how tax increment financing is affected by rising property values.

Table 4.1: Projected Revenue from Tax Increment Financing with Steady 3% Annual Growth

Year	Taxable Value	Tax Revenue	Baseline	Capture Value
2012	\$ 5,309,185	\$ 126,407	\$ 122,725	\$ 3,682
2013	\$ 5,468,461	\$ 130,199	\$ 122,725	\$ 7,474
2014	\$ 5,659,201	\$ 134,740	\$ 122,725	\$ 12,015
2015	\$ 5,828,977	\$ 138,783	\$ 122,725	\$ 16,058
2016	\$ 6,153,846	\$ 146,518	\$ 122,725	\$ 23,792
2017	\$ 6,338,462	\$ 150,913	\$ 122,725	\$ 28,188
2018	\$ 6,528,615	\$ 155,440	\$ 122,725	\$ 32,715
2019	\$ 6,724,474	\$ 160,104	\$ 122,725	\$ 37,378
2020	\$ 6,926,208	\$ 164,907	\$ 122,725	\$ 42,182
2021	\$ 7,183,503	\$ 171,033	\$ 122,725	\$ 48,308
2022	\$ 7,399,008	\$ 176,164	\$ 122,725	\$ 53,439
2023	\$ 7,620,978	\$ 181,449	\$ 122,725	\$ 58,723
2024	\$ 7,849,608	\$ 186,892	\$ 122,725	\$ 64,167
2025	\$ 8,085,096	\$ 192,499	\$ 122,725	\$ 69,774
2026	\$ 8,477,649	\$ 201,845	\$ 122,725	\$ 79,120
2027	\$ 8,731,978	\$ 207,901	\$ 122,725	\$ 85,175
2028	\$ 8,993,938	\$ 214,138	\$ 122,725	\$ 91,412
2029	\$ 9,263,756	\$ 220,562	\$ 122,725	\$ 97,837
2030	\$ 9,541,668	\$ 227,179	\$ 122,725	\$ 104,453
2031	\$ 9,827,918	\$ 233,994	\$ 122,725	\$ 111,269
			TOTAL:	\$ 1,067,161

Figure 4.1: Projected Revenue from Tax Increment Financing with Steady 3% Annual Growth



Findings

As shown in Table 4.1 and Figure 4.1, taxable values in the downtown district increase steadily, resulting in an increase in capture value. Under this scenario, Luna Pier would capture a total of \$1,067,161 over the 20 year span. However, since the city is relying only on incidental increases in property values for its capture, the TIF would generate only \$3,682 in the program’s first year. As the years progress, Luna Pier would receive larger tax revenue. Towards the final years of the TIF, Luna Pier would capture over \$100,000 per year.

Scenario 2: New Development

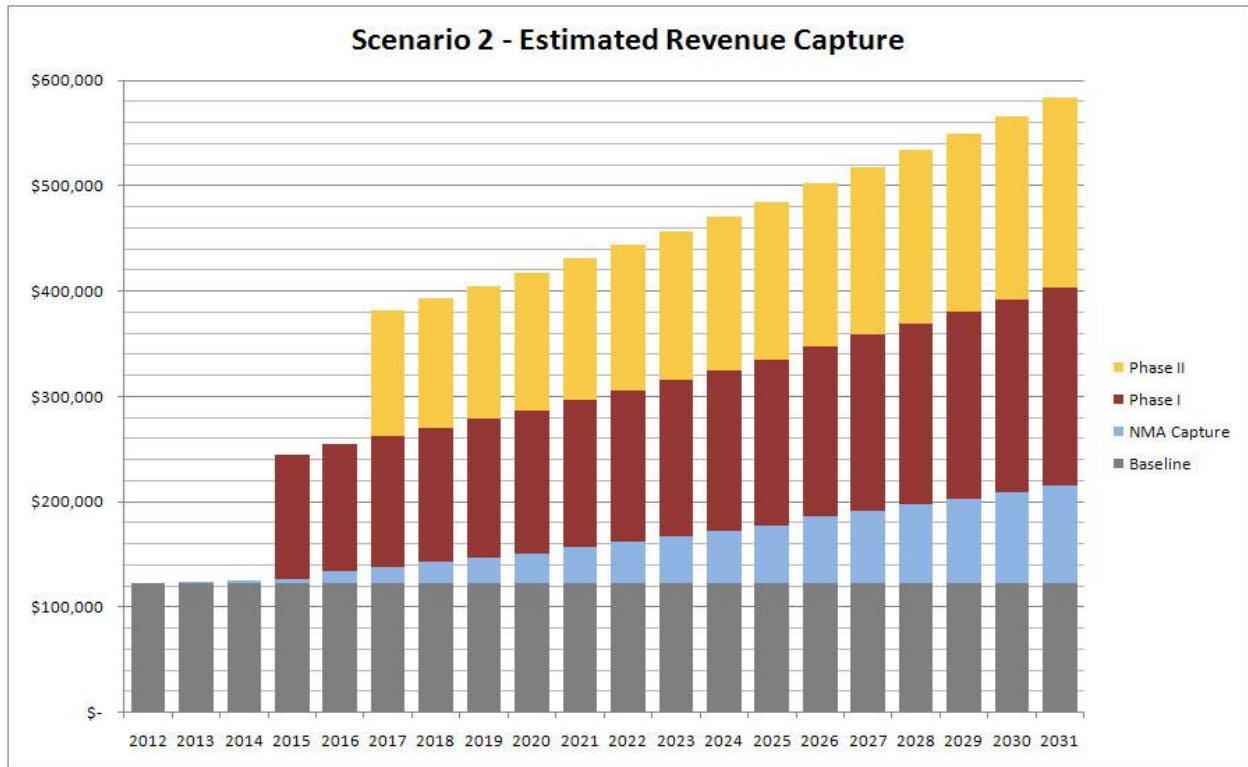
This scenario describes a quick infusion of revenue into the DDA via a large redevelopment project in Blocks 2 and 3. This scenario makes more modest assumptions about the NMA rate than Scenario 1, predicting that the taxable value of property will not begin to increase until after 2011. After 2011, the NMA rate slowly increases eventually reaching 3% by 2015, and from 2015 to the end of the TIF, a 3% NMA rate is used.

The principle characteristic of this scenario is a potential large-scale, mixed use development. Such a project could feature pedestrian oriented retail on the ground level, a restaurant with views of Lake Erie, and several dozen residential units on upper floors. The development occurs in two phases, each generating \$5,100,000 in taxable value. Phase I is assumed to occur in Block 3 (see Chapter 3 for block descriptions), replacing structures on the properties there, and will be completed by 2014 (thus entering TIF calculations beginning in 2015). Phase II is assumed to occur in Block 2 and has an expected completion date of 2016 (thus entering the TIF in 2017).

Table 4.2: Projected Annual Revenue from Tax Increment Financing with New Development

Year	Taxable Value	Tax Revenue	Baseline	Capture Value		
2012	\$ 5,154,549	\$ 122,725	\$ 122,725	\$ -		
2013	\$ 5,180,322	\$ 123,339	\$ 122,725	\$ 614		Extra Capture with Phase I
2014	\$ 5,257,405	\$ 125,174	\$ 122,725	\$ 2,449		
2015	\$ 5,336,266	\$ 127,052	\$ 122,725	\$ 4,327	\$ 117,146	Extra Capture with Phase II
2016	\$ 5,646,354	\$ 134,435	\$ 122,725	\$ 11,709	\$ 120,660	
2017	\$ 5,815,744	\$ 138,468	\$ 122,725	\$ 15,742	\$ 124,280	\$ 118,783
2018	\$ 5,990,217	\$ 142,622	\$ 122,725	\$ 19,896	\$ 128,008	\$ 122,346
2019	\$ 6,169,923	\$ 146,900	\$ 122,725	\$ 24,175	\$ 131,849	\$ 126,016
2020	\$ 6,355,021	\$ 151,307	\$ 122,725	\$ 28,582	\$ 135,804	\$ 129,797
2021	\$ 6,603,683	\$ 157,228	\$ 122,725	\$ 34,503	\$ 139,878	\$ 133,691
2022	\$ 6,801,794	\$ 161,945	\$ 122,725	\$ 39,219	\$ 144,075	\$ 137,702
2023	\$ 7,005,848	\$ 166,803	\$ 122,725	\$ 44,078	\$ 148,397	\$ 141,833
2024	\$ 7,216,023	\$ 171,807	\$ 122,725	\$ 49,082	\$ 152,849	\$ 146,088
2025	\$ 7,432,504	\$ 176,961	\$ 122,725	\$ 54,236	\$ 157,434	\$ 150,470
2026	\$ 7,805,479	\$ 185,841	\$ 122,725	\$ 63,116	\$ 162,157	\$ 154,984
2027	\$ 8,039,643	\$ 191,417	\$ 122,725	\$ 68,691	\$ 167,022	\$ 159,634
2028	\$ 8,280,832	\$ 197,159	\$ 122,725	\$ 74,434	\$ 172,033	\$ 164,423
2029	\$ 8,529,257	\$ 203,074	\$ 122,725	\$ 80,349	\$ 177,194	\$ 169,356
2030	\$ 8,785,135	\$ 209,166	\$ 122,725	\$ 86,441	\$ 182,509	\$ 174,436
2031	\$ 9,048,689	\$ 215,441	\$ 122,725	\$ 92,716	\$ 187,985	\$ 179,669
TOTAL:				\$ 794,360	\$ 3,343,640	\$ 5,552,867

Figures 4.2: Projected Annual Revenue from Tax Increment Financing with New Development



Findings

A new development that adds up to \$10,200,000 in taxable value to the downtown district would drastically increase the capture value. According to Table 4.2 and Figure 4.2, the City of Luna Pier would stand to gain \$5,552,867 throughout the 20 year duration with both phases completed, or \$3,343,640 with only Phase I complete. For the sake of comparison, if neither phase were built, the total capture value from the TIF would yield only \$794,360, roughly 14% of the highest possible capture value.

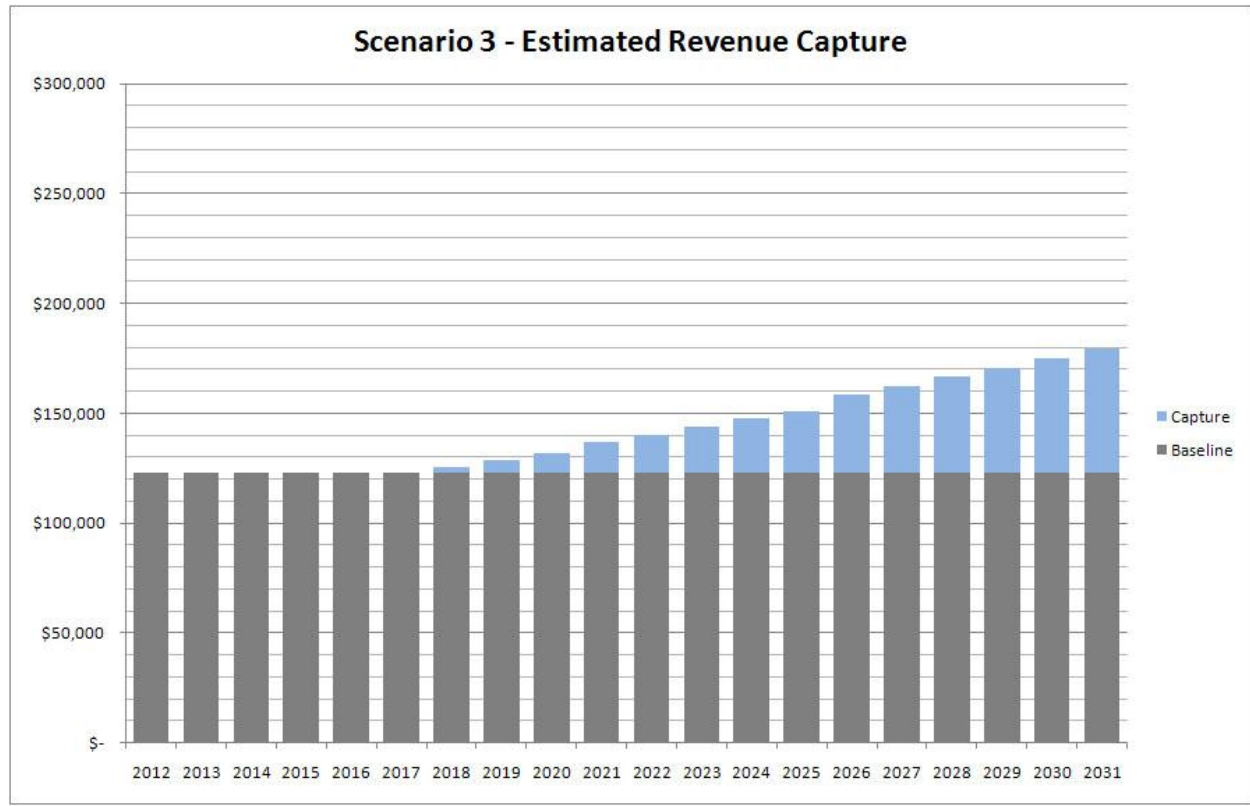
Scenario 3: Depressed Market

The last scenario presents the possibility of property values in Luna Pier decreasing. In this scenario, the practicum team uses information gathered from the Luna Pier’s assessor that predicts a negative NMA rate through 2014. The property value decreases by 4% in 2011. During 2012 and 2013, the property value decreases by 2% and 1%, respectively. In 2014, the property value remains stagnant at 0%. After 2014, property values begin to increase by 2.5% annually for remaining years of the TIF.

Table 4.3: Projected Annual Revenue from Tax Increment Financing due to Depressed Market

Year	Taxable Value	Tax Revenue	Baseline	Capture Value
2012	\$ 4,948,367	\$ 117,816	\$ 122,725	\$ -
2013	\$ 4,849,400	\$ 115,460	\$ 122,725	\$ -
2014	\$ 4,824,571	\$ 114,869	\$ 122,725	\$ -
2015	\$ 4,824,571	\$ 114,869	\$ 122,725	\$ -
2016	\$ 5,022,816	\$ 119,589	\$ 122,725	\$ -
2017	\$ 5,148,387	\$ 122,578	\$ 122,725	\$ -
2018	\$ 5,277,096	\$ 125,643	\$ 122,725	\$ 2,918
2019	\$ 5,409,024	\$ 128,784	\$ 122,725	\$ 6,059
2020	\$ 5,544,249	\$ 132,004	\$ 122,725	\$ 9,278
2021	\$ 5,753,271	\$ 136,980	\$ 122,725	\$ 14,255
2022	\$ 5,897,103	\$ 140,405	\$ 122,725	\$ 17,680
2023	\$ 6,044,530	\$ 143,915	\$ 122,725	\$ 21,190
2024	\$ 6,195,644	\$ 147,513	\$ 122,725	\$ 24,788
2025	\$ 6,350,535	\$ 151,201	\$ 122,725	\$ 28,475
2026	\$ 6,659,298	\$ 158,552	\$ 122,725	\$ 35,827
2027	\$ 6,825,781	\$ 162,516	\$ 122,725	\$ 39,791
2028	\$ 6,996,425	\$ 166,579	\$ 122,725	\$ 43,853
2029	\$ 7,171,336	\$ 170,743	\$ 122,725	\$ 48,018
2030	\$ 7,350,619	\$ 175,012	\$ 122,725	\$ 52,286
2031	\$ 7,534,385	\$ 179,387	\$ 122,725	\$ 56,662
			TOTAL:	\$ 401,079

Figure 4.3: Projected Annual Revenue from Tax Increment Financing due to Depressed Market



Findings

Normally, it is beneficial for a city to begin its TIF when property values are low so that the difference between the baseline and the capture value are higher. However, entering a TIF plan when property values are actually falling is counterproductive. As Table 4.3 shows, the TIF would make no revenue at all for the first six years of its existence because the actual tax revenue would be less than your established baseline. Under this scenario, even though property values begin to increase in 2014, the downtown district’s total taxable value needs time to recover from the decreases in property value. Once the property values recover and the remaining years of the TIF are completed, the total revenue generated throughout the 20 year duration of the TIF would equal \$401,079. If the City of Luna Pier still wished to begin a TIF immediately in these circumstances, it would need to borrow deep into the future to receive revenue for improvements to the downtown district.

Borrowing Scenarios

Although TIFs have been implemented on a year-by-year bases, a more common approach is for a city to “borrow against” anticipated tax revenues. In other words, the city receives the capture value money for a fiscal year, before that fiscal year is over. This method has both strengths and weakness. When a city borrows, the future capture value yields are potentially greater since construction can begin immediately on needed improvements that increase the

value of the district. The sooner such construction occurs, the more years the city will be able to enjoy the capture differential.

On the other hand, borrowing against expected revenues carries considerable risk. The difference between the most optimistic scenario, 2, and the most pessimistic, 3, is a factor of nearly 20. If the DDA assumes an overly optimistic scenario and takes out obligations beyond its means to repay, the city as a whole must assume the DDA’s liabilities, and could even go into debt.

To account for risk, a Debt Coverage Ratio (DCR) is typically used in borrowing; that is to say, the city only spends a certain percentage of what it thinks it can recoup. For example, if the city wished to finance a 20 – year bond and use Scenario 1 for its revenue projections, it would take the total 20-year capture from the table above (\$1,067,161) and multiply it by the DCR to estimate how much to borrow. For all projections below, an 80% DCR is used, a typical ratio for this type of investment. In this case, $\$1,067,161 \times 0.8 = \$853,729$, a sum in the vicinity of what the city could then borrow.

Table 4.4: Borrowing Against for 5, 10, 15 Year for all Scenarios

Borrowing Period	Scenario 1: 3% NMA rate	Scenario 2: New Development		Scenario 3: Depressed Market
		Phase I	Phase II	
5 years	\$ 50,417	\$ 205,524		\$ -
10 years	\$ 201,433	\$ 831,698	\$ 1,336,205	\$ 26,008
20 years	\$ 853,729	\$ 2,674,912	\$ 4,442,294	\$ 320,863

The Table 4.4 displays the amount of money Luna Pier could borrow over 5, 10, and 20-year periods by using the 80% DCR applied to each of the three scenarios previously described. Borrowing in accordance with Scenario 1 presents Luna Pier with revenue of \$50,417 for 5 years into the future. Borrowing 20 years into the future using the assumptions for Scenario 2 (with both phases built) would yield Luna Pier over \$4,000,000 of quick revenue. Since Scenario 3 depicts an initial fall in property values; the TIF would not generate any capture value during the first 5 years. In this scenario, a city would have to borrow against 10 or 20 years of prospective revenues in order to obtain money for immediate improvements.

Summary

Entering into a TIF plan carries fundamental risk, but with good data and direction, the rewards can be substantial. The capture value of the TIF is dependent on the property value of parcels within the downtown districts. If the property values increase, then the capture value increases; likewise, if the property values decrease, than the capture value will decrease. The general goal for any municipality is to establish a baseline that is as low as possible, then increase property values quickly to capture the largest amount of revenue. Depending on the assumptions used about appreciation and development, the amount of money captured by a TIF can vary, as presented in the three scenarios.

Chapter 7 – Comparable Beach Towns

In developing our recommendations for Luna Pier, it is important to examine other cities that serve as comparable beach towns. Selecting appropriate case studies allows the practicum team to gain knowledge of what tourist amenities and implementation strategies each of the following beach towns have used.

Selection Criteria

Before choosing cities to examine, the practicum team capped the case studies to 4; one local example (St. Ignace), one national (Lake George, NY), one international (Grand Bend, Ontario) and one that would illustrate the future vision of Luna Pier (South Haven, MI). With the exception of South Haven, it was decided that each case study should resemble certain characteristics of Luna Pier, including a coastal location, population under 4,000 people, proximity to a highway exit, presence of several attractions and events throughout the year, and a sustained population swell during the summer months.

St. Ignace, Michigan: Attracting Tourists through TIF

St. Ignace, with a population of 2,678, is located in Michigan’s Upper Peninsula, on I-75, a few miles north of the Mackinac Bridge. During the summer months and especially on the weekends, St. Ignace’s population swells (St. Ignace Chamber of Commerce, 2011).

Figure 5.1: Location of St. Ignace, Michigan



Source: City of St. Ignace, 2011

Figure 5.2: Downtown St. Ignace



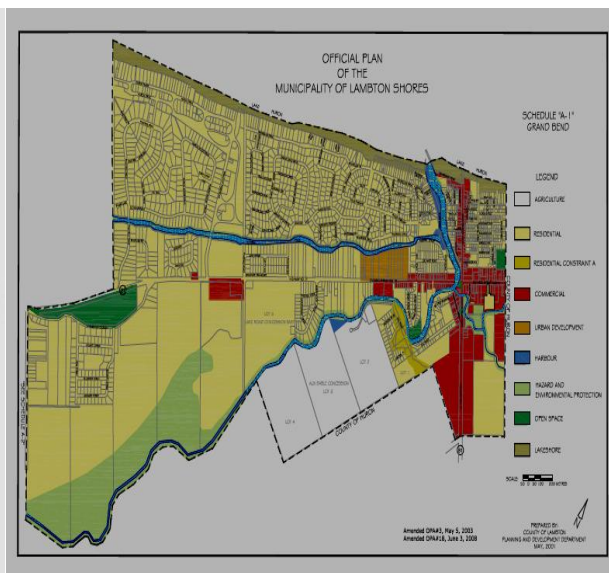
St. Ignace’s DDA outlined a detailed Economic Downtown Development Plan that created a TIF district with various goals. Some of these goals include: developing a downtown waterfront that enhances the beauty of the city and encourages cultural and entertainment activities that appeal to the community. To address these goals, the DDA undertook two major projects in the development plan: the shoreline promenade project (which became the Huron Boardwalk) and the Historical Theme Park Project. The Historical Theme Park Project included the Museum of Ojibawa Culture, landscaping of the Father Marquette Park, and the purchase of several parcels of land. The DDA also recognized the need for other ventures such as expanding the open space along the waterfront, developing the railroad corridor as a utility corridor, creating a winter/summer recreational trail, and installing further streetscaping features such as visually appealing sidewalks and light fixtures (City of St. Ignace, 2011).

Grand Bend, Ontario: Beach and Marina Tourism

Grand Bend is a community within the municipality of Lambton Shores, Ontario. Grand Bend is home to 3,535 year-round residents but the population swells to 50,000 people during the summer. Lambton Shores is a successful tourist municipality that has a reputation of a beach town (Canada Statistics, 2007).

Figure 5.3 - Location of Grand Bend, Ontario

Figure 5.4 – Downtown Grand Bend, Ontario



Source: Ontario Ministry of Environment and Municipality of Lambton Shores

Though it is a small town, Grand Bend created a downtown that is attractive for tourists by incorporating a campground, marina, beach, seasonal events and festivals, permanent entertainment, and attractions with a variety of places to dine. One of Grand Bend’s most successful attractions is its newly redeveloped beachfront which contains features such as new street lamps and pedestrian-friendly sidewalks leading to the beach. Near the beach is an open parcel, often used for community entertainment. Another notable feature of Grand Bend is the marina that leads to Lake Huron. The marina consists of a 6 foot deep channel containing 35

transient and 30 seasonal boat slips which provide access to Lake Huron for residents and visitors (Ontario Ministry of Environment and Municipality of Lambton Shores).

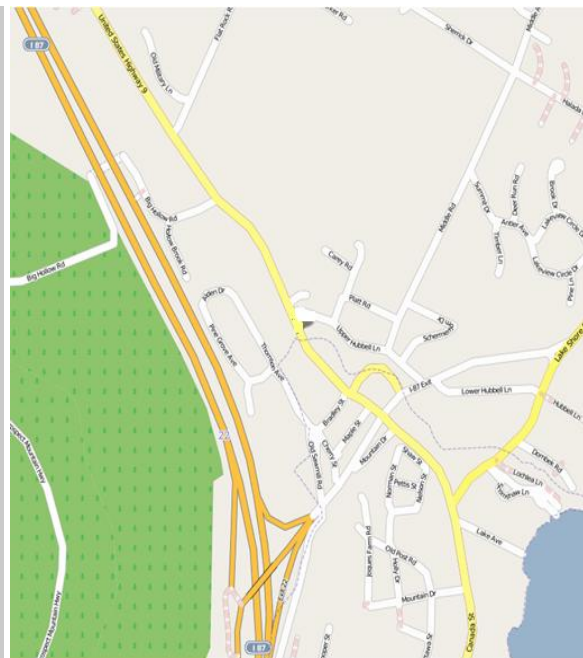
Lake George, New York: Tourism and Placemaking

The City of Lake George is located on the western side of Interstate 87 in the eastern side of the State of New York. In 2009, it contained 3,578 people. Similar to Luna Pier, Lake George was once a magnet for the rich and famous with recurring visits from members of the Roosevelt, Van Rensselaer, Vanderbilt, Rockefeller and Whitney families (Lake George Gateway Plan, 2010).

Figure 5.3: Location of Lake George, New York



Figure 5.4: Downtown Lake George



Source: Best Places to Live, 2010 and Travel Blog, 2011

Even though the population is small, in the summertime the population can swell to 50,000, especially in the Lake George Village Area where tourists and residents often enjoy weekly firework shows, street magicians and musicians, boardwalk style food venues, special events, and boating.

In December of 2010, Lake George developed a plan called the Lake George Route 9 Gateway Plan. This plan lays out criteria for transforming the Lake George main street into a “complete street,” including sidewalks, medians, landscaping, signage, gateways, lighting, crosswalks, access management, sustainable water filtration systems, and alternative transit and snowmobile access. The estimated total cost for this project is \$5,345,223 (Lake George Gateway Plan, 2010).

South Haven, Michigan: Tourist Marketing and Grants

South Haven is a beach town located on Lake Michigan in Southwest Michigan and contains a year round population of 5,145. During the summer months, South Haven’s population swells with visitors from the Midwest (Go South Haven, 2008).

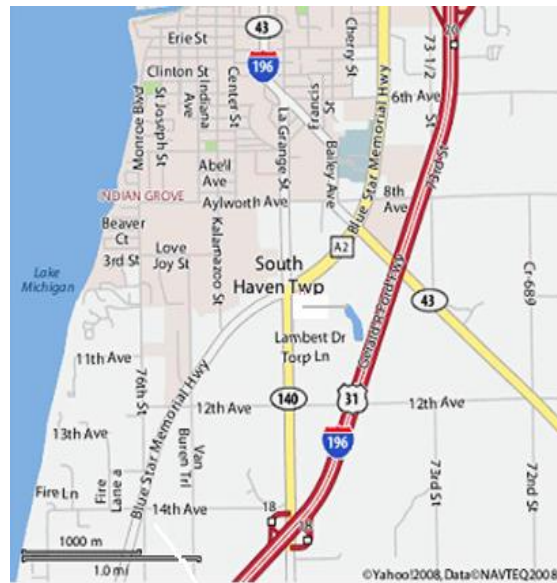
Figure 5.5: Location of South Haven, Michigan

Michigan



Source: Best Places, 2010

Figure 5.6: Downtown South Haven



Source: Great Lakes Inns and Suites, 2010

Through the years, South Haven has successfully marketed itself to tourists using various forms of advertising. Among these is a high quality, detailed visitor’s guide that includes maps, shopping, dining, accommodation options, and outlines the numerous recreational activities such as the beach, fishing, and golfing. Additionally, the city’s marketing strategy includes publishing lists of upcoming events and festivals such as the blueberry festival.

Another contributing factor to South Haven’s success is the grants it receives. Most recently the city was awarded a Façade Grant from the Michigan Economic Development Corporation (MEDC) for \$245,644, and another from MEDC for \$750,000 to implement a project that would connect bike trails to the downtown. Other grants include a \$375,000 grant from the Michigan Department of Transportation for bridge repair and an \$814,200 grant from Michigan Waterways Commission for construction of a new marina club house.

Summary

After the case studies were determined and analyzed, they could be compared to Luna Pier

Table 6.1: Comparative Data for Case Studies

	Luna Pier, MI	St. Ignace, MI	Lake George, NY	Grand Bend, Ontario	South Haven, MI
General					
Population 2009	1,436 (2010)	2,322	973	995 (yr 2001)	5,145
County population	152,021	10,591	66,021	126,971	78,227
Population change since 2000?	-3.2%	-13.3%	-1.2%	3.1% (since 1996)	2.5%
Summer Population Swell?	No	Yes	Yes	Yes	Yes
Traffic					
Located near interstate?	Yes	Yes	Yes	Yes	Yes
Average Annual daily traffic	48,800	10,600	24,000	20,000	19,700
ATTRACTIONS					
Beach	Yes	Yes	Yes	Yes	Yes
Large Events/festivals (at least 1 per season)	No	Yes	Yes	Yes	Yes
Multiple dining options	No	Yes	Yes	Yes	Yes
Entertainment	No	Yes	Yes	Yes	Yes
Campground	Yes	Yes	Yes	Yes	Yes
Marina	Yes	Yes	Yes	Yes	Yes

Beach towns throughout Michigan, the United States, and Canada offer perspectives on tourist amenities that are beneficial to Luna Pier and strategies for implementing methods to attract tourists. St. Ignace, Michigan provides insight on how Luna Pier can utilize a TIF to create a historically themed park and expand greenspace. Grand Bend, Ontario enhances its beachfront and marina by improving features such as street lamps and sidewalks. Lake George utilizes gateways, wayfinding signs and lighting to create a sense of place. Finally, South Haven employs marketing schemes to draw tourists to the region, accompanied by grants that help it fund projects that are attractive to tourists.

Chapter 8 – Summary of Findings

Assets

Luna Pier potentially faces several challenges in the coming years. Relying on a non-diverse tax base for the city's funding threatens the economic stability of the community. Certain findings have the opportunity to mitigate future funding threats for the city. The following is a list of the city's assets, in the order described in the report.

- ❖ Background
 - Historically known as a boaters' destination
 - Located next to Lake Erie and a major interstate highway
 - Proximity to the large population centers of Detroit and Toledo
 - Expected population growth
- ❖ Tourism
 - Located in Michigan's most popular region for tourism
 - Attracts an active young age group of 18-34 year olds.
 - Numerous tourist amenities currently in place
- ❖ Market Growth Potential
 - Potential growth for several types of recreation and retail businesses
- ❖ Tax increment financing
 - Potential to capture large amounts of revenue to begin infrastructure improvements quickly

Concerns

Luna Pier faces several potential threats. The city relies for funding on a tax base that lacks diversity. As identified over the course of this report, these are the factors that hinder the city's ability to overcome this limitation.

- ❖ Background
 - Non-diverse population
 - Population declining since 1990
 - Income below county and state average
- ❖ Tourism
 - The young age cohort of 18 to 34 year olds spends the least amount of money among all travelers
 - A lack of tourist-oriented business
- ❖ Block Assessment
 - Only a small portion of blocks meet criteria for walkability, aesthetics, and streetscaping
 - Threat of deterioration of vacant properties
- ❖ Market Growth
 - Potential lack of appeal to prospective businesses
 - Competition for niche businesses from surrounding areas
- ❖ Tax increment financing
 - Possibility of property value decline, leading to indebtedness

Chapter 9 – Recommendations

The practicum team formulated recommendations on developing Luna Pier into a beach town with a diverse tax base. Recommendations for developing Luna Pier into a beach town include aesthetic upgrades, enhancing tourist activities, and promoting tourist businesses. To diversify Luna Pier’s tax base, businesses that cater to both local residents and incoming tourists were identified. Many of the recommendations are based on revenue captured from the TIF.

TIF Implementation

Dependent on its economic outlook, Luna Pier needs to determine when to enact a TIF plan. By enacting a TIF and borrowing against future returns, Luna Pier can obtain funding for necessary projects more quickly than by waiting for tax revenue to accumulate. Given the three scenarios presented in Chapter 6, the city should choose to borrow with due diligence based on the city’s future economic health.

Physical Improvements to Blocks

The bulk of the improvements suggested in these recommendations are located in Blocks 2, 3, and 12. The decision to focus on these blocks was based in part on the results of the block assessment, and in part on their centrality (all located along Luna Pier Road) and thus importance in Luna Pier’s branding and place-making efforts. Additionally, this area could increase in importance due to the potential presence of a ferry stop in Luna Pier and the associated increase in pedestrian traffic.

Of the highest priority is Block 2 (the area bounded by Elm Street to the north, Luna Pier Road to the south, Northern Avenue to the east, and Harold Drive to the west). The Block Assessment identified that this block could be improved in several categories. As highlighted in Chapter 4, many sidewalks in Block 2 are not even or contiguous from parcel to parcel, and lack adequate buffering from the street. The lack of aforementioned features is inconsistent with the characteristic of tourist-oriented towns, as presented in Lake George’s Route 9 Gateway Plan. While sidewalks should take priority, other streetscaping should be implemented in Block 2 as resources allow:

- Walkability improvements
 - Crosswalks
 - Curbs & buffering from the street
 - Street furniture (benches and planters)
- Aesthetic improvements
 - Themed lighting
 - Façade improvements
 - Landscaping
- Place-making
 - Signage, wayfinding, and a nautical theme



Tourist Gateway



Outdoor Seating

Examples of Infrastructure Designed for Tourist Appeal



Blocks 3 and 12, located to the east and west of Block 2 respectively, are secondary priorities. As the downtown district grows and a greater variety of businesses are interested in investing in the city, these blocks are the most likely venues for commercial expansion. Growth can be encouraged in Blocks 3 and 12 by making improvements to the streetscape and creating greater pedestrian appeal. The same list of priorities given for Block 2 also applies to these blocks.

Park

Based on feedback from community officials and citizen committees, this plan recommends several other uses for TIF revenue. Transforming the park in Block 13 from a children's area into a more mature memorial park with space for live performances and events was highlighted as important with public support. One park fixture found in the city's master plan and in a case study (Grand Bend, Ontario) was an interactive fountain, which can be an iconic landmark for tourists. To the extent that these improvements will encourage business development and tourist interest, they should be encouraged through TIF funding, as resources allow.

Beach

To promote tourist activity in Luna Pier the beach front must be redeveloped. As illustrated in the case study of Grand Bend, there is high tourist demand for a well-developed beach front. Grand Bend utilizes lighting along the beach attract tourists to the beach district at night. Luna Pier should enact similar improvements to their beach. Other improvements Luna Pier should consider have been implemented by St. Ignace. For example, St. Ignace utilized TIF revenue to redevelop its beach to include a boardwalk.

Incentives

While the most conventional application of TIF captured revenue remains physical improvements to an area, cities have variously used TIF revenue for business incentives, marketing, and even event planning. While physical infrastructure should remain the core recipient of TIF revenue, the City of Luna Pier should remain open to other potential uses for the TIF as opportunities arise, to such an extent as these are consistent with the city's master plan. In particular, any opportunity to attract new development with incentives via TIF revenue should be carefully considered. To do this, Luna Pier should cooperate with private investors and businesses looking to locate in Luna Pier, and offer incentives to attract business that would be in demand by tourists. The following section provides more detail on the most economically viable businesses for the study area.

Developing business for a tourist market

To reach their goal of establishing a diversified economic base Luna Pier needs to utilize vacant buildings for future businesses that are popular amongst local residents within a 1 and 3 mile trade area. In addition to being in demand by the local population, the following businesses have the opportunity to cater to the needs of tourists.

- Clothing and Clothing Accessories
- Shoe Stores
- Sporting Goods Store
- Book, Music and other Hobby Stores

Residents within the 3 mile trade area also spend more money than the national average on water sports and clothing accessories. Businesses that focus on water sports would be a good fit in Luna Pier due to its Lake Erie access. In addition, these two businesses could also cater to the tourist market for water skiing, boating, and fishing.

“First Taste of Michigan”

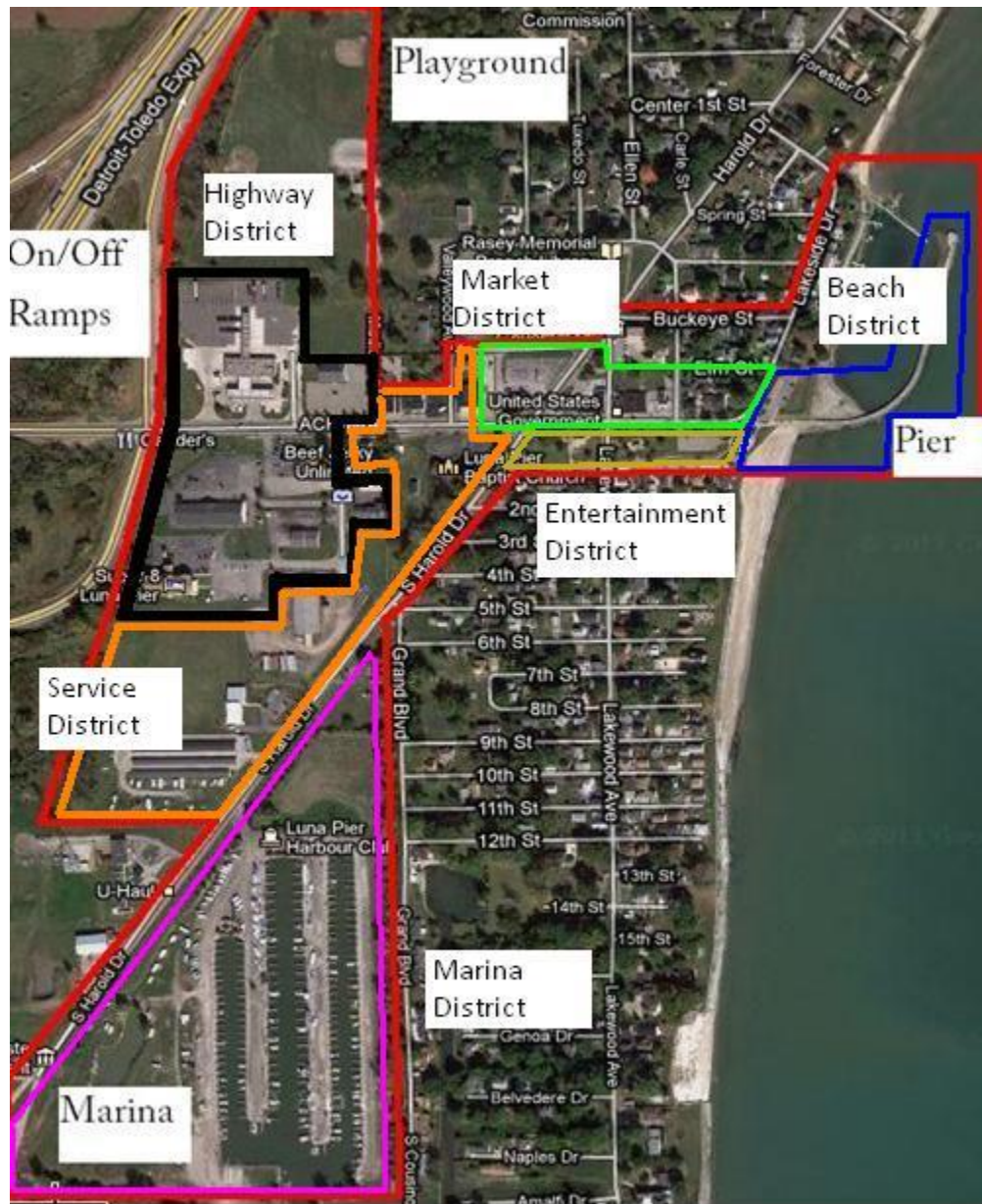
Based on feedback from city officials, one suggested retail use in the city could be a Michigan-themed specialty store known as the “First Taste of Michigan.” The city's location directly off I-75 only six miles from the state border offers the opportunity to attract visitors from outside the state. The highway exit for Luna Pier also comes before the state's official visitor center, giving the city an opportunity to capitalize on the state's tourist appeal. The “First Taste of

Michigan” could offer Michigan products including cherries, peaches, pasties, beer and wine, baked goods, souvenirs, and other goods that represent the state. If necessary, funding from the TIF could be used to facilitate opening this store.

Branding

For Luna Pier to draw a higher level of tourist interest, the city should brand itself with an identity. Branding can be accomplished by establishing districts within the study area. Luna Pier should create the following districts: market, beach, entertainment, service, highway, and marina. After the boundaries are determined, the city needs to brand each district by placing signs with slogans and wayfinding at the border of districts. See Appendix VIII for further detail on the use of districts in branding.

Figure 9.1: Potential Future Districts within the Study Area



Tourist Activities

As indicated in the case study of Lake George, New York, Luna Pier should host and promote a variety of events, festivals and year-round attractions. As presented in Chapter 3, Luna Pier should focus on beach activities, boating and sailing, camping, festivals and crafts, hunting, and fishing.

Marketing

Luna Pier should be proactive and aggressive in marketing itself; this may require hiring a marketing consultant that can attract 18 to 34 year olds from Michigan and the Midwest states

to the Luna Pier region. Incorporating the “First Taste of Michigan” slogan to out-of-state tourists may create a large influx of tourist revenue because tourists entering Southeast Michigan typically spend about \$400 a day.

Placing a billboard on northbound I-75 could attract those who were not originally planning on stopping. This billboard would supply the city an opportunity to showcase its strengths to those unfamiliar with the area. For example, advertising the beach and lighthouse (once constructed) along with the words “First Taste of Michigan” could portray a simple idea to passers-by. The slogan could also be reinforced by placing it on newsletters, signs, and other public documents.

As discussed in Chapter 7, South Haven actively markets itself towards tourism by advertising with a seasonal magazine highlighting activities and attractions. Luna Pier should create a similar magazine highlighting the beach, pier and water sport activities. These seasonal magazines can be distributed throughout Michigan Welcome Centers.

Grants

In its current state, Luna Pier may be able to capitalize on a number of state grants. One of these grants is a Community Development Block Grant (CDBG) under the Michigan Economic Development Corporation (MEDC). The CDBG offers three grant programs including: infrastructure, façades, and signature building grant. Applying for infrastructure and block grants could provide cities with an opportunity for money to repair, replace, or furnish sidewalks and façade improvements. This could be a cost effective way to begin the process of beautification within the study area. The signature building grant could also be utilized in Luna Pier. A signature building can be described as a focal point for commercial rehabilitation within the downtown area that provides significant future contributions (MEDC, 2011). This grant may provide additional funding for the “First Taste of Michigan” building.

Another contributing factor to South Haven’s success is the grants it received. Most recently it was awarded a Façade Grant from MEDC of \$245,644, and another from MEDC of \$750,000 for a project that would connect some main trails to the downtown. Other grants include: a \$375,000 grant from MDOT for bridge repair and an \$814,200 grant from Michigan Waterways Commission for construction of a new club house.

Closing Remarks

It was the responsibility of the practicum team to develop recommendations for Luna Pier based on creating a tourism industry that diversifies its tax base. Tourists in Southeast Michigan tend to be between 18 and 34 years old and are mostly from Michigan and the Midwest. These tourists enjoy water activities such as boating and fishing. Luna Pier has the potential to capitalize on tourist activities due to their geography. However, Luna Pier the current physical condition of Luna Pier is not conducive to a tourism industry. For Luna Pier to successfully create a tourism industry, aesthetic upgrades to current infrastructure need to be implemented, especially in Blocks 2, 3, and 12. This process can be implemented by utilizing revenue captured from TIF. After this process, it is strongly recommended that Luna Pier attracts clothing, clothing accessory, and sporting goods stores.

Appendices

Appendix I: Current Planning of Luna Pier Master Plan

Before any of the goals in the aforementioned scope were met, the Luna Pier practicum team studied the city’s 2010 Master Plan. The practicum team focused on tourism and economic goals that are related to the scope. As stated in the master plan, Luna Pier is seeking to “diversify its economy and provide a strong stable tax base for future generations” and “maintain an attractive community character built on nautical and coastal Great Lakes architectural themes.”

Luna Pier’s Master Plan Goals

	Goals
Design	Luna Pier will prepare design guidelines to advance general architectural themes in private development: including building architecture, landscaping and other design elements.
	Luna Pier will seek to incorporate nautical themes in future public buildings, street furniture, lighting, and signage.
	Luna Pier will adopt a consistent design for new community signage. Following adoption of a preferred design, new gateway, directional and identification signage will replace existing signage and will be incorporated into new construction projects.
Economic	The City of Luna Pier recognizes a need to “create a brand” that is rooted in authenticity and uniqueness. Steps will be taken to create and maintain this brand that is built on the notion that Luna Pier is “a first taste of Michigan.” The term “first taste” is meant literally and figuratively since Luna Pier so uniquely positioned in the State.
	Luna Pier will directly build (or support private efforts to build) a new lighthouse, new pier and upgraded Luna Pier Memorial Park.
	Luna Pier will work to recruit and assemble a commercial base of activity.
	Promote and develop Luna Pier’s unique offerings to tourists, visitors and area residents through partnerships with the Monroe County Convention and Visitors Bureau, State of Michigan and other tourism organizations

Tourism	Luna Pier will work to recruit and assemble a commercial base of activity.
	Promote and develop Luna Pier’s unique offerings to tourists, visitors and area residents through partnerships with the Monroe County Convention and Visitors Bureau, State of Michigan and other tourism organizations
	The Turtle Island Lighthouse will be rebuilt as an iconic and functional "placemaking" feature in downtown Luna Pier.
	Improvements to Luna Pier Memorial Park should be programmed. The City of Luna Pier will apply for funds from the Michigan Department of Natural Resources to help fund several park improvements. Redevelopment of the Luna Pier Memorial Park will take place in a manner that honors existing memorial features and structures.
	Improvement to Municipal Boat Launch
	Luna Pier will develop a destination at the Erie State Game Area.
	The existing non-motorized trail system in Luna Pier will be expanded to include a "loop system" at both ends of the City and will serve to connect features so as to create possible destinations.

The goals presented in above, have helped Luna Pier to be proactive in initiating the transformation of the downtown distinct into that of a more vibrant tourist destination. The practicum team will use the aforementioned Master Plan goals as a guide throughout the report.

Appendix II: Design Vision

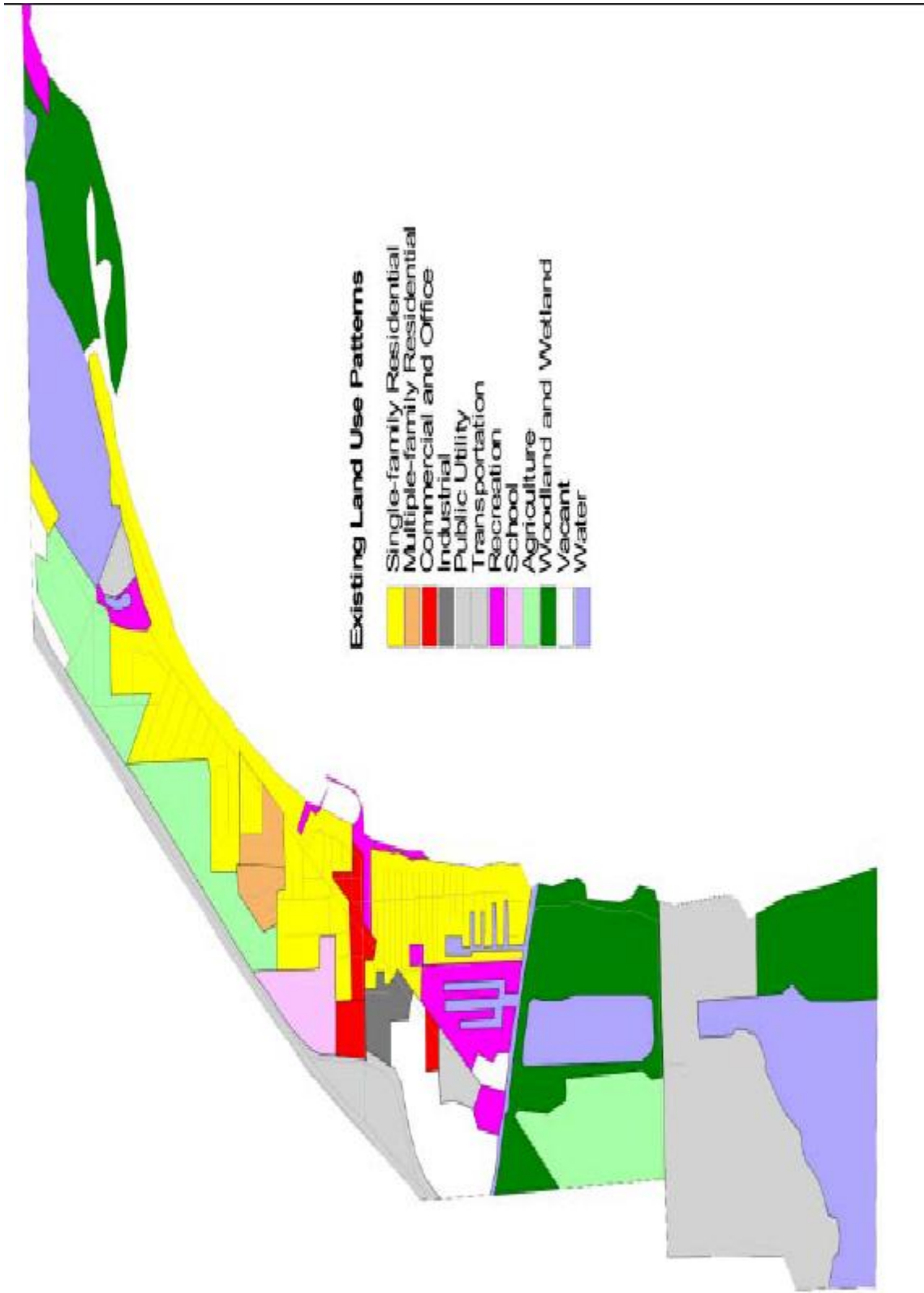
Similar to using the city’s master plan as a guide, the Luna Pier practicum team used the city’s design codes as a guide for the report. Cities usually enact design ordinances that are used to guide the city’s buildings, signs, landmarks, pedestrian connections, and streetscape as having a common visual theme for placemaking. These design ordinances are issued to provide unique aesthetic characteristics to a community. Luna Pier has the intention to enact design guidelines that dictates a nautical theme within the city.

Design Guidelines for Luna Pier

Theme	Encourage	Discourage
Outdoor Spaces	Balconies, terraces, outdoor cafes	Outdoor spaces that infringe on pedestrian movement
Color & Texture	Use beige, brown and blue colors. Use multiple colors per building. Add texture on siding.	Single color use on building.
Plant Material	Native species	Invasive species
Nautical Imagery	Subtle hint of nautical building theme	Overusing multiple architecture features to express theme
Michigan Identity	Subtle hint of Michigan identity	Overusing multiple features to express Michigan identity
Signage	Use a subtle hint of Michigan Identity or nautical themes	Overuse of nautical theme

The above represents the guidelines that Luna Pier will follow when creating a nautical theme downtown. These guidelines were created by Poggemeyer Design Group, Inc. in respect to the desires of the 2010 Luna Pier master plan.

Appendix III: Existing and Future Land Use Maps for Luna Pier



Appendix IV: Market Growth Potential

Luna Pier, MI Ring: 1 mile radius					Lati Longit
Summary Demographics					
2010 Population		1,547			
2010 Households		631			
2010 Median Disposable Income		\$39,756			
2010 Per Capita Income		\$23,084			
Industry Summary					
	Demand (Retail Potential)	Supply (Retail Sales)	Retail Gap (Demand - Supply)	Surplus / Leakage Factor	
Total Retail Trade and Food & Drink (NAICS 44-45, 722)	\$14,209,017	\$1,768,500	\$12,440,517	77.9	
Total Retail Trade (NAICS 44-45)	\$12,377,424	\$975,400	\$11,402,024	85.4	
Total Food & Drink (NAICS 722)	\$1,831,593	\$793,100	\$1,038,493	39.6	
Industry Group					
	Demand (Retail Potential)	Supply (Retail Sales)	Retail Gap	Surplus / Leakage Factor	
Motor Vehicle & Parts Dealers (NAICS 441)	\$2,848,396	\$0	\$2,848,396	100.0	
Automobile Dealers (NAICS 4411)	\$2,493,666	\$0	\$2,493,666	100.0	
Other Motor Vehicle Dealers (NAICS 4412)	\$275,058	\$0	\$275,058	100.0	
Auto Parts, Accessories, and Tire Stores (NAICS 4413)	\$79,672	\$0	\$79,672	100.0	
Furniture & Home Furnishings Stores (NAICS 442)	\$277,925	\$0	\$277,925	100.0	
Furniture Stores (NAICS 4421)	\$188,098	\$0	\$188,098	100.0	
Home Furnishings Stores (NAICS 4422)	\$89,827	\$0	\$89,827	100.0	
Electronics & Appliance Stores (NAICS 443/NAICS 4431)	\$281,872	\$0	\$281,872	100.0	
Bldg Materials, Garden Equip. & Supply Stores (NAICS 444)	\$589,885	\$47,365	\$542,520	85.1	
Building Material and Supplies Dealers (NAICS 4441)	\$510,529	\$0	\$510,529	100.0	
Lawn and Garden Equipment and Supplies Stores (NAICS 4442)	\$79,356	\$47,365	\$31,991	25.2	
Food & Beverage Stores (NAICS 445)	\$2,571,772	\$766,552	\$1,805,220	54.1	
Grocery Stores (NAICS 4451)	\$2,283,666	\$0	\$2,283,666	100.0	
Specialty Food Stores (NAICS 4452)	\$97,879	\$327,037	-\$229,158	-53.9	
Beer, Wine, and Liquor Stores (NAICS 4453)	\$190,227	\$439,515	-\$249,288	-39.6	
Health & Personal Care Stores (NAICS 446/NAICS 4461)	\$447,547	\$0	\$447,547	100.0	
Gasoline Stations (NAICS 447/NAICS 4471)	\$2,577,277	\$0	\$2,577,277	100.0	
Clothing and Clothing Accessories Stores (NAICS 448)	\$401,580	\$0	\$401,580	100.0	
Clothing Stores (NAICS 4481)	\$279,130	\$0	\$279,130	100.0	
Shoe Stores (NAICS 4482)	\$52,017	\$0	\$52,017	100.0	
Jewelry, Luggage, and Leather Goods Stores (NAICS 4483)	\$70,433	\$0	\$70,433	100.0	
Sporting Goods, Hobby, Book, and Music Stores (NAICS 451)	\$198,717	\$0	\$198,717	100.0	
Sporting Goods/Hobby/Musical Instrument Stores (NAICS 4511)	\$150,699	\$0	\$150,699	100.0	
Book, Periodical, and Music Stores (NAICS 4512)	\$48,018	\$0	\$48,018	100.0	

Luna Pier, MI				
Ring: 3 miles radius				
Summary Demographics				
2010 Population	3,892			
2010 Households	1,517			
2010 Median Disposable Income	\$46,629			
2010 Per Capita Income	\$25,985			
Industry Summary				
	Demand	Supply	Retail Gap	Surplus / Leakage
	(Retail Potential)	(Retail Sales)	(Demand - Supply)	Factor
Total Retail Trade and Food & Drink (NAICS 44-45)	\$38,663,600	\$5,122,555	\$33,541,045	76.6
Total Retail Trade (NAICS 44-45)	\$33,581,493	\$3,381,365	\$30,200,128	81.7
Total Food & Drink (NAICS 722)	\$5,082,107	\$1,741,190	\$3,340,917	49.0
Industry Group				
	Demand	Supply	Retail Gap	Surplus / Leakage
	(Retail Potential)	(Retail Sales)		Factor
Motor Vehicle & Parts Dealers (NAICS 441)	\$7,743,333	\$1,601,041	\$6,142,292	65.7
Automobile Dealers (NAICS 4411)	\$6,818,916	\$287,447	\$6,531,469	91.9
Other Motor Vehicle Dealers (NAICS 4412)	\$702,467	\$1,264,525	-\$562,058	-28.6
Auto Parts, Accessories, and Tire Stores (NAICS 4413)	\$221,950	\$49,069	\$172,881	63.8
Furniture & Home Furnishings Stores (NAICS 442)	\$809,565	\$0	\$809,565	100.0
Furniture Stores (NAICS 4421)	\$548,508	\$0	\$548,508	100.0
Home Furnishings Stores (NAICS 4422)	\$261,057	\$0	\$261,057	100.0
Electronics & Appliance Stores (NAICS 443/NAICS 4431)	\$777,633	\$20,973	\$756,660	94.7
Bldg Materials, Garden Equip. & Supply Stores (NAICS 444)	\$1,655,389	\$170,512	\$1,484,877	81.3
Building Material and Supplies Dealers (NAICS 4441)	\$1,448,318	\$0	\$1,448,318	100.0
Lawn and Garden Equipment and Supplies Stores (NAICS 4442)	\$207,071	\$170,512	\$36,559	9.7
Food & Beverage Stores (NAICS 445)	\$6,949,390	\$1,262,271	\$5,687,119	69.3
Grocery Stores (NAICS 4451)	\$6,165,365	\$355,874	\$5,809,491	89.1
Specialty Food Stores (NAICS 4452)	\$264,839	\$327,037	-\$62,198	-10.5
Beer, Wine, and Liquor Stores (NAICS 4453)	\$519,186	\$579,360	-\$60,174	-5.5
Health & Personal Care Stores (NAICS 446/NAICS 4461)	\$1,192,652	\$0	\$1,192,652	100.0
Gasoline Stations (NAICS 447/NAICS 4471)	\$6,815,746	\$0	\$6,815,746	100.0
Clothing and Clothing Accessories Stores (NAICS 448)	\$1,117,034	\$26,840	\$1,090,194	95.3
Clothing Stores (NAICS 4481)	\$776,300	\$26,840	\$749,460	93.3
Shoe Stores (NAICS 4482)	\$141,801	\$0	\$141,801	100.0
Jewelry, Luggage, and Leather Goods Stores (NAICS 4483)	\$198,933	\$0	\$198,933	100.0
Sporting Goods, Hobby, Book, and Music Stores (NAICS 449)	\$548,394	\$59,224	\$489,170	80.5
Sporting Goods/Hobby/Musical Instrument Stores (NAICS 4491)	\$416,830	\$59,224	\$357,606	75.1
Book, Periodical, and Music Stores (NAICS 451)	\$131,564	\$0	\$131,564	100.0

Appendix V: Recreation Expenditures

Luna Pier, MI

Longitude: -
83.44347

Ring: 1 mile radius

Demographic Summary	2010	2015
Population	1,547	1,564
Households	631	642
Families	429	435
Median Age	38.2	38.2
Median Household Income	\$54,279	\$61,062

	Spending Potential Index	Average Amount Spent	Total
Entertainment/Recreation Fees and Admissions	77	\$478.59	\$301,990
Admission to Movies, Theater, Opera, Ballet	75	\$113.75	\$71,778
Admission to Sporting Events, excl. Trips	83	\$49.69	\$31,352
Fees for Participant Sports, excl. Trips	79	\$83.75	\$52,845
Fees for Recreational Lessons	75	\$102.36	\$64,590
Membership Fees for Social/Recreation/Civic Clubs	78	\$128.54	\$81,108
Dating Services	65	\$0.50	\$317
Rental of Video Cassettes and DVDs	83	\$34.26	\$21,615
Toys & Games	85	\$124.27	\$78,412
Toys and Playground Equipment	86	\$120.97	\$76,334
Play Arcade Pinball/Video Games	82	\$1.55	\$977
Online Entertainment and Games	75	\$1.75	\$1,102
Recreational Vehicles and Fees	83	\$268.01	\$169,114
Docking and Landing Fees for Boats and Planes	83	\$5.88	\$3,713
Camp Fees	88	\$25.52	\$16,101
Purchase of RVs or Boats	83	\$230.79	\$145,627
Rental of RVs or Boats	68	\$5.82	\$3,673
Sports, Recreation and Exercise Equipment	67	\$121.94	\$76,941
Exercise Equipment and Gear, Game Tables	69	\$56.71	\$35,786
Bicycles	75	\$14.78	\$9,325
Camping Equipment	35	\$5.04	\$3,181
Hunting and Fishing Equipment	58	\$22.41	\$14,143
Winter Sports Equipment	74	\$4.80	\$3,027
Water Sports Equipment	99	\$6.60	\$4,164
Other Sports Equipment	96	\$9.10	\$5,739
Rental/Repair of Sports/Recreation/Exercise Equipment	63	\$2.50	\$1,576
Photographic Equipment and Supplies	84	\$87.31	\$55,093
Film	90	\$6.66	\$4,203
Film Processing	94	\$21.07	\$13,297

Photographic Equipment	81	\$34.63	\$21,852
Photographer Fees/Other Supplies & Equip Rental/Repair	81	\$24.95	\$15,741
Reading	86	\$133.57	\$84,285
Magazine/Newspaper Subscriptions	92	\$58.47	\$36,896
Magazine/Newspaper Single Copies	92	\$17.61	\$11,113
Books	79	\$57.49	\$36,275

Data Note: The Spending Potential Index (SPI) is household-based, and represents the amount spent for a product or service relative to a national average of 100. Detail may not sum to totals due to rounding.

Source: ESRI forecasts for 2010 and 2015; Consumer Spending data are derived from the 2006 and 2007 Consumer Expenditure Surveys, Bureau of Labor Statistics.

Luna Pier

**Latitude:
41.80947**

**Longitude: -
83.44347**

Luna Pier, MI

Ring: 3 miles radius

Demographic Summary	2010	2015
Population	3,892	3,865
Households	1,517	1,518
Families	1,104	1,099
Median Age	39.6	39.9
Median Household Income	\$62,728	\$68,391

	Spending Potential Index	Average Amount Spent	Total
Entertainment/Recreation Fees and Admissions	98	\$604.32	\$916,746
Admission to Movies, Theater, Opera, Ballet	93	\$140.79	\$213,579
Admission to Sporting Events, excl. Trips	103	\$61.31	\$93,011
Fees for Participant Sports, excl. Trips	98	\$104.05	\$157,842
Fees for Recreational Lessons	99	\$134.85	\$204,564
Membership Fees for Social/Recreation/Civic Clubs	99	\$162.70	\$246,814
Dating Services	81	\$0.62	\$936
Rental of Video Cassettes and DVDs	95	\$39.08	\$59,280
Toys & Games	98	\$142.65	\$216,399
Toys and Playground Equipment	98	\$138.78	\$210,530
Play Arcade Pinball/Video Games	98	\$1.85	\$2,804
Online Entertainment and Games	87	\$2.02	\$3,065

Recreational Vehicles and Fees	95	\$306.90	\$465,573
Docking and Landing Fees for Boats and Planes	106	\$7.53	\$11,428
Camp Fees	111	\$32.07	\$48,648
Purchase of RVs or Boats	93	\$259.85	\$394,200
Rental of RVs or Boats	87	\$7.45	\$11,297
Sports, Recreation and Exercise Equipment	78	\$141.33	\$214,403
Exercise Equipment and Gear, Game Tables	82	\$67.02	\$101,666
Bicycles	93	\$18.35	\$27,843
Camping Equipment	39	\$5.71	\$8,662
Hunting and Fishing Equipment	62	\$23.95	\$36,327
Winter Sports Equipment	85	\$5.52	\$8,373
Water Sports Equipment	108	\$7.23	\$10,969
Other Sports Equipment	109	\$10.32	\$15,661
Rental/Repair of Sports/Recreation/Exercise Equipment	81	\$3.23	\$4,902
Photographic Equipment and Supplies	100	\$103.27	\$156,656
Film	101	\$7.44	\$11,282
Film Processing	107	\$23.96	\$36,353
Photographic Equipment	97	\$41.60	\$63,100
Photographer Fees/Other Supplies & Equip Rental/Repair	98	\$30.27	\$45,921
Reading	102	\$157.35	\$238,696
Magazine/Newspaper Subscriptions	108	\$68.33	\$103,664
Magazine/Newspaper Single Copies	102	\$19.58	\$29,709
Books	96	\$69.43	\$105,323

Data Note: The Spending Potential Index (SPI) is household-based, and represents the amount spent for a product or service relative to a national average of 100. Detail may not sum to totals due to rounding.

Source: ESRI forecasts for 2010 and 2015; Consumer Spending data are derived from the 2006 and 2007 Consumer Expenditure Surveys, Bureau of Labor Statistics.

Appendix VI: Millage Table

02/02/2011		TAX NAMES AND RATES FOR CITY OF LUNA PIER		PAGE 1		
10:23 am, DB: LUNAL0						
HEADING	CODE	SUBCODE	MILLS ADM FEE	TAX TYPE	BILLING (P.R.E.s)	BILLING (CLASSES)
Date: 51 Billing Type: Summer, School: 09, RATES: Advalorem Tax Rates						
LUNA PIER OPER			9.830400	0.00	City/Nil/Twn Tax	All Properties
STATE ED TAX-51			6.000000	0.00	State Educ. Tax	All Properties
CO OPERATING-51			4.795200	0.00	County Tax	All Properties
LUNA PIER FLOOD			0.500000	0.00	City/Nil/Twn Tax	All Properties
TOTAL MILLS			21.125600			
--TOTAL P.R.E.			21.125600			
--TOTAL NON P.R.E.			21.125600			
Date: 51 Billing Type: Winter, School: 09, RATES: Advalorem Tax Rates						
SENIOR CITZ-51			0.500000	1.00	County Tax	All Properties
CO LIBRARY-51			1.000000	1.00	Library Tax	All Properties
COMM COLLEGE-51			2.179400	1.00	College Tax	All Properties
MONROE ISD-51			4.754100	1.00	I. S. D. Tax	All Properties
09 MASON OPER-51			18.000000	1.00	School Operating	Non-P.R.E. Properties
FAIRVIEW-51			0.200000	1.00	County Tax	All Properties
VETERANS-51			0.100000	1.00	County Tax	All Properties
TOTAL MILLS			26.733500			
--TOTAL P.R.E.			8.733500			
--TOTAL NON P.R.E.			26.733500			
Date: 51 Billing Type: Summer, School: 09, RATES: State Land Bank Sale Rates						
LUNA PIER OPER			9.830400	0.00	City/Nil/Twn Tax	All Properties
STATE ED TAX-51			6.000000	0.00	State Educ. Tax	All Properties
CO OPERATING-51			4.795200	0.00	County Tax	All Properties
LUNA PIER FLOOD			0.500000	0.00	City/Nil/Twn Tax	All Properties
TOTAL MILLS			21.125600			
--TOTAL P.R.E.			21.125600			
--TOTAL NON P.R.E.			21.125600			
Date: 51 Billing Type: Winter, School: 09, RATES: State Land Bank Sale Rates						
SENIOR CITZ-51			0.500000	1.00	County Tax	All Properties
CO LIBRARY-51			1.000000	1.00	Library Tax	All Properties
COMM COLLEGE-51			2.179400	1.00	College Tax	All Properties
MONROE ISD-51			4.754100	1.00	I. S. D. Tax	All Properties
09 MASON OPER-51			18.000000	1.00	School Operating	Non-P.R.E. Properties
FAIRVIEW-51			0.200000	1.00	County Tax	All Properties
VETERANS-51			0.100000	1.00	County Tax	All Properties
TOTAL MILLS			26.733500			
--TOTAL P.R.E.			8.733500			
--TOTAL NON P.R.E.			26.733500			

Appendix VII: Tax Increment Financing

APPENDIX VI: TIF Calculations

Scenario 1: Steady Growth

Parcel No.	Name	Address	Block	Assessed Value	Taxable Value	2012	2013
5851-002-020-00	Mason Schools	10701 Elmhurst	11	\$ -	\$ -	\$ -	\$ -
5851-002-020-10	Mason Schools	10701 Elmhurst	11	\$ -	\$ -	\$ -	\$ -
5851-003-005-00	Luna Pier Car Wash -DBA	4237 Luna Pier Road	8	\$ 56,700	\$ 56,700	\$ 58,401	\$ 60,153
5851-003-005-10	Luna Pier Car Wash -DBA	10550 Evans Drive	7	\$ 75,800	\$ 74,775	\$ 77,018	\$ 79,329
5851-003-006-00	Ganders Restuarant	4219 Luna Pier Road	7	\$ 115,500	\$ 115,500	\$ 118,965	\$ 122,534
5851-003-007-10	VanEx Fire Systems	10447 Harold Drive	6	\$ 169,400	\$ 169,400	\$ 174,482	\$ 179,716
5851-003-007-50	S & V Holding	10552 Evans Drive	7	\$ 374,300	\$ 303,469	\$ 312,573	\$ 321,950
5851-003-009-10	Sphinx Investments	10501 Evans Drive	5	\$ 81,700	\$ 81,700	\$ 84,151	\$ 86,676
5851-003-009-20	Luna Pier Storage	10441 Harold Drive	6	\$ 219,100	\$ 219,100	\$ 225,673	\$ 232,443
5851-003-009-30	Super 8 Motel	4163 Super Eight Drive	5	\$ 786,000	\$ 786,000	\$ 809,580	\$ 833,867
5851-003-009-40	Victory Carpert	10543 Evans Drive	7	\$ 130,200	\$ 130,200	\$ 134,106	\$ 138,129
5851-003-010-00	Luna Pier Harbour Club	10420 Harold Drive	6	\$ 536,900	\$ 483,783	\$ 498,296	\$ 513,245
5851-003-011-00	Luna Pier Harbour Club	10420 Harold Drive	6	\$ 32,200	\$ 32,200	\$ 33,166	\$ 34,161
5851-003-012-00	Jerry & Chris Whipple	10450 Harold Drive	6	\$ 67,500	\$ 37,255	\$ 38,373	\$ 39,524
5851-003-014-00	City of Luna Pier	Lot	5	\$ -	\$ -	\$ -	\$ -
5851-003-017-00	Luna Pier Harbour Club	10420 Harold Drive	6	\$ 77,600	\$ 66,792	\$ 68,796	\$ 70,860
5851-025-001-00	Joseph & Crystal Manley	10712 Lakeside	4	\$ 54,400	\$ 54,400	\$ 56,032	\$ 57,713
5851-025-002-00	Joseph & Crystal Manley	10712 Lakeside	4	\$ 17,600	\$ 17,600	\$ 18,128	\$ 18,672
5851-025-003-00	Linda Gulley	10704 Lakeside	4	\$ 39,700	\$ 27,316	\$ 28,135	\$ 28,980
5851-025-004-00	Doris Derbeck	10666 Lakeside	4	\$ 60,200	\$ 57,278	\$ 58,996	\$ 60,766
5851-030-001-00	Chris Jenkins	4419 Elm	3	\$ 30,300	\$ 28,699	\$ 29,560	\$ 30,447
5851-030-002-00	Chris Jenkins	4419 Elm	3	\$ 13,100	\$ 2,073	\$ 2,135	\$ 2,199
5851-030-003-00	City of Luna Pier	Lot	13	\$ -	\$ -	\$ -	\$ -
5851-030-004-00	Michael Lucarelli	4416 Luna Pier Road	3	\$ 42,000	\$ 42,000	\$ 43,260	\$ 44,558
5851-055-001-00	City of Luna Pier	Lot	4	\$ -	\$ -	\$ -	\$ -
5851-055-002-00	Debra Welton	10632 Lakeside	4	\$ 100,400	\$ 84,973	\$ 87,522	\$ 90,148
5851-055-003-00	Sara Welton	10628 Lakeside	4	\$ 88,600	\$ 69,076	\$ 71,148	\$ 73,283
5851-055-006-00	City of Luna Pier	Lot	4	\$ -	\$ -	\$ -	\$ -
5851-055-007-00	Douglas Berry	10644 Lakeside	4	\$ 107,300	\$ 107,300	\$ 110,519	\$ 113,835
5851-055-010-00	Douglas Berry	10644 Lakeside	4	\$ 24,900	\$ 13,894	\$ 14,311	\$ 14,740
5851-055-011-00	James & Linda Emptage	10662 Lakeside	4	\$ 146,100	\$ 146,100	\$ 150,483	\$ 154,997
5851-055-013-00	Doris Derbeck	10666 Lakeside	4	\$ 15,800	\$ 2,073	\$ 2,135	\$ 2,199
5851-060-001-00	John Hafeli - Post Office	4352 Luna Pier Road	2	\$ 37,100	\$ 32,950	\$ 33,939	\$ 34,957
5851-060-002-00	Andrew's Place	4354 Luna Pier Road	2	\$ 60,600	\$ 60,600	\$ 62,418	\$ 64,291
5851-060-003-00	Michael Lucarelli	4380 Luna Pier Road	2	\$ 36,200	\$ 36,200	\$ 37,286	\$ 38,405
5851-060-004-00	Michael Lucarelli	4408 Luna Pier Road	2	\$ 49,700	\$ 49,700	\$ 51,191	\$ 52,727
5851-060-005-00	Michael Lucarelli	4416 Luna Pier Road	2	\$ 10,300	\$ 10,300	\$ 10,609	\$ 10,927
5851-060-006-00	Matt Smith	4413 Elm	2	\$ 19,400	\$ 19,400	\$ 19,982	\$ 20,581
5851-060-007-00	Nicole Travis	4407 Elm	2	\$ 14,100	\$ 14,100	\$ 14,523	\$ 14,959
5851-060-008-00	City of Luna Pier	Parking lot	1	\$ -	\$ -	\$ -	\$ -
5851-060-010-00	Francis Kortsch	4364 Elm	1	\$ 27,900	\$ 27,900	\$ 28,737	\$ 29,599
5851-060-019-00	Allison Turner	10629 Northern	1	\$ 31,400	\$ 31,400	\$ 32,342	\$ 33,312
5851-060-020-00	John & Patti Cureton	4363 Buckeye Street	1	\$ 18,200	\$ 18,200	\$ 18,746	\$ 19,308
5851-060-021-00	City Hall	4357 Buckeye Street	1	\$ -	\$ -	\$ -	\$ -
5851-075-001-00	Luna Pier Baptist Church	4265 Luna Pier Road	8	\$ -	\$ -	\$ -	\$ -
5851-080-001-00	Martin Bally	10620 Harold Drive	1	\$ 32,100	\$ 32,100	\$ 33,063	\$ 34,055
5851-080-002-00	U & Y Enterprises - store	4348 Luna Pier Road	2	\$ 132,600	\$ 97,460	\$ 100,384	\$ 103,395
5851-080-006-00	Robert Garverick - Chateau	4320 Luna Pier Road	12	\$ 73,900	\$ 51,051	\$ 52,583	\$ 54,160
5851-080-007-00	Robert Garverick - Chateau	4320 Luna Pier Road	12	\$ 10,700	\$ 5,564	\$ 5,731	\$ 5,903
5851-120-141-00	City of Luna Pier	Park	13	\$ -	\$ -	\$ -	\$ -
5851-125-001-00	Sunoco Station	4180 Luna Pier Road	9	\$ 851,000	\$ 851,000	\$ 876,530	\$ 902,826
5851-125-003-00	Balencia Wellness Center	4220 Luna Pier Road	9	\$ 206,400	\$ 206,400	\$ 212,592	\$ 218,970
5851-125-004-00	Tony Zalucki - apartments	4240 Luna Pier Road	10	\$ 78,000	\$ 78,000	\$ 80,340	\$ 82,750
5851-125-005-00	Charles Kelly	4246 Luna Pier Road	10	\$ 90,800	\$ 49,361	\$ 50,842	\$ 52,367
5851-125-006-00	Luna Pier Fire Station	4368 Luna Pier Road	12	\$ -	\$ -	\$ -	\$ -
5851-125-007-00	Robert & Kathy Hearn	4267 Erie Road	12	\$ 47,800	\$ 41,991	\$ 43,251	\$ 44,548
5851-125-007-10	City of Luna Pier	Lot	12	\$ -	\$ -	\$ -	\$ -
5851-125-008-00	Tony Zalucki	4240 Luna Pier Road	10	\$ 9,300	\$ 9,300	\$ 9,579	\$ 9,866
5851-125-014-00	Richard & Margaret Dorman	10631 Valleywood	10	\$ 65,600	\$ 65,600	\$ 67,568	\$ 69,595
5851-125-015-01	Donald Schultz	Lot	10	\$ 11,600	\$ 1,631	\$ 1,680	\$ 1,730
5851-125-015-10	Donald Schultz	Lot	10	\$ 11,600	\$ 1,631	\$ 1,680	\$ 1,730
5851-125-016-00	Joseph Zdesar	10643 Valleywood	10	\$ 51,700	\$ 45,978	\$ 47,357	\$ 48,778
5851-140-131-00	City of Luna Pier	Park	13	\$ -	\$ -	\$ -	\$ -
5851-155-057-00	Luna Pier Harbour Club	10121 Grand Blvd	6	\$ 1,900	\$ 660	\$ 680	\$ 700
5851-155-058-00	Luna Pier Harbour Club	10121 Grand Blvd	6	\$ 57,400	\$ 3,265	\$ 3,363	\$ 3,464
5851-155-059-00	Luna Pier Harbour Club	10121 Grand Blvd	6	\$ 119,300	\$ 103,151	\$ 106,246	\$ 109,433
				TOTAL:	\$ 5,154,549	\$ 5,309,185	\$ 5,468,461
				NMA:	3.0%	3.0%	3.0%
				Downtown multiplier	0.0%	0.0%	5.0%

*Yellow cell: reported by city treasurer as \$572,780; assumed to be a mistake for value listed

*Green cells: new infill development as describe in Chapter 6.

APPENDIX VI: TIF Calculations

Scenario 1: Steady Growth

2014	2015	2016	2017	2018	2019	2020	2021	2022
\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
\$ -	\$ -	\$ 150,000	\$ 154,500	\$ 159,135	\$ 163,909	\$ 168,826	\$ 173,891	\$ 179,108
\$ 61,958	\$ 63,816	\$ 65,731	\$ 67,703	\$ 69,734	\$ 71,826	\$ 73,981	\$ 76,200	\$ 78,486
\$ 81,709	\$ 84,160	\$ 86,685	\$ 89,285	\$ 91,964	\$ 94,723	\$ 97,564	\$ 150,000	\$ 154,500
\$ 126,210	\$ 129,996	\$ 133,896	\$ 137,913	\$ 142,050	\$ 146,312	\$ 150,701	\$ 155,222	\$ 159,879
\$ 185,108	\$ 190,661	\$ 196,381	\$ 202,272	\$ 208,341	\$ 214,591	\$ 221,029	\$ 227,659	\$ 234,489
\$ 331,609	\$ 341,557	\$ 351,804	\$ 362,358	\$ 373,229	\$ 384,425	\$ 395,958	\$ 407,837	\$ 420,072
\$ 89,276	\$ 91,954	\$ 94,713	\$ 97,554	\$ 100,481	\$ 103,495	\$ 106,600	\$ 109,798	\$ 113,092
\$ 239,416	\$ 246,599	\$ 253,997	\$ 261,617	\$ 269,465	\$ 277,549	\$ 285,876	\$ 294,452	\$ 303,286
\$ 858,883	\$ 884,650	\$ 911,189	\$ 938,525	\$ 966,681	\$ 995,681	\$ 1,025,552	\$ 1,056,318	\$ 1,088,008
\$ 142,273	\$ 146,541	\$ 150,937	\$ 155,466	\$ 160,130	\$ 164,933	\$ 169,881	\$ 174,978	\$ 180,227
\$ 528,643	\$ 544,502	\$ 560,837	\$ 577,662	\$ 594,992	\$ 612,842	\$ 631,227	\$ 650,164	\$ 669,669
\$ 35,186	\$ 36,241	\$ 37,329	\$ 38,448	\$ 39,602	\$ 40,790	\$ 42,014	\$ 43,274	\$ 44,572
\$ 40,710	\$ 41,931	\$ 43,189	\$ 44,484	\$ 45,819	\$ 47,194	\$ 48,609	\$ 50,068	\$ 51,570
\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
\$ 72,985	\$ 75,175	\$ 77,430	\$ 79,753	\$ 82,146	\$ 84,610	\$ 87,148	\$ 89,763	\$ 92,456
\$ 59,444	\$ 61,228	\$ 63,065	\$ 64,956	\$ 66,905	\$ 68,912	\$ 70,980	\$ 73,109	\$ 75,302
\$ 19,232	\$ 19,809	\$ 20,403	\$ 21,015	\$ 21,646	\$ 22,295	\$ 22,964	\$ 23,653	\$ 24,363
\$ 29,849	\$ 30,744	\$ 31,667	\$ 32,617	\$ 33,595	\$ 34,603	\$ 35,641	\$ 36,710	\$ 37,812
\$ 62,589	\$ 64,467	\$ 66,401	\$ 68,393	\$ 70,445	\$ 72,558	\$ 74,735	\$ 76,977	\$ 79,286
\$ 32,883	\$ 33,869	\$ 34,885	\$ 35,932	\$ 37,010	\$ 38,120	\$ 39,263	\$ 40,441	\$ 41,655
\$ 2,375	\$ 2,446	\$ 2,520	\$ 2,595	\$ 2,673	\$ 2,753	\$ 2,836	\$ 2,921	\$ 3,009
\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
\$ 48,122	\$ 49,566	\$ 51,053	\$ 52,585	\$ 54,162	\$ 55,787	\$ 57,461	\$ 59,185	\$ 60,960
\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
\$ 92,852	\$ 95,638	\$ 98,507	\$ 101,462	\$ 104,506	\$ 107,641	\$ 110,870	\$ 114,197	\$ 117,623
\$ 75,481	\$ 77,746	\$ 80,078	\$ 82,480	\$ 84,955	\$ 87,503	\$ 90,129	\$ 92,832	\$ 95,617
\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
\$ 117,250	\$ 120,767	\$ 124,390	\$ 128,122	\$ 131,965	\$ 135,924	\$ 140,002	\$ 144,202	\$ 148,528
\$ 15,182	\$ 15,638	\$ 16,107	\$ 16,590	\$ 17,088	\$ 17,601	\$ 18,129	\$ 18,672	\$ 19,233
\$ 159,647	\$ 164,437	\$ 169,370	\$ 174,451	\$ 179,685	\$ 185,075	\$ 190,627	\$ 196,346	\$ 202,237
\$ 2,265	\$ 2,333	\$ 2,403	\$ 2,475	\$ 2,550	\$ 2,626	\$ 2,705	\$ 2,786	\$ 2,870
\$ 37,753	\$ 38,886	\$ 40,052	\$ 41,254	\$ 42,492	\$ 43,766	\$ 45,079	\$ 46,432	\$ 47,825
\$ 69,434	\$ 71,517	\$ 73,662	\$ 75,872	\$ 78,148	\$ 80,493	\$ 82,908	\$ 85,395	\$ 87,957
\$ 41,477	\$ 42,721	\$ 44,003	\$ 45,323	\$ 46,683	\$ 48,083	\$ 49,526	\$ 51,011	\$ 52,542
\$ 56,945	\$ 58,653	\$ 60,413	\$ 62,225	\$ 64,092	\$ 66,015	\$ 67,995	\$ 70,035	\$ 72,136
\$ 11,801	\$ 12,155	\$ 12,520	\$ 12,896	\$ 13,283	\$ 13,681	\$ 14,092	\$ 14,514	\$ 14,950
\$ 22,228	\$ 22,895	\$ 23,582	\$ 24,289	\$ 25,018	\$ 25,768	\$ 26,541	\$ 27,338	\$ 28,158
\$ 16,155	\$ 16,640	\$ 17,139	\$ 17,653	\$ 18,183	\$ 18,729	\$ 19,290	\$ 19,869	\$ 20,465
\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
\$ 31,967	\$ 32,926	\$ 33,914	\$ 34,931	\$ 35,979	\$ 37,059	\$ 38,170	\$ 39,315	\$ 40,495
\$ 35,977	\$ 37,057	\$ 38,168	\$ 39,313	\$ 40,493	\$ 41,707	\$ 42,959	\$ 44,247	\$ 45,575
\$ 20,853	\$ 21,479	\$ 22,123	\$ 22,787	\$ 23,470	\$ 24,174	\$ 24,900	\$ 25,647	\$ 26,416
\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
\$ 36,779	\$ 37,883	\$ 39,019	\$ 40,190	\$ 41,395	\$ 42,637	\$ 43,916	\$ 45,234	\$ 46,591
\$ 111,667	\$ 115,017	\$ 118,467	\$ 122,021	\$ 125,682	\$ 129,453	\$ 133,336	\$ 137,336	\$ 141,456
\$ 55,785	\$ 57,458	\$ 59,182	\$ 60,958	\$ 62,786	\$ 64,670	\$ 66,610	\$ 68,608	\$ 70,667
\$ 6,080	\$ 6,262	\$ 6,450	\$ 6,644	\$ 6,843	\$ 7,048	\$ 7,260	\$ 7,478	\$ 7,702
\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
\$ 929,911	\$ 957,808	\$ 986,542	\$ 1,016,139	\$ 1,046,623	\$ 1,078,021	\$ 1,110,362	\$ 1,143,673	\$ 1,177,983
\$ 225,539	\$ 232,305	\$ 239,274	\$ 246,452	\$ 253,846	\$ 261,461	\$ 269,305	\$ 277,384	\$ 285,706
\$ 85,233	\$ 87,790	\$ 90,423	\$ 93,136	\$ 95,930	\$ 98,808	\$ 101,772	\$ 104,825	\$ 107,970
\$ 53,938	\$ 55,556	\$ 57,223	\$ 58,940	\$ 60,708	\$ 62,529	\$ 64,405	\$ 66,337	\$ 68,327
\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
\$ 45,885	\$ 47,261	\$ 48,679	\$ 50,139	\$ 51,644	\$ 53,193	\$ 54,789	\$ 56,432	\$ 58,125
\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
\$ 10,162	\$ 10,467	\$ 10,781	\$ 11,105	\$ 11,438	\$ 11,781	\$ 12,134	\$ 12,498	\$ 12,873
\$ 71,683	\$ 73,833	\$ 76,048	\$ 78,330	\$ 80,680	\$ 83,100	\$ 85,593	\$ 88,161	\$ 90,806
\$ 1,782	\$ 1,836	\$ 1,891	\$ 1,947	\$ 2,006	\$ 2,066	\$ 2,128	\$ 2,192	\$ 2,258
\$ 1,782	\$ 1,836	\$ 1,891	\$ 1,947	\$ 2,006	\$ 2,066	\$ 2,128	\$ 2,192	\$ 2,258
\$ 50,241	\$ 51,749	\$ 53,301	\$ 54,900	\$ 56,547	\$ 58,244	\$ 59,991	\$ 61,791	\$ 63,644
\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
\$ 721	\$ 743	\$ 765	\$ 788	\$ 812	\$ 836	\$ 861	\$ 887	\$ 914
\$ 3,568	\$ 3,675	\$ 3,785	\$ 3,899	\$ 4,016	\$ 4,136	\$ 4,260	\$ 4,388	\$ 4,520
\$ 112,716	\$ 116,097	\$ 119,580	\$ 123,168	\$ 126,863	\$ 130,669	\$ 134,589	\$ 138,626	\$ 142,785
\$ 5,659,201	\$ 5,828,977	\$ 6,153,846	\$ 6,338,462	\$ 6,528,615	\$ 6,724,474	\$ 6,926,208	\$ 7,183,503	\$ 7,399,008
3.0%	3.0%	3.0%	3.0%	3.0%	3.0%	3.0%	3.0%	3.0%
0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%

*Yellow cell: reported by city treasurer as \$572,780; assumed to be a mistake for value listed
 *Green cells: new infill development as describe in Chapter 6.

APPENDIX VI: TIF Calculations

Scenario 1: Steady Growth

2023	2024	2025	2026	2027	2028	2029	2030	2031
\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
\$ 184,481	\$ 190,016	\$ 195,716	\$ 201,587	\$ 207,635	\$ 213,864	\$ 220,280	\$ 226,888	\$ 233,695
\$ 80,841	\$ 83,266	\$ 85,764	\$ 88,337	\$ 90,987	\$ 93,716	\$ 96,528	\$ 99,424	\$ 102,407
\$ 159,135	\$ 163,909	\$ 168,826	\$ 173,891	\$ 179,108	\$ 184,481	\$ 190,016	\$ 195,716	\$ 201,587
\$ 164,675	\$ 169,616	\$ 174,704	\$ 179,945	\$ 185,344	\$ 190,904	\$ 196,631	\$ 202,530	\$ 208,606
\$ 241,524	\$ 248,770	\$ 256,233	\$ 263,920	\$ 271,837	\$ 279,992	\$ 288,392	\$ 297,044	\$ 305,955
\$ 432,674	\$ 445,654	\$ 459,024	\$ 472,795	\$ 486,979	\$ 501,588	\$ 516,636	\$ 532,135	\$ 548,099
\$ 116,485	\$ 119,979	\$ 123,579	\$ 127,286	\$ 131,105	\$ 135,038	\$ 139,089	\$ 143,261	\$ 147,559
\$ 312,384	\$ 321,756	\$ 331,408	\$ 341,351	\$ 351,591	\$ 362,139	\$ 373,003	\$ 384,193	\$ 395,719
\$ 1,120,648	\$ 1,154,267	\$ 1,188,896	\$ 1,224,562	\$ 1,261,299	\$ 1,299,138	\$ 1,338,112	\$ 1,378,256	\$ 1,419,603
\$ 185,634	\$ 191,203	\$ 196,939	\$ 202,847	\$ 208,933	\$ 215,201	\$ 221,657	\$ 228,306	\$ 235,156
\$ 689,759	\$ 710,452	\$ 731,765	\$ 753,718	\$ 776,330	\$ 799,620	\$ 823,608	\$ 848,316	\$ 873,766
\$ 45,910	\$ 47,287	\$ 48,705	\$ 50,167	\$ 51,672	\$ 53,222	\$ 54,818	\$ 56,463	\$ 58,157
\$ 53,117	\$ 54,710	\$ 56,352	\$ 58,042	\$ 59,783	\$ 61,577	\$ 63,424	\$ 65,327	\$ 67,287
\$ -	\$ -	\$ -	\$ 150,000	\$ 154,500	\$ 159,135	\$ 163,909	\$ 168,826	\$ 173,891
\$ 95,229	\$ 98,086	\$ 101,029	\$ 104,060	\$ 107,182	\$ 110,397	\$ 113,709	\$ 117,120	\$ 120,634
\$ 77,561	\$ 79,888	\$ 82,285	\$ 84,753	\$ 87,296	\$ 89,915	\$ 92,612	\$ 95,391	\$ 98,252
\$ 25,093	\$ 25,846	\$ 26,622	\$ 27,420	\$ 28,243	\$ 29,090	\$ 29,963	\$ 30,862	\$ 31,788
\$ 38,946	\$ 40,114	\$ 41,318	\$ 42,557	\$ 43,834	\$ 45,149	\$ 46,504	\$ 47,899	\$ 49,336
\$ 81,665	\$ 84,115	\$ 86,638	\$ 89,237	\$ 91,914	\$ 94,672	\$ 97,512	\$ 100,437	\$ 103,450
\$ 42,904	\$ 44,191	\$ 45,517	\$ 46,883	\$ 48,289	\$ 49,738	\$ 51,230	\$ 52,767	\$ 54,350
\$ 3,099	\$ 3,192	\$ 3,288	\$ 3,386	\$ 3,488	\$ 3,593	\$ 3,700	\$ 3,811	\$ 3,926
\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
\$ 62,789	\$ 64,673	\$ 66,613	\$ 68,611	\$ 70,669	\$ 72,789	\$ 74,973	\$ 77,222	\$ 79,539
\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
\$ 121,151	\$ 124,786	\$ 128,529	\$ 132,385	\$ 136,357	\$ 140,447	\$ 144,661	\$ 149,001	\$ 153,471
\$ 98,486	\$ 101,440	\$ 104,484	\$ 107,618	\$ 110,847	\$ 114,172	\$ 117,597	\$ 121,125	\$ 124,759
\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
\$ 152,984	\$ 157,574	\$ 162,301	\$ 167,170	\$ 172,185	\$ 177,351	\$ 182,671	\$ 188,151	\$ 193,796
\$ 19,810	\$ 20,404	\$ 21,016	\$ 21,646	\$ 22,296	\$ 22,965	\$ 23,654	\$ 24,363	\$ 25,094
\$ 208,304	\$ 214,553	\$ 220,989	\$ 227,619	\$ 234,448	\$ 241,481	\$ 248,725	\$ 256,187	\$ 263,873
\$ 2,956	\$ 3,044	\$ 3,136	\$ 3,230	\$ 3,327	\$ 3,426	\$ 3,529	\$ 3,635	\$ 3,744
\$ 49,259	\$ 50,737	\$ 52,259	\$ 53,827	\$ 55,442	\$ 57,105	\$ 58,818	\$ 60,583	\$ 62,400
\$ 90,595	\$ 93,313	\$ 96,113	\$ 98,996	\$ 101,966	\$ 105,025	\$ 108,176	\$ 111,421	\$ 114,763
\$ 54,118	\$ 55,742	\$ 57,414	\$ 59,136	\$ 60,910	\$ 62,738	\$ 64,620	\$ 66,558	\$ 68,555
\$ 74,300	\$ 76,529	\$ 78,825	\$ 81,190	\$ 83,625	\$ 86,134	\$ 88,718	\$ 91,380	\$ 94,121
\$ 15,398	\$ 15,860	\$ 16,336	\$ 16,826	\$ 17,331	\$ 17,851	\$ 18,386	\$ 18,938	\$ 19,506
\$ 29,002	\$ 29,873	\$ 30,769	\$ 31,692	\$ 32,643	\$ 33,622	\$ 34,630	\$ 35,669	\$ 36,739
\$ 21,079	\$ 21,711	\$ 22,363	\$ 23,034	\$ 23,725	\$ 24,436	\$ 25,170	\$ 25,925	\$ 26,702
\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
\$ 41,710	\$ 42,961	\$ 44,250	\$ 45,577	\$ 46,945	\$ 48,353	\$ 49,804	\$ 51,298	\$ 52,837
\$ 46,942	\$ 48,350	\$ 49,801	\$ 51,295	\$ 52,834	\$ 54,419	\$ 56,051	\$ 57,733	\$ 59,465
\$ 27,209	\$ 28,025	\$ 28,865	\$ 29,731	\$ 30,623	\$ 31,542	\$ 32,488	\$ 33,463	\$ 34,467
\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
\$ 47,989	\$ 49,428	\$ 50,911	\$ 52,438	\$ 54,012	\$ 55,632	\$ 57,301	\$ 59,020	\$ 60,791
\$ 145,700	\$ 150,071	\$ 154,573	\$ 159,210	\$ 163,987	\$ 168,906	\$ 173,973	\$ 179,193	\$ 184,568
\$ 72,787	\$ 74,970	\$ 77,219	\$ 79,536	\$ 81,922	\$ 84,380	\$ 86,911	\$ 89,518	\$ 92,204
\$ 7,933	\$ 8,171	\$ 8,416	\$ 8,669	\$ 8,929	\$ 9,196	\$ 9,472	\$ 9,757	\$ 10,049
\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
\$ 1,213,323	\$ 1,249,722	\$ 1,287,214	\$ 1,325,830	\$ 1,365,605	\$ 1,406,573	\$ 1,448,771	\$ 1,492,234	\$ 1,537,001
\$ 294,277	\$ 303,105	\$ 312,199	\$ 321,564	\$ 331,211	\$ 341,148	\$ 351,382	\$ 361,924	\$ 372,781
\$ 111,209	\$ 114,546	\$ 117,982	\$ 121,521	\$ 125,167	\$ 128,922	\$ 132,790	\$ 136,773	\$ 140,877
\$ 70,377	\$ 72,488	\$ 74,663	\$ 76,903	\$ 79,210	\$ 81,586	\$ 84,034	\$ 86,555	\$ 89,151
\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
\$ 59,869	\$ 61,665	\$ 63,515	\$ 65,421	\$ 67,383	\$ 69,405	\$ 71,487	\$ 73,631	\$ 75,840
\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
\$ 13,260	\$ 13,657	\$ 14,067	\$ 14,489	\$ 14,924	\$ 15,371	\$ 15,833	\$ 16,308	\$ 16,797
\$ 93,530	\$ 96,336	\$ 99,226	\$ 102,203	\$ 105,269	\$ 108,427	\$ 111,680	\$ 115,030	\$ 118,481
\$ 2,325	\$ 2,395	\$ 2,467	\$ 2,541	\$ 2,617	\$ 2,696	\$ 2,777	\$ 2,860	\$ 2,946
\$ 2,325	\$ 2,395	\$ 2,467	\$ 2,541	\$ 2,617	\$ 2,696	\$ 2,777	\$ 2,860	\$ 2,946
\$ 65,554	\$ 67,520	\$ 69,546	\$ 71,632	\$ 73,781	\$ 75,995	\$ 78,274	\$ 80,623	\$ 83,041
\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
\$ 941	\$ 969	\$ 998	\$ 1,028	\$ 1,059	\$ 1,091	\$ 1,124	\$ 1,157	\$ 1,192
\$ 4,655	\$ 4,795	\$ 4,939	\$ 5,087	\$ 5,239	\$ 5,397	\$ 5,558	\$ 5,725	\$ 5,897
\$ 147,069	\$ 151,481	\$ 156,025	\$ 160,706	\$ 165,527	\$ 170,493	\$ 175,608	\$ 180,876	\$ 186,302
\$ 7,620,978	\$ 7,849,608	\$ 8,085,096	\$ 8,477,649	\$ 8,731,978	\$ 8,993,938	\$ 9,263,756	\$ 9,541,668	\$ 9,827,918
3.0%	3.0%	3.0%	3.0%	3.0%	3.0%	3.0%	3.0%	3.0%
0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%

*Yellow cell: reported by city treasurer as \$572,780; assumed to be a mistake for value listed
*Green cells: new infill development as describe in Chapter 6.

APPENDIX VI: TIF Calculations

Scenario 2: New Development

Parcel No.	Name	Address	Block	Assessed Value	Taxable Value	2012	2013
5851-002-020-00	Mason Schools	10701 Elmhurst	11	\$ -	\$ -	\$ -	\$ -
5851-002-020-10	Mason Schools	10701 Elmhurst	11	\$ -	\$ -	\$ -	\$ -
5851-003-005-00	Luna Pier Car Wash -DBA	4237 Luna Pier Road	8	\$ 56,700	\$ 56,700	\$ 56,700	\$ 56,984
5851-003-005-10	Luna Pier Car Wash -DBA	10550 Evans Drive	7	\$ 75,800	\$ 74,775	\$ 74,775	\$ 75,149
5851-003-006-00	Ganders Restuarant	4219 Luna Pier Road	7	\$ 115,500	\$ 115,500	\$ 115,500	\$ 116,078
5851-003-007-10	VanEx Fire Systems	10447 Harold Drive	6	\$ 169,400	\$ 169,400	\$ 169,400	\$ 170,247
5851-003-007-50	S & V Holding	10552 Evans Drive	7	\$ 374,300	\$ 303,469	\$ 303,469	\$ 304,986
5851-003-009-10	Sphinx Investments	10501 Evans Drive	5	\$ 81,700	\$ 81,700	\$ 81,700	\$ 82,109
5851-003-009-20	Luna Pier Storage	10441 Harold Drive	6	\$ 219,100	\$ 219,100	\$ 219,100	\$ 220,196
5851-003-009-30	Super 8 Motel	4163 Super Eight Drive	5	\$ 786,000	\$ 786,000	\$ 786,000	\$ 789,930
5851-003-009-40	Victory Carpert	10543 Evans Drive	7	\$ 130,200	\$ 130,200	\$ 130,200	\$ 130,851
5851-003-010-00	Luna Pier Harbour Club	10420 Harold Drive	6	\$ 536,900	\$ 483,783	\$ 483,783	\$ 486,202
5851-003-011-00	Luna Pier Harbour Club	10420 Harold Drive	6	\$ 32,200	\$ 32,200	\$ 32,200	\$ 32,361
5851-003-012-00	Jerry & Chris Whipple	10450 Harold Drive	6	\$ 67,500	\$ 37,255	\$ 37,255	\$ 37,441
5851-003-014-00	City of Luna Pier	Lot	5	\$ -	\$ -	\$ -	\$ -
5851-003-017-00	Luna Pier Harbour Club	10420 Harold Drive	6	\$ 77,600	\$ 66,792	\$ 66,792	\$ 67,126
5851-025-001-00	Joseph & Crystal Manley	10712 Lakeside	4	\$ 54,400	\$ 54,400	\$ 54,400	\$ 54,672
5851-025-002-00	Joseph & Crystal Manley	10712 Lakeside	4	\$ 17,600	\$ 17,600	\$ 17,600	\$ 17,688
5851-025-003-00	Linda Gulley	10704 Lakeside	4	\$ 39,700	\$ 27,316	\$ 27,316	\$ 27,453
5851-025-004-00	Doris Derbeck	10666 Lakeside	4	\$ 60,200	\$ 57,278	\$ 57,278	\$ 57,564
5851-030-001-00	Chris Jenkins	4419 Elm	3	\$ 30,300	\$ 28,699	\$ 28,699	\$ 28,842
5851-030-002-00	Chris Jenkins	4419 Elm	3	\$ 13,100	\$ 2,073	\$ 2,073	\$ 2,083
5851-030-003-00	City of Luna Pier	Lot	13	\$ -	\$ -	\$ -	\$ -
5851-030-004-00	Michael Lucarelli	4416 Luna Pier Road	3	\$ 42,000	\$ 42,000	\$ 42,000	\$ 42,210
5851-055-001-00	City of Luna Pier	Lot	4	\$ -	\$ -	\$ -	\$ -
5851-055-002-00	Debra Welton	10632 Lakeside	4	\$ 100,400	\$ 84,973	\$ 84,973	\$ 85,398
5851-055-003-00	Sara Welton	10628 Lakeside	4	\$ 88,600	\$ 69,076	\$ 69,076	\$ 69,421
5851-055-006-00	City of Luna Pier	Lot	4	\$ -	\$ -	\$ -	\$ -
5851-055-007-00	Douglas Berry	10644 Lakeside	4	\$ 107,300	\$ 107,300	\$ 107,300	\$ 107,837
5851-055-010-00	Douglas Berry	10644 Lakeside	4	\$ 24,900	\$ 13,894	\$ 13,894	\$ 13,963
5851-055-011-00	James & Linda Emptage	10662 Lakeside	4	\$ 146,100	\$ 146,100	\$ 146,100	\$ 146,831
5851-055-013-00	Doris Derbeck	10666 Lakeside	4	\$ 15,800	\$ 2,073	\$ 2,073	\$ 2,083
5851-060-001-00	John Hafeli - Post Office	4352 Luna Pier Road	2	\$ 37,100	\$ 32,950	\$ 32,950	\$ 33,115
5851-060-002-00	Andrew's Place	4354 Luna Pier Road	2	\$ 60,600	\$ 60,600	\$ 60,600	\$ 60,903
5851-060-003-00	Michael Lucarelli	4380 Luna Pier Road	2	\$ 36,200	\$ 36,200	\$ 36,200	\$ 36,381
5851-060-004-00	Michael Lucarelli	4408 Luna Pier Road	2	\$ 49,700	\$ 49,700	\$ 49,700	\$ 49,949
5851-060-005-00	Michael Lucarelli	4416 Luna Pier Road	2	\$ 10,300	\$ 10,300	\$ 10,300	\$ 10,352
5851-060-006-00	Matt Smith	4413 Elm	2	\$ 19,400	\$ 19,400	\$ 19,400	\$ 19,497
5851-060-007-00	Nicole Travis	4407 Elm	2	\$ 14,100	\$ 14,100	\$ 14,100	\$ 14,171
5851-060-008-00	City of Luna Pier	Parking lot	1	\$ -	\$ -	\$ -	\$ -
5851-060-010-00	Francis Kortsch	4364 Elm	1	\$ 27,900	\$ 27,900	\$ 27,900	\$ 28,040
5851-060-019-00	Allison Turner	10629 Northern	1	\$ 31,400	\$ 31,400	\$ 31,400	\$ 31,557
5851-060-020-00	John & Patti Cureton	4363 Buckeye Street	1	\$ 18,200	\$ 18,200	\$ 18,200	\$ 18,291
5851-060-021-00	City Hall	4357 Buckeye Street	1	\$ -	\$ -	\$ -	\$ -
5851-075-001-00	Luna Pier Baptist Church	4265 Luna Pier Road	8	\$ -	\$ -	\$ -	\$ -
5851-080-001-00	Martin Bally	10620 Harold Drive	1	\$ 32,100	\$ 32,100	\$ 32,100	\$ 32,261
5851-080-002-00	U & Y Enterprises - store	4348 Luna Pier Road	2	\$ 132,600	\$ 97,460	\$ 97,460	\$ 97,947
5851-080-006-00	Robert Garverick - Chateau	4320 Luna Pier Road	12	\$ 73,900	\$ 51,051	\$ 51,051	\$ 51,306
5851-080-007-00	Robert Garverick - Chateau	4320 Luna Pier Road	12	\$ 10,700	\$ 5,564	\$ 5,564	\$ 5,592
5851-120-141-00	City of Luna Pier	Park	13	\$ -	\$ -	\$ -	\$ -
5851-125-001-00	Sunoco Station	4180 Luna Pier Road	9	\$ 851,000	\$ 851,000	\$ 851,000	\$ 855,255
5851-125-003-00	Balencia Wellness Center	4220 Luna Pier Road	9	\$ 206,400	\$ 206,400	\$ 206,400	\$ 207,432
5851-125-004-00	Tony Zalucki - apartments	4240 Luna Pier Road	10	\$ 78,000	\$ 78,000	\$ 78,000	\$ 78,390
5851-125-005-00	Charles Kelly	4246 Luna Pier Road	10	\$ 90,800	\$ 49,361	\$ 49,361	\$ 49,608
5851-125-006-00	Luna Pier Fire Station	4368 Luna Pier Road	12	\$ -	\$ -	\$ -	\$ -
5851-125-007-00	Robert & Kathy Hearn	4267 Erie Road	12	\$ 47,800	\$ 41,991	\$ 41,991	\$ 42,201
5851-125-007-10	City of Luna Pier	Lot	12	\$ -	\$ -	\$ -	\$ -
5851-125-008-00	Tony Zalucki	4240 Luna Pier Road	10	\$ 9,300	\$ 9,300	\$ 9,300	\$ 9,347
5851-125-014-00	Richard & Margaret Dorman	10631 Valleywood	10	\$ 65,600	\$ 65,600	\$ 65,600	\$ 65,928
5851-125-015-01	Donald Schultz	Lot	10	\$ 11,600	\$ 1,631	\$ 1,631	\$ 1,639
5851-125-015-10	Donald Schultz	Lot	10	\$ 11,600	\$ 1,631	\$ 1,631	\$ 1,639
5851-125-016-00	Joseph Zdesar	10643 Valleywood	10	\$ 51,700	\$ 45,978	\$ 45,978	\$ 46,208
5851-140-131-00	City of Luna Pier	Park	13	\$ -	\$ -	\$ -	\$ -
5851-155-057-00	Luna Pier Harbour Club	10121 Grand Blvd	6	\$ 1,900	\$ 660	\$ 660	\$ 663
5851-155-058-00	Luna Pier Harbour Club	10121 Grand Blvd	6	\$ 57,400	\$ 3,265	\$ 3,265	\$ 3,281
5851-155-059-00	Luna Pier Harbour Club	10121 Grand Blvd	6	\$ 119,300	\$ 103,151	\$ 103,151	\$ 103,667
				TOTAL:	\$ 5,154,549	\$ 5,154,549	\$ 5,180,322

NMA:	0.0%	0.5%	1.0%
Downtown multiplier	0.0%	0.0%	5.0%

*Yellow cell: reported by city treasurer as \$572,780; assumed to be a mistake for value listed

*Green cells: new infill development as describe in Chapter 6.

*Red cells: Phase I

*Orange cells: Phase II

APPENDIX VI: TIF Calculations

Scenario 2: New Development

2014	2015	2016	2017	2018	2019	2020	2021	2022
\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
\$ -	\$ -	\$ 150,000	\$ 154,500	\$ 159,135	\$ 163,909	\$ 168,826	\$ 173,891	\$ 179,108
\$ 57,553	\$ 58,417	\$ 60,169	\$ 61,974	\$ 63,833	\$ 65,748	\$ 67,721	\$ 69,753	\$ 71,845
\$ 75,900	\$ 77,039	\$ 79,350	\$ 81,731	\$ 84,182	\$ 86,708	\$ 89,309	\$ 91,987	\$ 94,734
\$ 117,238	\$ 118,997	\$ 122,567	\$ 126,244	\$ 130,031	\$ 133,932	\$ 137,950	\$ 142,088	\$ 146,351
\$ 171,949	\$ 174,529	\$ 179,765	\$ 185,158	\$ 190,712	\$ 196,434	\$ 202,327	\$ 208,396	\$ 214,648
\$ 308,036	\$ 312,657	\$ 322,036	\$ 331,698	\$ 341,648	\$ 351,898	\$ 362,455	\$ 373,329	\$ 384,528
\$ 82,930	\$ 84,174	\$ 86,699	\$ 89,300	\$ 91,979	\$ 94,738	\$ 97,580	\$ 100,508	\$ 103,523
\$ 222,397	\$ 225,733	\$ 232,505	\$ 239,481	\$ 246,665	\$ 254,065	\$ 261,687	\$ 269,538	\$ 277,624
\$ 797,829	\$ 809,797	\$ 834,091	\$ 859,113	\$ 884,887	\$ 911,433	\$ 938,776	\$ 966,940	\$ 995,948
\$ 132,160	\$ 134,142	\$ 138,166	\$ 142,311	\$ 146,580	\$ 150,978	\$ 155,507	\$ 160,172	\$ 164,978
\$ 491,064	\$ 498,430	\$ 513,383	\$ 528,784	\$ 544,648	\$ 560,987	\$ 577,817	\$ 595,151	\$ 613,006
\$ 32,685	\$ 33,175	\$ 34,170	\$ 35,195	\$ 36,251	\$ 37,339	\$ 38,459	\$ 39,613	\$ 40,801
\$ 37,816	\$ 38,383	\$ 39,534	\$ 40,720	\$ 41,942	\$ 43,200	\$ 44,496	\$ 45,831	\$ 47,206
\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
\$ 67,797	\$ 68,814	\$ 70,879	\$ 73,005	\$ 75,195	\$ 77,451	\$ 79,774	\$ 82,168	\$ 84,633
\$ 55,219	\$ 56,047	\$ 57,728	\$ 59,460	\$ 61,244	\$ 63,081	\$ 64,974	\$ 66,923	\$ 68,931
\$ 17,865	\$ 18,133	\$ 18,677	\$ 19,237	\$ 19,814	\$ 20,409	\$ 21,021	\$ 21,652	\$ 22,301
\$ 27,727	\$ 28,143	\$ 28,987	\$ 29,857	\$ 30,753	\$ 31,675	\$ 32,625	\$ 33,604	\$ 34,612
\$ 58,140	\$ 59,012	\$ 60,782	\$ 62,606	\$ 64,484	\$ 66,419	\$ 68,411	\$ 70,464	\$ 72,577
\$ 30,573	\$ 5,100,000	\$ 5,253,000	\$ 5,410,590	\$ 5,572,908	\$ 5,740,095	\$ 5,912,298	\$ 6,089,667	\$ 6,272,357
\$ 2,208	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
\$ 44,743	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
\$ 86,252	\$ 87,546	\$ 90,172	\$ 92,877	\$ 95,663	\$ 98,533	\$ 101,489	\$ 104,534	\$ 107,670
\$ 70,116	\$ 71,167	\$ 73,302	\$ 75,501	\$ 77,766	\$ 80,099	\$ 82,502	\$ 84,978	\$ 87,527
\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
\$ 108,915	\$ 110,549	\$ 113,865	\$ 117,281	\$ 120,799	\$ 124,423	\$ 128,156	\$ 132,001	\$ 135,961
\$ 14,103	\$ 14,315	\$ 14,744	\$ 15,186	\$ 15,642	\$ 16,111	\$ 16,595	\$ 17,092	\$ 17,605
\$ 148,299	\$ 150,523	\$ 155,039	\$ 159,690	\$ 164,481	\$ 169,415	\$ 174,498	\$ 179,733	\$ 185,125
\$ 2,104	\$ 2,136	\$ 2,200	\$ 2,266	\$ 2,334	\$ 2,404	\$ 2,476	\$ 2,550	\$ 2,627
\$ 35,102	\$ 35,628	\$ 36,697	\$ 37,798	\$ 38,932	\$ 40,100	\$ 41,303	\$ 42,542	\$ 43,818
\$ 64,557	\$ 65,526	\$ 67,491	\$ 5,100,000	\$ 5,253,000	\$ 5,410,590	\$ 5,572,908	\$ 5,740,095	\$ 5,912,298
\$ 38,564	\$ 39,142	\$ 40,317	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
\$ 52,945	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
\$ 10,973	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
\$ 20,667	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
\$ 15,021	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
\$ 29,722	\$ 30,168	\$ 31,073	\$ 32,005	\$ 32,965	\$ 33,954	\$ 34,973	\$ 36,022	\$ 37,102
\$ 33,450	\$ 33,952	\$ 34,971	\$ 36,020	\$ 37,100	\$ 38,213	\$ 39,360	\$ 40,541	\$ 41,757
\$ 19,388	\$ 19,679	\$ 20,270	\$ 20,878	\$ 21,504	\$ 22,149	\$ 22,814	\$ 23,498	\$ 24,203
\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
\$ 34,196	\$ 34,709	\$ 35,750	\$ 36,823	\$ 37,928	\$ 39,065	\$ 40,237	\$ 41,444	\$ 42,688
\$ 103,824	\$ 105,382	\$ 108,543	\$ 111,799	\$ 115,153	\$ 118,608	\$ 122,166	\$ 125,831	\$ 129,606
\$ 51,819	\$ 52,597	\$ 54,175	\$ 55,800	\$ 57,474	\$ 59,198	\$ 60,974	\$ 62,803	\$ 64,687
\$ 5,648	\$ 5,732	\$ 5,904	\$ 6,082	\$ 6,264	\$ 6,452	\$ 6,645	\$ 6,845	\$ 7,050
\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
\$ 863,808	\$ 876,765	\$ 903,068	\$ 930,160	\$ 958,064	\$ 986,806	\$ 1,016,411	\$ 1,046,903	\$ 1,078,310
\$ 209,506	\$ 212,649	\$ 219,028	\$ 225,599	\$ 232,367	\$ 239,338	\$ 246,518	\$ 253,914	\$ 261,531
\$ 79,174	\$ 80,362	\$ 82,772	\$ 85,256	\$ 87,813	\$ 90,448	\$ 93,161	\$ 95,956	\$ 98,835
\$ 50,104	\$ 50,855	\$ 52,381	\$ 53,953	\$ 55,571	\$ 57,238	\$ 58,955	\$ 60,724	\$ 62,546
\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
\$ 42,623	\$ 43,262	\$ 44,560	\$ 45,897	\$ 47,274	\$ 48,692	\$ 50,153	\$ 51,657	\$ 53,207
\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
\$ 9,440	\$ 9,582	\$ 9,869	\$ 10,165	\$ 10,470	\$ 10,784	\$ 11,108	\$ 11,441	\$ 11,784
\$ 66,587	\$ 67,586	\$ 69,614	\$ 71,702	\$ 73,853	\$ 76,069	\$ 78,351	\$ 80,701	\$ 83,122
\$ 1,656	\$ 1,680	\$ 1,731	\$ 1,783	\$ 1,836	\$ 1,891	\$ 1,948	\$ 2,006	\$ 2,067
\$ 1,656	\$ 1,680	\$ 1,731	\$ 1,783	\$ 1,836	\$ 1,891	\$ 1,948	\$ 2,006	\$ 2,067
\$ 46,670	\$ 47,370	\$ 48,791	\$ 50,255	\$ 51,762	\$ 53,315	\$ 54,915	\$ 56,562	\$ 58,259
\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
\$ 670	\$ 680	\$ 700	\$ 721	\$ 743	\$ 765	\$ 788	\$ 812	\$ 836
\$ 3,314	\$ 3,364	\$ 3,465	\$ 3,569	\$ 3,676	\$ 3,786	\$ 3,900	\$ 4,017	\$ 4,137
\$ 104,703	\$ 106,274	\$ 109,462	\$ 112,746	\$ 116,128	\$ 119,612	\$ 123,201	\$ 126,897	\$ 130,704
\$ 5,257,405	\$ 10,256,479	\$ 10,714,174	\$ 16,024,557	\$ 16,505,294	\$ 17,000,452	\$ 17,510,466	\$ 18,093,791	\$ 18,636,605
1.5%	3.0%	3.0%	3.0%	3.0%	3.0%	3.0%	3.0%	3.0%
0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%

*Yellow cell: reported by city treasurer as \$572,780; assumed to be a mistake for value listed

*Green cells: new infill development as describe in Chapter 6.

*Red cells: Phase I

*Orange cells: Phase II

APPENDIX VI: TIF Calculations

Scenario 2: New Development

2023	2024	2025	2026	2027	2028	2029	2030	2031
\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
\$ 184,481	\$ 190,016	\$ 195,716	\$ 201,587	\$ 207,635	\$ 213,864	\$ 220,280	\$ 226,888	\$ 233,695
\$ 74,000	\$ 76,220	\$ 78,507	\$ 80,862	\$ 83,288	\$ 85,787	\$ 88,360	\$ 91,011	\$ 93,742
\$ 159,135	\$ 163,909	\$ 168,826	\$ 173,891	\$ 179,108	\$ 184,481	\$ 190,016	\$ 195,716	\$ 201,587
\$ 150,742	\$ 155,264	\$ 159,922	\$ 164,719	\$ 169,661	\$ 174,751	\$ 179,993	\$ 185,393	\$ 190,955
\$ 221,088	\$ 227,720	\$ 234,552	\$ 241,589	\$ 248,836	\$ 256,301	\$ 263,990	\$ 271,910	\$ 280,067
\$ 396,064	\$ 407,946	\$ 420,185	\$ 432,790	\$ 445,774	\$ 459,147	\$ 472,921	\$ 487,109	\$ 501,722
\$ 106,629	\$ 109,827	\$ 113,122	\$ 116,516	\$ 120,011	\$ 123,612	\$ 127,320	\$ 131,140	\$ 135,074
\$ 285,952	\$ 294,531	\$ 303,367	\$ 312,468	\$ 321,842	\$ 331,497	\$ 341,442	\$ 351,685	\$ 362,236
\$ 1,025,826	\$ 1,056,601	\$ 1,088,299	\$ 1,120,948	\$ 1,154,577	\$ 1,189,214	\$ 1,224,890	\$ 1,261,637	\$ 1,299,486
\$ 169,927	\$ 175,025	\$ 180,276	\$ 185,684	\$ 191,254	\$ 196,992	\$ 202,902	\$ 208,989	\$ 215,258
\$ 631,396	\$ 650,338	\$ 669,848	\$ 689,944	\$ 710,642	\$ 731,961	\$ 753,920	\$ 776,538	\$ 799,834
\$ 42,025	\$ 43,286	\$ 44,584	\$ 45,922	\$ 47,299	\$ 48,718	\$ 50,180	\$ 51,685	\$ 53,236
\$ 48,622	\$ 50,081	\$ 51,583	\$ 53,131	\$ 54,725	\$ 56,367	\$ 58,058	\$ 59,799	\$ 61,593
\$ -	\$ -	\$ -	\$ 150,000	\$ 154,500	\$ 159,135	\$ 163,909	\$ 168,826	\$ 173,891
\$ 87,172	\$ 89,787	\$ 92,481	\$ 95,255	\$ 98,113	\$ 101,056	\$ 104,088	\$ 107,210	\$ 110,427
\$ 70,999	\$ 73,129	\$ 75,322	\$ 77,582	\$ 79,910	\$ 82,307	\$ 84,776	\$ 87,319	\$ 89,939
\$ 22,970	\$ 23,659	\$ 24,369	\$ 25,100	\$ 25,853	\$ 26,629	\$ 27,428	\$ 28,250	\$ 29,098
\$ 35,651	\$ 36,720	\$ 37,822	\$ 38,957	\$ 40,125	\$ 41,329	\$ 42,569	\$ 43,846	\$ 45,161
\$ 74,755	\$ 76,997	\$ 79,307	\$ 81,687	\$ 84,137	\$ 86,661	\$ 89,261	\$ 91,939	\$ 94,697
\$ 6,460,527	\$ 6,654,343	\$ 6,853,974	\$ 7,059,593	\$ 7,271,381	\$ 7,489,522	\$ 7,714,208	\$ 7,945,634	\$ 8,184,003
\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
\$ 110,900	\$ 114,227	\$ 117,654	\$ 121,184	\$ 124,819	\$ 128,564	\$ 132,421	\$ 136,393	\$ 140,485
\$ 90,153	\$ 92,857	\$ 95,643	\$ 98,512	\$ 101,468	\$ 104,512	\$ 107,647	\$ 110,876	\$ 114,203
\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
\$ 140,040	\$ 144,241	\$ 148,568	\$ 153,025	\$ 157,616	\$ 162,344	\$ 167,215	\$ 172,231	\$ 177,398
\$ 18,133	\$ 18,677	\$ 19,238	\$ 19,815	\$ 20,409	\$ 21,022	\$ 21,652	\$ 22,302	\$ 22,971
\$ 190,678	\$ 196,399	\$ 202,291	\$ 208,359	\$ 214,610	\$ 221,049	\$ 227,680	\$ 234,510	\$ 241,546
\$ 2,706	\$ 2,787	\$ 2,870	\$ 2,956	\$ 3,045	\$ 3,136	\$ 3,231	\$ 3,327	\$ 3,427
\$ 45,133	\$ 46,487	\$ 47,881	\$ 49,318	\$ 50,797	\$ 52,321	\$ 53,891	\$ 55,508	\$ 57,173
\$ 6,089,667	\$ 6,272,357	\$ 6,460,527	\$ 6,654,343	\$ 6,853,974	\$ 7,059,593	\$ 7,271,381	\$ 7,489,522	\$ 7,714,208
\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
\$ 38,216	\$ 39,362	\$ 40,543	\$ 41,759	\$ 43,012	\$ 44,302	\$ 45,631	\$ 47,000	\$ 48,410
\$ 43,010	\$ 44,300	\$ 45,629	\$ 46,998	\$ 48,408	\$ 49,860	\$ 51,356	\$ 52,896	\$ 54,483
\$ 24,929	\$ 25,677	\$ 26,447	\$ 27,241	\$ 28,058	\$ 28,900	\$ 29,767	\$ 30,660	\$ 31,579
\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
\$ 43,968	\$ 45,287	\$ 46,646	\$ 48,045	\$ 49,487	\$ 50,971	\$ 52,501	\$ 54,076	\$ 55,698
\$ 133,494	\$ 137,499	\$ 141,624	\$ 145,873	\$ 150,249	\$ 154,756	\$ 159,399	\$ 164,181	\$ 169,106
\$ 66,628	\$ 68,627	\$ 70,685	\$ 72,806	\$ 74,990	\$ 77,240	\$ 79,557	\$ 81,944	\$ 84,402
\$ 7,262	\$ 7,480	\$ 7,704	\$ 7,935	\$ 8,173	\$ 8,418	\$ 8,671	\$ 8,931	\$ 9,199
\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
\$ 1,110,659	\$ 1,143,979	\$ 1,178,298	\$ 1,213,647	\$ 1,250,057	\$ 1,287,558	\$ 1,326,185	\$ 1,365,971	\$ 1,406,950
\$ 269,377	\$ 277,459	\$ 285,782	\$ 294,356	\$ 303,187	\$ 312,282	\$ 321,651	\$ 331,300	\$ 341,239
\$ 101,800	\$ 104,854	\$ 107,999	\$ 111,239	\$ 114,576	\$ 118,014	\$ 121,554	\$ 125,201	\$ 128,957
\$ 64,422	\$ 66,355	\$ 68,345	\$ 70,396	\$ 72,508	\$ 74,683	\$ 76,923	\$ 79,231	\$ 81,608
\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
\$ 54,803	\$ 56,448	\$ 58,141	\$ 59,885	\$ 61,682	\$ 63,532	\$ 65,438	\$ 67,401	\$ 69,423
\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
\$ 12,138	\$ 12,502	\$ 12,877	\$ 13,263	\$ 13,661	\$ 14,071	\$ 14,493	\$ 14,928	\$ 15,376
\$ 85,616	\$ 88,185	\$ 90,830	\$ 93,555	\$ 96,362	\$ 99,252	\$ 102,230	\$ 105,297	\$ 108,456
\$ 2,129	\$ 2,193	\$ 2,258	\$ 2,326	\$ 2,396	\$ 2,468	\$ 2,542	\$ 2,618	\$ 2,697
\$ 2,129	\$ 2,193	\$ 2,258	\$ 2,326	\$ 2,396	\$ 2,468	\$ 2,542	\$ 2,618	\$ 2,697
\$ 60,007	\$ 61,807	\$ 63,661	\$ 65,571	\$ 67,538	\$ 69,564	\$ 71,651	\$ 73,801	\$ 76,015
\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
\$ 861	\$ 887	\$ 914	\$ 941	\$ 969	\$ 999	\$ 1,029	\$ 1,059	\$ 1,091
\$ 4,261	\$ 4,389	\$ 4,521	\$ 4,656	\$ 4,796	\$ 4,940	\$ 5,088	\$ 5,241	\$ 5,398
\$ 134,625	\$ 138,663	\$ 142,823	\$ 147,108	\$ 151,521	\$ 156,067	\$ 160,749	\$ 165,571	\$ 170,539
\$ 19,195,703	\$ 19,771,574	\$ 20,364,722	\$ 21,125,663	\$ 21,759,433	\$ 22,412,216	\$ 23,084,583	\$ 23,777,120	\$ 24,490,434
3.0%	3.0%	3.0%	3.0%	3.0%	3.0%	3.0%	3.0%	3.0%
0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%

*Yellow cell: reported by city treasurer as \$572,780; assumed to be a mistake for value listed

*Green cells: new infill development as describe in Chapter 6.

*Red cells: Phase I

*Orange cells: Phase II

APPENDIX VI: TIF Calculations

Scenario 3: Depressed Markets

Parcel No.	Name	Address	Block	Assessed Value	Taxable Value	2012	2013
5851-002-020-00	Mason Schools	10701 Elmhurst	11	\$ -	\$ -	\$ -	\$ -
5851-002-020-10	Mason Schools	10701 Elmhurst	11	\$ -	\$ -	\$ -	\$ -
5851-003-005-00	Luna Pier Car Wash -DBA	4237 Luna Pier Road	8	\$ 56,700	\$ 56,700	\$ 54,432	\$ 53,343
5851-003-005-10	Luna Pier Car Wash -DBA	10550 Evans Drive	7	\$ 75,800	\$ 74,775	\$ 71,784	\$ 70,348
5851-003-006-00	Ganders Restuarant	4219 Luna Pier Road	7	\$ 115,500	\$ 115,500	\$ 110,880	\$ 108,662
5851-003-007-10	VanEx Fire Systems	10447 Harold Drive	6	\$ 169,400	\$ 169,400	\$ 162,624	\$ 159,372
5851-003-007-50	S & V Holding	10552 Evans Drive	7	\$ 374,300	\$ 303,469	\$ 291,330	\$ 285,504
5851-003-009-10	Sphinx Investments	10501 Evans Drive	5	\$ 81,700	\$ 81,700	\$ 78,432	\$ 76,863
5851-003-009-20	Luna Pier Storage	10441 Harold Drive	6	\$ 219,100	\$ 219,100	\$ 210,336	\$ 206,129
5851-003-009-30	Super 8 Motel	4163 Super Eight Drive	5	\$ 786,000	\$ 786,000	\$ 754,560	\$ 739,469
5851-003-009-40	Victory Carpert	10543 Evans Drive	7	\$ 130,200	\$ 130,200	\$ 124,992	\$ 122,492
5851-003-010-00	Luna Pier Harbour Club	10420 Harold Drive	6	\$ 536,900	\$ 483,783	\$ 464,432	\$ 455,143
5851-003-011-00	Luna Pier Harbour Club	10420 Harold Drive	6	\$ 32,200	\$ 32,200	\$ 30,912	\$ 30,294
5851-003-012-00	Jerry & Chris Whipple	10450 Harold Drive	6	\$ 67,500	\$ 37,255	\$ 35,765	\$ 35,050
5851-003-014-00	City of Luna Pier	Lot	5	\$ -	\$ -	\$ -	\$ -
5851-003-017-00	Luna Pier Harbour Club	10420 Harold Drive	6	\$ 77,600	\$ 66,792	\$ 64,120	\$ 62,838
5851-025-001-00	Joseph & Crystal Manley	10712 Lakeside	4	\$ 54,400	\$ 54,400	\$ 52,224	\$ 51,180
5851-025-002-00	Joseph & Crystal Manley	10712 Lakeside	4	\$ 17,600	\$ 17,600	\$ 16,896	\$ 16,558
5851-025-003-00	Linda Gulley	10704 Lakeside	4	\$ 39,700	\$ 27,316	\$ 26,223	\$ 25,699
5851-025-004-00	Doris Derbeck	10666 Lakeside	4	\$ 60,200	\$ 57,278	\$ 54,987	\$ 53,887
5851-030-001-00	Chris Jenkins	4419 Elm	3	\$ 30,300	\$ 28,699	\$ 27,551	\$ 27,000
5851-030-002-00	Chris Jenkins	4419 Elm	3	\$ 13,100	\$ 2,073	\$ 1,990	\$ 1,950
5851-030-003-00	City of Luna Pier	Lot	13	\$ -	\$ -	\$ -	\$ -
5851-030-004-00	Michael Lucarelli	4416 Luna Pier Road	3	\$ 42,000	\$ 42,000	\$ 40,320	\$ 39,514
5851-055-001-00	City of Luna Pier	Lot	4	\$ -	\$ -	\$ -	\$ -
5851-055-002-00	Debra Welton	10632 Lakeside	4	\$ 100,400	\$ 84,973	\$ 81,574	\$ 79,943
5851-055-003-00	Sara Welton	10628 Lakeside	4	\$ 88,600	\$ 69,076	\$ 66,313	\$ 64,987
5851-055-006-00	City of Luna Pier	Lot	4	\$ -	\$ -	\$ -	\$ -
5851-055-007-00	Douglas Berry	10644 Lakeside	4	\$ 107,300	\$ 107,300	\$ 103,008	\$ 100,948
5851-055-010-00	Douglas Berry	10644 Lakeside	4	\$ 24,900	\$ 13,894	\$ 13,338	\$ 13,071
5851-055-011-00	James & Linda Emptage	10662 Lakeside	4	\$ 146,100	\$ 146,100	\$ 140,256	\$ 137,451
5851-055-013-00	Doris Derbeck	10666 Lakeside	4	\$ 15,800	\$ 2,073	\$ 1,990	\$ 1,950
5851-060-001-00	John Hafeli - Post Office	4352 Luna Pier Road	2	\$ 37,100	\$ 32,950	\$ 31,632	\$ 30,999
5851-060-002-00	Andrew's Place	4354 Luna Pier Road	2	\$ 60,600	\$ 60,600	\$ 58,176	\$ 57,012
5851-060-003-00	Michael Lucarelli	4380 Luna Pier Road	2	\$ 36,200	\$ 36,200	\$ 34,752	\$ 34,057
5851-060-004-00	Michael Lucarelli	4408 Luna Pier Road	2	\$ 49,700	\$ 49,700	\$ 47,712	\$ 46,758
5851-060-005-00	Michael Lucarelli	4416 Luna Pier Road	2	\$ 10,300	\$ 10,300	\$ 9,888	\$ 9,690
5851-060-006-00	Matt Smith	4413 Elm	2	\$ 19,400	\$ 19,400	\$ 18,624	\$ 18,252
5851-060-007-00	Nicole Travis	4407 Elm	2	\$ 14,100	\$ 14,100	\$ 13,536	\$ 13,265
5851-060-008-00	City of Luna Pier	Parking lot	1	\$ -	\$ -	\$ -	\$ -
5851-060-010-00	Francis Kortsch	4364 Elm	1	\$ 27,900	\$ 27,900	\$ 26,784	\$ 26,248
5851-060-019-00	Allison Turner	10629 Northern	1	\$ 31,400	\$ 31,400	\$ 30,144	\$ 29,541
5851-060-020-00	John & Patti Cureton	4363 Buckeye Street	1	\$ 18,200	\$ 18,200	\$ 17,472	\$ 17,123
5851-060-021-00	City Hall	4357 Buckeye Street	1	\$ -	\$ -	\$ -	\$ -
5851-075-001-00	Luna Pier Baptist Church	4265 Luna Pier Road	8	\$ -	\$ -	\$ -	\$ -
5851-080-001-00	Martin Bally	10620 Harold Drive	1	\$ 32,100	\$ 32,100	\$ 30,816	\$ 30,200
5851-080-002-00	U & Y Enterprises - store	4348 Luna Pier Road	2	\$ 132,600	\$ 97,460	\$ 93,562	\$ 91,690
5851-080-006-00	Robert Garverick - Chateau	4320 Luna Pier Road	12	\$ 73,900	\$ 51,051	\$ 49,009	\$ 48,029
5851-080-007-00	Robert Garverick - Chateau	4320 Luna Pier Road	12	\$ 10,700	\$ 5,564	\$ 5,341	\$ 5,235
5851-120-141-00	City of Luna Pier	Park	13	\$ -	\$ -	\$ -	\$ -
5851-125-001-00	Sunoco Station	4180 Luna Pier Road	9	\$ 851,000	\$ 851,000	\$ 816,960	\$ 800,621
5851-125-003-00	Balencia Wellness Center	4220 Luna Pier Road	9	\$ 206,400	\$ 206,400	\$ 198,144	\$ 194,181
5851-125-004-00	Tony Zalucki - apartments	4240 Luna Pier Road	10	\$ 78,000	\$ 78,000	\$ 74,880	\$ 73,382
5851-125-005-00	Charles Kelly	4246 Luna Pier Road	10	\$ 90,800	\$ 49,361	\$ 47,387	\$ 46,439
5851-125-006-00	Luna Pier Fire Station	4368 Luna Pier Road	12	\$ -	\$ -	\$ -	\$ -
5851-125-007-00	Robert & Kathy Hearn	4267 Erie Road	12	\$ 47,800	\$ 41,991	\$ 40,311	\$ 39,505
5851-125-007-10	City of Luna Pier	Lot	12	\$ -	\$ -	\$ -	\$ -
5851-125-008-00	Tony Zalucki	4240 Luna Pier Road	10	\$ 9,300	\$ 9,300	\$ 8,928	\$ 8,749
5851-125-014-00	Richard & Margaret Dorman	10631 Valleywood	10	\$ 65,600	\$ 65,600	\$ 62,976	\$ 61,716
5851-125-015-01	Donald Schultz	Lot	10	\$ 11,600	\$ 1,631	\$ 1,566	\$ 1,534
5851-125-015-10	Donald Schultz	Lot	10	\$ 11,600	\$ 1,631	\$ 1,566	\$ 1,534
5851-125-016-00	Joseph Zdesar	10643 Valleywood	10	\$ 51,700	\$ 45,978	\$ 44,139	\$ 43,256
5851-140-131-00	City of Luna Pier	Park	13	\$ -	\$ -	\$ -	\$ -
5851-155-057-00	Luna Pier Harbour Club	10121 Grand Blvd	6	\$ 1,900	\$ 660	\$ 634	\$ 621
5851-155-058-00	Luna Pier Harbour Club	10121 Grand Blvd	6	\$ 57,400	\$ 3,265	\$ 3,134	\$ 3,072
5851-155-059-00	Luna Pier Harbour Club	10121 Grand Blvd	6	\$ 119,300	\$ 103,151	\$ 99,025	\$ 97,044
				TOTAL:	\$ 5,154,549	\$ 4,948,367	\$ 4,849,400
				NMA	-4.0%	-2.0%	-1.0%
				Downtown multiplier	0.0%	0.0%	5.0%

*Yellow cell: reported by city treasurer as \$572,780; this is assumed to be a mistake for value listed.

*Green cells: new infill development as describe in Chapter 6.

APPENDIX VI: TIF Calculations

Scenario 3: Depressed Markets

2014	2015	2016	2017	2018	2019	2020	2021	2022
\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
\$ -	\$ -	\$ 150,000	\$ 153,750	\$ 157,594	\$ 161,534	\$ 165,572	\$ 169,711	\$ 173,954
\$ 52,810	\$ 52,810	\$ 53,338	\$ 54,671	\$ 56,038	\$ 57,439	\$ 58,875	\$ 60,347	\$ 61,856
\$ 69,645	\$ 69,645	\$ 70,341	\$ 72,100	\$ 73,902	\$ 75,750	\$ 77,644	\$ 79,584	\$ 81,570
\$ 107,576	\$ 107,576	\$ 108,652	\$ 111,368	\$ 114,152	\$ 117,006	\$ 119,931	\$ 122,929	\$ 126,002
\$ 157,778	\$ 157,778	\$ 159,356	\$ 163,339	\$ 167,423	\$ 171,609	\$ 175,899	\$ 180,296	\$ 184,804
\$ 282,649	\$ 282,649	\$ 285,475	\$ 292,612	\$ 299,927	\$ 307,425	\$ 315,111	\$ 322,989	\$ 331,064
\$ 76,095	\$ 76,095	\$ 76,856	\$ 78,777	\$ 80,746	\$ 82,765	\$ 84,834	\$ 86,955	\$ 89,129
\$ 204,068	\$ 204,068	\$ 206,109	\$ 211,261	\$ 216,543	\$ 221,956	\$ 227,505	\$ 233,193	\$ 239,023
\$ 732,074	\$ 732,074	\$ 739,395	\$ 757,880	\$ 776,827	\$ 796,247	\$ 816,154	\$ 836,557	\$ 857,471
\$ 121,267	\$ 121,267	\$ 122,480	\$ 125,542	\$ 128,680	\$ 131,897	\$ 135,195	\$ 138,575	\$ 142,039
\$ 450,592	\$ 450,592	\$ 455,098	\$ 466,475	\$ 478,137	\$ 490,090	\$ 502,343	\$ 514,901	\$ 527,774
\$ 29,991	\$ 29,991	\$ 30,291	\$ 31,048	\$ 31,824	\$ 32,620	\$ 33,435	\$ 34,271	\$ 35,128
\$ 34,699	\$ 34,699	\$ 35,046	\$ 35,922	\$ 36,820	\$ 37,741	\$ 38,684	\$ 39,651	\$ 40,643
\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
\$ 62,210	\$ 62,210	\$ 62,832	\$ 64,402	\$ 66,012	\$ 67,663	\$ 69,354	\$ 71,088	\$ 72,865
\$ 50,668	\$ 50,668	\$ 51,174	\$ 52,454	\$ 53,765	\$ 55,109	\$ 56,487	\$ 57,899	\$ 59,347
\$ 16,392	\$ 16,392	\$ 16,556	\$ 16,970	\$ 17,395	\$ 17,829	\$ 18,275	\$ 18,732	\$ 19,200
\$ 25,442	\$ 25,442	\$ 25,696	\$ 26,339	\$ 26,997	\$ 27,672	\$ 28,364	\$ 29,073	\$ 29,800
\$ 53,348	\$ 53,348	\$ 53,882	\$ 55,229	\$ 56,610	\$ 58,025	\$ 59,475	\$ 60,962	\$ 62,486
\$ 28,080	\$ 28,080	\$ 28,361	\$ 29,070	\$ 29,797	\$ 30,542	\$ 31,305	\$ 32,088	\$ 32,890
\$ 2,028	\$ 2,028	\$ 2,049	\$ 2,100	\$ 2,152	\$ 2,206	\$ 2,261	\$ 2,318	\$ 2,376
\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
\$ 41,094	\$ 41,094	\$ 41,505	\$ 42,543	\$ 43,606	\$ 44,696	\$ 45,814	\$ 46,959	\$ 48,133
\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
\$ 79,143	\$ 79,143	\$ 79,935	\$ 81,933	\$ 83,981	\$ 86,081	\$ 88,233	\$ 90,439	\$ 92,700
\$ 64,337	\$ 64,337	\$ 64,980	\$ 66,605	\$ 68,270	\$ 69,977	\$ 71,726	\$ 73,519	\$ 75,357
\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
\$ 99,938	\$ 99,938	\$ 100,938	\$ 103,461	\$ 106,048	\$ 108,699	\$ 111,416	\$ 114,202	\$ 117,057
\$ 12,941	\$ 12,941	\$ 13,070	\$ 13,397	\$ 13,732	\$ 14,075	\$ 14,427	\$ 14,788	\$ 15,157
\$ 136,076	\$ 136,076	\$ 137,437	\$ 140,873	\$ 144,395	\$ 148,005	\$ 151,705	\$ 155,498	\$ 159,385
\$ 1,931	\$ 1,931	\$ 1,950	\$ 1,999	\$ 2,049	\$ 2,100	\$ 2,153	\$ 2,206	\$ 2,261
\$ 32,239	\$ 32,239	\$ 32,562	\$ 33,376	\$ 34,210	\$ 35,065	\$ 35,942	\$ 36,841	\$ 37,762
\$ 59,293	\$ 59,293	\$ 59,886	\$ 61,383	\$ 62,918	\$ 64,491	\$ 66,103	\$ 67,755	\$ 69,449
\$ 35,419	\$ 35,419	\$ 35,773	\$ 36,668	\$ 37,584	\$ 38,524	\$ 39,487	\$ 40,474	\$ 41,486
\$ 48,628	\$ 48,628	\$ 49,114	\$ 50,342	\$ 51,601	\$ 52,891	\$ 54,213	\$ 55,568	\$ 56,958
\$ 10,078	\$ 10,078	\$ 10,179	\$ 10,433	\$ 10,694	\$ 10,961	\$ 11,235	\$ 11,516	\$ 11,804
\$ 18,982	\$ 18,982	\$ 19,171	\$ 19,651	\$ 20,142	\$ 20,645	\$ 21,162	\$ 21,691	\$ 22,233
\$ 13,796	\$ 13,796	\$ 13,934	\$ 14,282	\$ 14,639	\$ 15,005	\$ 15,380	\$ 15,765	\$ 16,159
\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
\$ 27,298	\$ 27,298	\$ 27,571	\$ 28,261	\$ 28,967	\$ 29,691	\$ 30,433	\$ 31,194	\$ 31,974
\$ 30,723	\$ 30,723	\$ 31,030	\$ 31,806	\$ 32,601	\$ 33,416	\$ 34,251	\$ 35,108	\$ 35,985
\$ 17,807	\$ 17,807	\$ 17,986	\$ 18,435	\$ 18,896	\$ 19,368	\$ 19,853	\$ 20,349	\$ 20,858
\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
\$ 31,408	\$ 31,408	\$ 31,722	\$ 32,515	\$ 33,328	\$ 34,161	\$ 35,015	\$ 35,890	\$ 36,787
\$ 95,358	\$ 95,358	\$ 96,312	\$ 98,719	\$ 101,187	\$ 103,717	\$ 106,310	\$ 108,968	\$ 111,692
\$ 47,548	\$ 47,548	\$ 48,024	\$ 49,225	\$ 50,455	\$ 51,717	\$ 53,009	\$ 54,335	\$ 55,693
\$ 5,182	\$ 5,182	\$ 5,234	\$ 5,365	\$ 5,499	\$ 5,637	\$ 5,777	\$ 5,922	\$ 6,070
\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
\$ 792,615	\$ 792,615	\$ 800,541	\$ 820,554	\$ 841,068	\$ 862,095	\$ 883,647	\$ 905,738	\$ 928,382
\$ 192,239	\$ 192,239	\$ 194,162	\$ 199,016	\$ 203,991	\$ 209,091	\$ 214,318	\$ 219,676	\$ 225,168
\$ 72,649	\$ 72,649	\$ 73,375	\$ 75,209	\$ 77,090	\$ 79,017	\$ 80,992	\$ 83,017	\$ 85,093
\$ 45,974	\$ 45,974	\$ 46,434	\$ 47,595	\$ 48,785	\$ 50,005	\$ 51,255	\$ 52,536	\$ 53,849
\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
\$ 39,110	\$ 39,110	\$ 39,501	\$ 40,489	\$ 41,501	\$ 42,538	\$ 43,602	\$ 44,692	\$ 45,809
\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
\$ 8,662	\$ 8,662	\$ 8,749	\$ 8,967	\$ 9,191	\$ 9,421	\$ 9,657	\$ 9,898	\$ 10,146
\$ 61,099	\$ 61,099	\$ 61,710	\$ 63,253	\$ 64,834	\$ 66,455	\$ 68,117	\$ 69,820	\$ 71,565
\$ 1,519	\$ 1,519	\$ 1,534	\$ 1,573	\$ 1,612	\$ 1,652	\$ 1,694	\$ 1,736	\$ 1,779
\$ 1,519	\$ 1,519	\$ 1,534	\$ 1,573	\$ 1,612	\$ 1,652	\$ 1,694	\$ 1,736	\$ 1,779
\$ 42,824	\$ 42,824	\$ 43,252	\$ 44,333	\$ 45,441	\$ 46,577	\$ 47,742	\$ 48,935	\$ 50,159
\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
\$ 615	\$ 615	\$ 621	\$ 636	\$ 652	\$ 669	\$ 685	\$ 702	\$ 720
\$ 3,041	\$ 3,041	\$ 3,071	\$ 3,148	\$ 3,227	\$ 3,308	\$ 3,390	\$ 3,475	\$ 3,562
\$ 96,074	\$ 96,074	\$ 97,035	\$ 99,461	\$ 101,947	\$ 104,496	\$ 107,108	\$ 109,786	\$ 112,531
\$ 4,824,571	\$ 4,824,571	\$ 5,022,816	\$ 5,148,387	\$ 5,277,096	\$ 5,409,024	\$ 5,544,249	\$ 5,753,271	\$ 5,897,103
0.0%	1.0%	2.5%	2.5%	2.5%	2.5%	2.5%	2.5%	2.5%
0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%

*Yellow cell: reported by city treasurer as \$572,780; this is assumed to be a mistake for value listed.

*Green cells: new infill development as describe in Chapter 6.

APPENDIX VI: TIF Calculations

Scenario 3: Depressed Markets

2023	2024	2025	2026	2027	2028	2029	2030	2031
\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
\$ 178,303	\$ 182,760	\$ 187,329	\$ 192,013	\$ 196,813	\$ 201,733	\$ 206,777	\$ 211,946	\$ 217,245
\$ 63,402	\$ 64,987	\$ 66,612	\$ 68,277	\$ 69,984	\$ 71,734	\$ 73,527	\$ 75,365	\$ 77,249
\$ 157,594	\$ 161,534	\$ 165,572	\$ 169,711	\$ 173,954	\$ 178,303	\$ 182,760	\$ 187,329	\$ 192,013
\$ 129,153	\$ 132,381	\$ 135,691	\$ 139,083	\$ 142,560	\$ 146,124	\$ 149,777	\$ 153,522	\$ 157,360
\$ 189,424	\$ 194,159	\$ 199,013	\$ 203,989	\$ 209,088	\$ 214,316	\$ 219,673	\$ 225,165	\$ 230,794
\$ 339,340	\$ 347,824	\$ 356,519	\$ 365,432	\$ 374,568	\$ 383,932	\$ 393,531	\$ 403,369	\$ 413,453
\$ 91,357	\$ 93,641	\$ 95,982	\$ 98,382	\$ 100,841	\$ 103,362	\$ 105,946	\$ 108,595	\$ 111,310
\$ 244,998	\$ 251,123	\$ 257,401	\$ 263,837	\$ 270,432	\$ 277,193	\$ 284,123	\$ 291,226	\$ 298,507
\$ 878,908	\$ 900,881	\$ 923,403	\$ 946,488	\$ 970,150	\$ 994,404	\$ 1,019,264	\$ 1,044,746	\$ 1,070,864
\$ 145,590	\$ 149,230	\$ 152,961	\$ 156,785	\$ 160,704	\$ 164,722	\$ 168,840	\$ 173,061	\$ 177,387
\$ 540,968	\$ 554,492	\$ 568,354	\$ 582,563	\$ 597,127	\$ 612,056	\$ 627,357	\$ 643,041	\$ 659,117
\$ 36,006	\$ 36,906	\$ 37,829	\$ 38,775	\$ 39,744	\$ 40,738	\$ 41,756	\$ 42,800	\$ 43,870
\$ 41,659	\$ 42,700	\$ 43,768	\$ 44,862	\$ 45,983	\$ 47,133	\$ 48,311	\$ 49,519	\$ 50,757
\$ -	\$ -	\$ -	\$ 150,000	\$ 153,750	\$ 157,594	\$ 161,534	\$ 165,572	\$ 169,711
\$ 74,687	\$ 76,554	\$ 78,468	\$ 80,430	\$ 82,441	\$ 84,502	\$ 86,614	\$ 88,779	\$ 90,999
\$ 60,830	\$ 62,351	\$ 63,910	\$ 65,508	\$ 67,145	\$ 68,824	\$ 70,544	\$ 72,308	\$ 74,116
\$ 19,680	\$ 20,172	\$ 20,677	\$ 21,194	\$ 21,723	\$ 22,267	\$ 22,823	\$ 23,394	\$ 23,979
\$ 30,545	\$ 31,308	\$ 32,091	\$ 32,893	\$ 33,716	\$ 34,559	\$ 35,423	\$ 36,308	\$ 37,216
\$ 64,048	\$ 65,650	\$ 67,291	\$ 68,973	\$ 70,698	\$ 72,465	\$ 74,277	\$ 76,134	\$ 78,037
\$ 33,712	\$ 34,555	\$ 35,419	\$ 36,304	\$ 37,212	\$ 38,142	\$ 39,096	\$ 40,073	\$ 41,075
\$ 2,435	\$ 2,496	\$ 2,558	\$ 2,622	\$ 2,688	\$ 2,755	\$ 2,824	\$ 2,895	\$ 2,967
\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
\$ 49,337	\$ 50,570	\$ 51,834	\$ 53,130	\$ 54,458	\$ 55,820	\$ 57,215	\$ 58,646	\$ 60,112
\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
\$ 95,017	\$ 97,393	\$ 99,827	\$ 102,323	\$ 104,881	\$ 107,503	\$ 110,191	\$ 112,946	\$ 115,769
\$ 77,241	\$ 79,172	\$ 81,151	\$ 83,180	\$ 85,260	\$ 87,391	\$ 89,576	\$ 91,815	\$ 94,111
\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
\$ 119,983	\$ 122,983	\$ 126,057	\$ 129,209	\$ 132,439	\$ 135,750	\$ 139,144	\$ 142,622	\$ 146,188
\$ 15,536	\$ 15,925	\$ 16,323	\$ 16,731	\$ 17,149	\$ 17,578	\$ 18,017	\$ 18,468	\$ 18,930
\$ 163,370	\$ 167,454	\$ 171,640	\$ 175,931	\$ 180,329	\$ 184,838	\$ 189,459	\$ 194,195	\$ 199,050
\$ 2,318	\$ 2,376	\$ 2,435	\$ 2,496	\$ 2,559	\$ 2,623	\$ 2,688	\$ 2,755	\$ 2,824
\$ 38,706	\$ 39,673	\$ 40,665	\$ 41,682	\$ 42,724	\$ 43,792	\$ 44,887	\$ 46,009	\$ 47,159
\$ 71,186	\$ 72,965	\$ 74,789	\$ 76,659	\$ 78,576	\$ 80,540	\$ 82,553	\$ 84,617	\$ 86,733
\$ 42,523	\$ 43,586	\$ 44,676	\$ 45,793	\$ 46,938	\$ 48,111	\$ 49,314	\$ 50,547	\$ 51,811
\$ 58,382	\$ 59,841	\$ 61,337	\$ 62,871	\$ 64,442	\$ 66,053	\$ 67,705	\$ 69,397	\$ 71,132
\$ 12,099	\$ 12,402	\$ 12,712	\$ 13,030	\$ 13,355	\$ 13,689	\$ 14,031	\$ 14,382	\$ 14,742
\$ 22,789	\$ 23,358	\$ 23,942	\$ 24,541	\$ 25,155	\$ 25,783	\$ 26,428	\$ 27,089	\$ 27,766
\$ 16,563	\$ 16,977	\$ 17,401	\$ 17,837	\$ 18,282	\$ 18,739	\$ 19,208	\$ 19,688	\$ 20,180
\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
\$ 32,774	\$ 33,593	\$ 34,433	\$ 35,294	\$ 36,176	\$ 37,080	\$ 38,007	\$ 38,957	\$ 39,931
\$ 36,885	\$ 37,807	\$ 38,752	\$ 39,721	\$ 40,714	\$ 41,732	\$ 42,775	\$ 43,845	\$ 44,941
\$ 21,379	\$ 21,914	\$ 22,461	\$ 23,023	\$ 23,599	\$ 24,189	\$ 24,793	\$ 25,413	\$ 26,048
\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
\$ 37,707	\$ 38,650	\$ 39,616	\$ 40,607	\$ 41,622	\$ 42,662	\$ 43,729	\$ 44,822	\$ 45,943
\$ 114,484	\$ 117,346	\$ 120,280	\$ 123,287	\$ 126,369	\$ 129,528	\$ 132,767	\$ 136,086	\$ 139,488
\$ 57,085	\$ 58,513	\$ 59,975	\$ 61,475	\$ 63,012	\$ 64,587	\$ 66,202	\$ 67,857	\$ 69,553
\$ 6,222	\$ 6,377	\$ 6,537	\$ 6,700	\$ 6,868	\$ 7,039	\$ 7,215	\$ 7,396	\$ 7,581
\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
\$ 951,591	\$ 975,381	\$ 999,766	\$ 1,024,760	\$ 1,050,379	\$ 1,076,638	\$ 1,103,554	\$ 1,131,143	\$ 1,159,422
\$ 230,797	\$ 236,567	\$ 242,481	\$ 248,543	\$ 254,757	\$ 261,126	\$ 267,654	\$ 274,345	\$ 281,204
\$ 87,220	\$ 89,400	\$ 91,635	\$ 93,926	\$ 96,274	\$ 98,681	\$ 101,148	\$ 103,677	\$ 106,269
\$ 55,196	\$ 56,576	\$ 57,990	\$ 59,440	\$ 60,926	\$ 62,449	\$ 64,010	\$ 65,610	\$ 67,251
\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
\$ 46,954	\$ 48,128	\$ 49,332	\$ 50,565	\$ 51,829	\$ 53,125	\$ 54,453	\$ 55,814	\$ 57,209
\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
\$ 10,399	\$ 10,659	\$ 10,926	\$ 11,199	\$ 11,479	\$ 11,766	\$ 12,060	\$ 12,361	\$ 12,671
\$ 73,354	\$ 75,188	\$ 77,068	\$ 78,994	\$ 80,969	\$ 82,994	\$ 85,068	\$ 87,195	\$ 89,375
\$ 1,824	\$ 1,869	\$ 1,916	\$ 1,964	\$ 2,013	\$ 2,063	\$ 2,115	\$ 2,168	\$ 2,222
\$ 1,824	\$ 1,869	\$ 1,916	\$ 1,964	\$ 2,013	\$ 2,063	\$ 2,115	\$ 2,168	\$ 2,222
\$ 51,413	\$ 52,698	\$ 54,016	\$ 55,366	\$ 56,750	\$ 58,169	\$ 59,623	\$ 61,114	\$ 62,641
\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
\$ 738	\$ 756	\$ 775	\$ 795	\$ 815	\$ 835	\$ 856	\$ 877	\$ 899
\$ 3,651	\$ 3,742	\$ 3,836	\$ 3,932	\$ 4,030	\$ 4,131	\$ 4,234	\$ 4,340	\$ 4,448
\$ 115,344	\$ 118,227	\$ 121,183	\$ 124,213	\$ 127,318	\$ 130,501	\$ 133,763	\$ 137,108	\$ 140,535
\$ 6,044,530	\$ 6,195,644	\$ 6,350,535	\$ 6,509,298	\$ 6,672,781	\$ 6,840,925	\$ 7,013,736	\$ 7,191,219	\$ 7,373,485
2.5%	2.5%	2.5%	2.5%	2.5%	2.5%	2.5%	2.5%	2.5%
0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%

*Yellow cell: reported by city treasurer as \$572,780; this is assumed to be a mistake for value listed.
 *Green cells: new infill development as describe in Chapter 6.

Appendix VIII: Decision Making Guide for Luna Pier

The team confronted the Luna Pier project with assistance from academic and professional philosophers whom often guide the theory of planning. These planning philosophers include Kevin Lynch, William White, and Jane Jacobs. These authors provide the richest perspective into transforming Luna Pier's current situation of an industrial town into a more animated town center which can be used to enhance its transformation into a beach town. Using their principles and theories and infusing them with Luna Pier's Master Plan, redeveloping the downtown area will be much more successful.

Kevin Lynch studied place legibility or the ease at which people recognize their surrounding environment. Lynch discovered five elements that are mentally and physically correlated to the level of social animation in the city: including paths, edges, districts, nodes and landmarks. Paths are simply the corridors of which people are able to move. Edges are boundaries of two areas; for example, a wall between a beach and a downtown. Districts are areas that possess similar characteristics and/or function. Nodes are points of special interest; for example, a busy intersection in downtown. Finally, landmarks are an areas reference point; for example, a popular restaurant or a high school. Furthermore, the distinction between the elements enhances the social energy of the city.

The level of distinction between the elements provides a more clear mental picture for users which further defines the city. As people become attracted to the city it is important that there lies a clear distinction between nodes and paths and districts because people will view the city as a more imaginable place. In other words, as the city becomes increasingly imaginable, people understand a clearer picture as to what the function of the city is. In this project, the city's function needs to transform into a tourist beach town filled with activities and downtown commerce. By accentuating Kevin Lynch's elements in the perspective of beach town elements, Luna Pier has the potential to become an imaginable city; for example, creating a distinct boundary between the downtown area and the beach. However, Kevin Lynch's elements of a city represent the physical design of the city as it relates to personal perceptions of the city but, Lynch often ignores the social life that occurs on the streets.

William Whyte was another urban philosopher; he studied the social life of the street. That is, Whyte studied how people used urban centers and squares. Whyte's methods for studying people's interaction in urban squares were a bit unconventional but strong correlations resulted with his observations and conclusions. Whyte concluded that for a public center or square to be an attractive place for social conglomeration there should be ample seating. The seats need to be in the downtown, next to a corner and ideally close to a bus/rail stop and seating should not be 3 feet above the street. These aspects can be easily transpired into downtown Luna Pier.

Whyte's discoveries are simple, yet highly effective. Incorporating the aforementioned aspects into the Luna Pier downtown will further increase the social drama of the downtown. People will have desirable areas for interacting with each, which will attract other people and promote social connection between the people and the downtown.

Jane Jacobs, perhaps the most recognizable urban theorist, wrote numerous books about the policies that effect city formation. For example, Jacobs scrutinized the urban renewal program that forcefully displaced minorities. While her publications often analyze the policy portion of urban systems, she does provide insight on how urban systems should form. Jacobs describes an effective city that can produce innovation and vibrancy through dense multi-use areas. Here she describes 5 elements that create ideal urban environments: livable streets and neighborhoods, some minimum density of residential development as well as intensity of land use, an integration of living, working and shopping in reasonable proximity to each other, a manmade environment that defines and encloses public space, separate distinct buildings with complex arrangements and relationships. While Jacobs defines the characteristics of a healthy urban environment there are certain definitions of those characteristics that are presented vaguely. However, the purpose of Jacobs work is to understand that the dysfunction of city life is what makes a city unique; whereas order generates repetition and probabilities of which are dull and boring. While Jacobs work is more difficult to employ, in its specificity it can however, through its theory, be implemented.

Using Jacob's theories into Luna Pier, such as multiuse buildings, Luna Pier will be able to transform the downtown area into a more active scene. This scene is supposed to be socially dysfunctional often creating unpredicted public scenes. Jacobs' ideas accompanied by Whytes' urban seats creates an environment that is conducive to social interaction.

Finally, inspiration was drawn from Anne Whiston Spirn, who studied urban nature and humans design. Spirn noticed that during urban development, humans have a tendency to unattractively control their natural environment. She argues that instead of controlling the natural environment urban systems should try to accentuate the beauty of it. By accentuating this beauty, people are not appalled by the abrasive counterparts of controlling the environment. For example, controlling runoff can be accomplished by creating retention ponds. These ponds can be forged of concrete, which are visually appalling, or they can be naturally infused into the environment by planting grasses and bushes nearby. The latter of which provides a more inviting form of aesthetics.

Since Luna Pier contains a rich beach environment that if left without consideration when redeveloping would led to undesired and negative aesthetics, it is important to consider Spirn's work. Using Spirn's studies, Luna Pier needs to redevelop their downtown district while infusing and enhancing their natural beauty. This is especially important when the desired outcome of the redevelopment is a beach town. In other words, since beach towns often have a nautical feel to them, Luna Pier needs to physically enhance its nautical amenities.

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