New Orleans Riverfront: Reinventing the Crescent
An Economic Perspective

Prepared for

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Executive Summary

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Reinventing the Crescent focuses on public/private investments along the Riverfront to encourage an augmented housing stock along the high grounds on the bank of the Mississippi River; revitalize existing neighborhoods for renovation and redevelopment; promote a more active tourist industry including conventions, cruise ship traffic, attractions for families and individuals wishing to visit the city as a destination or be persuaded to extend a visit to New Orleans for another day or so; establish the Riversphere, an educational and research facility, in conjunction with Tulane University along the Riverfront and expand the capacity of the New Orleans Center for the Creative Arts. Perhaps most importantly, reinventing and reinvigorating the riverfront so that it is reintegrated into the life of the city and will reflect values, leadership, and priorities essential in attracting new industries and residents.

In gauging the economic impact of the development of the riverfront, as articulated in the Reinventing the Crescent project, three factors are essential. First, the public investment to initiate the economic activity is the first step. These strategic public investments are the IF expenditures as envisioned by the New Orleans Building Corporation. Second, what will the proposed public investment projects instigate in terms of private construction activity, or the THEN investments as characterized by the NOBC, and then permanent and ongoing economic activity that will be the result of the public and private investments? Finally, what ultimate economic outcomes will evolve from this public effort to revitalize a historical city?

The estimated public cost of the project is $294 million; the state is projected to carry the biggest investment share, 55%, but local government investment is projected to account for almost a fourth of the cost (23%), the federal government, as a result of projects related to both research and levee projects, is projected to cover 16% of the investment, and private/non-profit groups with philanthropic interests in areas such as the city’s recovery, enhancing urban greenspace, and promoting sustainable urban planning is projected to be a source of about 6% of the initial investments.

A reasonable expectation is that the initial investments will instigate private, profit-seeking investments, thereby multiplying the effect of the public money and concomitantly reducing the outstanding debt associated with the public expenditure. It is expected the private investment will be about $3.6 billion over the period of time from 2009 through 2024 with these investments being residential, commercial, and educational, or an average of $225 million per annum.

The projected economic impact of this construction activity, both public and private, supports average total spending of $513 million per annum, additional personal earnings of $190 million per annum, over 5,500 net new jobs created and supported every year, state tax revenue increases of $13 million per year, and additional local tax revenues of $8 million per year through the first nine years. The state’s investment of $162 million is essentially completely paid down by 2023 through the projected increase in construction activity alone. The estimated yearly economic impacts are summarized in Table ES.1 for the time period of 2008 through 2016 and for the time period of 2008 through 2024.

Table ES.1
Average Yearly Economic Impacts for IF and THEN Investments
For 2008 through 2016 and 2008 through 2024

ECONOMIC CATEGORIES	2008 THROUGH 2016	2008 THROUGH 2024
DIRECT SPENDING	$271.5 MILLION	$224.2MILLION
TOTAL SPENDING	$572.8 MILLION	$473.0 MILLION
EARNINGS	$190.4 MILLION	$157.2 MILLION
NET NEW JOBS	5,781	4,757
STATE TAX COLLECTIONS	$12.6 MILLION	$10.4 MILLION
LOCAL TAX COLLECTIONS	$8.4 MILLION	$6.9 MILLION

Source: Author and Regional Input-Output Tables , U.S. Department of Commerce.

The public and private investments with the clear intent of enhancing the riverfront are expected to augment tourism in New Orleans. A refined riverfront is expected to promote extended stays, more family-oriented visitors, increased activity connected with more cruise opportunities, and more attractive convention facilities. Just as an illustration, enticing 800,000 visitors, a meager eight percent of pre-Katrina visitor totals, to extend their stay by one additional night yields a projected $500 million of additional direct spending.

In addition, research and educational activities will also be enhanced through the Riversphere and the New Orleans Center for Creative Arts. Nearly 24,000 new jobs will be created through over $1.5 billion in total spending. Net new tax revenues will yield nearly $35 million more for the state and over $28 million more for New Orleans on a permanent basis. Table ES.2 illustrates the impact of increasing the present industries without accounting for the prospect of new commercial opportunities.

Table ES.2
Projected Impact of Increased Tourism and Research

ECONOMIC CATEGORIES	TOTAL SPENDING	PERSONAL EARNINGS	NET NEW JOBS	STATE TAX REVENUES	LOCAL TAX REVENUES
TOURISM	$1,581.4 MILLION	$505.9 MILLION	22,906	$33.4 MILLION	$27.4 MILLION
RESEARCH AND EDUCATION	$51.7 MILLION	$20.1 MILLION	851	$1.4 MILLION	$1.1 MILLION
TOTAL	$1,633.1 MILLION	$526.0 MILLION	23,757	$34.8 MILLION	$28.5 MILLION

Source: Author and Regional Input-Output Tables , U.S. Department of Commerce.

Businesses examine the rate of return on investment as one measure to determine if a project is profitable. State government can use the same financial procedure. In this case, the state will be making an investment of $162 million and, in return, the state will ignite an investment process and recurring activities that will generate a stream of net new state tax collections. The state's net cash flow will be the projected revenue stream on an annual basis less any capital expenses and ongoing operating expenses. The state will put up $162 million but will not incur any ongoing operating expenses and will reap the net new tax collections for years to come. The internal rate of return is the discount rate that makes the net cash flow equal to zero. These rates of return are illustrated in Table ES.3.

Rates of return are calculated for six different scenarios: first, for 20 year and 30 year time horizons. Reinventing the Crescent is a long-term economic development project—it is not just beautifying the riverfront, but it is making the riverfront a desirable for tourism, research and education, and promoting new commercial ventures as well as residential revitalization. Second, the rate of return is calculated based on the forecast of private investment of $3.6 billion over the period from 2010 to 2024 and 1.15 million new nights being spent in New Orleans starting in 2017. These are the projections based on what the author believes is likely to happen. Third, however, rates of return are also calculated on the basis of smaller private investment and not as substantial increase in tourism. Two scenarios were developed with one being there is a 25 percent reduction in the original forecasts and one being there is a 50 percent reduction in the original forecast. In all cases the rate of return is higher than the interest rate on 30 year government securities, the Baa corporate bond rate, and the bond rate on high-grade municipalities—all rates that are indicative of the borrowing rate for state government.

The projections are further made cautious by not including any inflation in the sales tax projections over this long time period. This assumption is introduced to make the rates of return just as cautious as possible. In addition, no increase in tourism is projected until all three phases of IF investments have been completed. This assumption is cautious as well as increases in tourism could easily take place as early as 2011 or 2012. Again the purpose is to keep the rates of return based on extremely cautious projections. In other words, the rates of return in Table ES.3 almost surely underestimate the ultimate impact of the state's investment in the New Orleans Riverfront.

This project, however, is far more comprehensive and ambitious than merely improving the tourist facilities that New Orleans offers. In fact, an improvement of this kind joins New Orleans with other great urban areas seeking to reintegrate waterfronts with the life of the city. The most impressive feature of Reinventing the Crescent is far less easy to quantify but will likely have the most profound effect on the future of the city. The aesthetic improvements and increased quality of life around this development will invigorate an essential area of the city – the neighborhoods adjacent to the proposed project account for over 50% of Orleans employment and 40% of the business units while generating over 60% of the payroll throughout the city. The Riverfront is the business center of the city. Improving the attractiveness and appeal of this area is essential to attracting new citizens and industries as well as keeping the residents interested in making New Orleans and Louisiana a better place to live.

Table ES.3
Summary of Internal Rate of Return on State Investments
Reinventing the Crescent: The New Orleans Riverfront

State's Commitment: **Invest $87 million in 2008; $42 million in 2010; and $33 million in 2013** **State will bear no recurring maintenance costs—these costs will be borne by NOBC**			
Time Period over which Internal Rate of Return is Calculated	**Basic Projections about Private Investment and Tourist Expansion**		
	Private Investment of $3.6 billion; 1.15 million additional tourist nights in New Orleans	**Private Investment of $2.6 billion; 862,500 additional tourist nights in New Orleans**	**Private Investment of $1.7 billion; 575,000 additional tourist nights in New Orleans**
20 Year Horizon	**17.0%**	**12.25%**	**7.0%**
30 Year Horizon	**18.0%**	**13.75%**	**9.0%**
Comparative Rates	**30 year US Security** **4.91%**	**Corporate Bond, Baa** **6.48%**	**High Grade Municipal Bonds** **4.42%**

In economic development, there is a tremendous emphasis on the new economy, and perhaps the most influential explication of this dynamic change in society is articulated by Richard Florida. His creative class thesis emphasizes the necessity of dynamic workers such as engineers, architects, musicians, educators, scientists, and artists in strengthening a region's economy. His data point to many areas such as Austin and Silicon Valley where residents have transformed a city by being on the cusp of advancements in technology, art, research, and ideas. The challenge is both attracting and retaining this diverse class of workers, and improvements such as an improved waterfront contribute to this end. Undoubtedly, this aspect, underlined by an overall improved quality of life, will have the most lasting influence on the city and the state. Even if the projected private investment is never realized, as unlikely as that actually is, this is a prudent, acceptable, and essential public investment.

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Introduction

In a study entitled *What's Needed for the New Orleans Recovery* prepared for the Financial Services Roundtable in March 2006[1] it was noted that "New Orleans needs **substantial employment gains in the industries already in the metropolitan area** and **appropriate housing to accommodate the returning workers** to sustain an economic recovery."

The study elaborates as follows:

"Substantial employment gains in leisure and hospitality, educational and health services, professional and business services, and wholesale and retail trade must lead the New Orleans recovery because this is where the region lost jobs. New Orleans lost 145,200 jobs in these four business sectors from August 2005 to December 2005 or almost one-quarter of all jobs that existed in the metropolitan area prior to Hurricane Katrina. In total, the New Orleans Metropolitan Area lost over 190,000 jobs in five months. But, to accommodate the return of these employees, appropriate housing must be available.

The housing constraint in New Orleans Metro impedes the ability of the economy to grow quickly. Businesses need workers and workers need housing. An increase of 79,100 jobs from December 2005 to December 2008, or only about 40 percent of the jobs lost, requires a housing stock of 477,400 houses by 2008. The housing deficiency in 2006 is estimated to be 84,000 housing units and the housing deficiency in 2008 is estimated to be about 102,000 housing units. A housing deficiency of 102,000 houses requires that 48 percent of the damaged housing stock be repaired and made inhabitable over the next three years or over 33,000 renovated housing units per year will need to be completed, or temporary housing must be available in the short-term.

An increase of 126,400 jobs from 2005 through 2008, or 65 percent of the jobs lost in the last five months of 2005, suggests that by 2008 the required housing stock will be 524,600 if all families were to be in permanent houses in the New Orleans Metropolitan Area. Given the number of housing units that currently exists and the ability to add 13,567 new houses each year the housing stock deficiency is projected to be 149,900 by 2008. Approximately 71 percent of the damaged housing stock or almost 50,000 housing units per year will need to be renovated over the next three years if this housing deficiency were to be countered.

Housing becomes a binding constraint on the ability of New Orleans to recover unless New Orleans homes are quickly renovated, temporary units are made available, or homes in other nearby parishes are available. Private decisions will ultimately determine the speed and sustainability of the recovery of the New Orleans economy with housing being one of these

[1] The study was conducted by Dr. James A. Richardson, Alumni Professor of Economics and Director of the Public Administration at Louisiana State University. Dr. Richardson was assisted by Mr. Roy L. Heidelberg, a graduate of the Master of Public Administration program at Louisiana State University.

major decisions. Government activities should be aimed at facilitating these private decisions as quickly and responsibly as possible."

Housing and the economic recovery of New Orleans are still issues as of the beginning of 2008. In 2006 the focus was on getting a quick rebound from the damage left by Katrina; in 2008 the focus is on a longer term perspective—enhancing the major drivers of the current economy and creating an environment in which new economic drivers will spring up.

Reinventing the Crescent focuses on public/private investments along the Riverfront to encourage an augmented housing stock along the high grounds on the bank of the Mississippi River; revitalize existing neighborhoods for renovation and redevelopment; promote a more active tourist industry including conventions, cruise ship traffic, attractions for families and individuals wishing to visit the city as a destination or be persuaded to extend a visit to New Orleans for another day or so; establish an educational and research facility in conjunction with Tulane University along the Riverfront and expand the capacity of the New Orleans Center for the Creative Arts. Perhaps most importantly, reinventing the riverfront so that it is reintegrated into the life of the city will reflect values, leadership, and priorities essential in attracting new industries and residents.

The public/private investment vision and plan are spelled out in the document prepared by Eskew+Dumez+Ripple[2] (E+D+R) for the New Orleans Building Corporation (NOBC) entitled *New Orleans Riverfront: Reinventing the Crescent* (November 2007). To add to this blueprint, the following study will discuss the economic dimensions of the plan. In simple terms, the economic dimension focuses on what the city and state potentially stand to gain from public investments in this proposed reinvention of the riverfront along six miles from Jackson Avenue just upriver from the Convention Center all the way to the neighborhood of Holy Cross.

Brief Introduction to the Economic Significance of Reinventing the Crescent

Reintegrating the Mississippi River into the life of the city certainly has emotional value; New Orleans is a city uniquely defined by the river, created and historically identified by its commercial importance. This qualitative dimension of the project complements the importance of the redevelopment in light of a looming housing shortage in a long-term growth environment and the profound economic significance of the neighborhoods adjacent to the planned development.

Given the scope of this project, the neighborhoods that would witness a significant and immediate socioeconomic impact are Holy Cross, Bywater, Marigny, the Vieux Carre, the Central Business District, the Lower Garden District, St. Thomas, and the Irish Channel. These neighborhoods account for 40 percent of all business establishments, nearly 55 percent of all

[2] E+D+W was assisted by Chan Krieger Sieniewicz (Cambridge, MA), Hargreaves Associates (Cambridge, MA), TEN Arquitectos (New York, NY), St. Martin, Brown (New Orleans, LA), Moffat & Nickel (Raleigh, NC), Kulkarni Consultants (Metairie, LA), Robinson et al (New Orleans, LA), Carol Bebelle (New Orleans, LA), and Julie Brown Consulting (New Orleans, LA).

employment throughout New Orleans, and over 60 percent of the payroll generated in Orleans. The improvement of the riverfront would provide both a quality of life improvement for the residents of these neighborhoods and a projected bolstering of the business activity in the short run and the long run. These neighborhoods and their economic significance are illustrated in Map 1. The significance is simple: the majority of employment and earnings throughout the city occur in these riverfront communities, but the capital generated is spread throughout New Orleans.

Historically significant industries are also concentrated in the neighborhoods under discussion. Figure 1 illustrates the economic recovery of historically important Orleans Parish industries. Manufacturing employment is just over 90 percent of its pre-Katrina level; trade and transportation employment is over 85 percent; employment in professional and technical services is just over 95 percent of its pre-Katrina level as of October 2007. Leisure and hospitality employment and educational and health care services employment are both hovering around 75 percent of the pre-Katrina employment levels.

These industries, with the exception of manufacturing, are mainstays of the neighborhoods under discussion. Nearly three-quarters of all business units in Trade, Transportation, and Utilities, Leisure and Hospitality, Professional Services, Education, and Health Services are located throughout these riverfront neighborhoods. Two-thirds of employment in these sectors and nearly 60 percent of all wages and salaries are statistically connected to those eight neighborhoods. Tables 1, 2, and 3 highlight the importance of these industries to the neighborhoods adjacent to the development. Almost half of the employment in the neighborhoods highlighted in Map 1 is in the trade and transportation and leisure/hospitality sectors of the economy; when professional services are added, the industries account for over 56 percent of total employment and about one-half of the total wages and salaries; over 65 percent of total employment in the highlighted neighborhoods is in transportation and trade, leisure/hospitality, professional services, and educational and health services.

Map 1. Economic Significance of Riverfront

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Figure 1
Employment Recovery in Post-Katrina New Orleans, Riverfront Neighborhoods

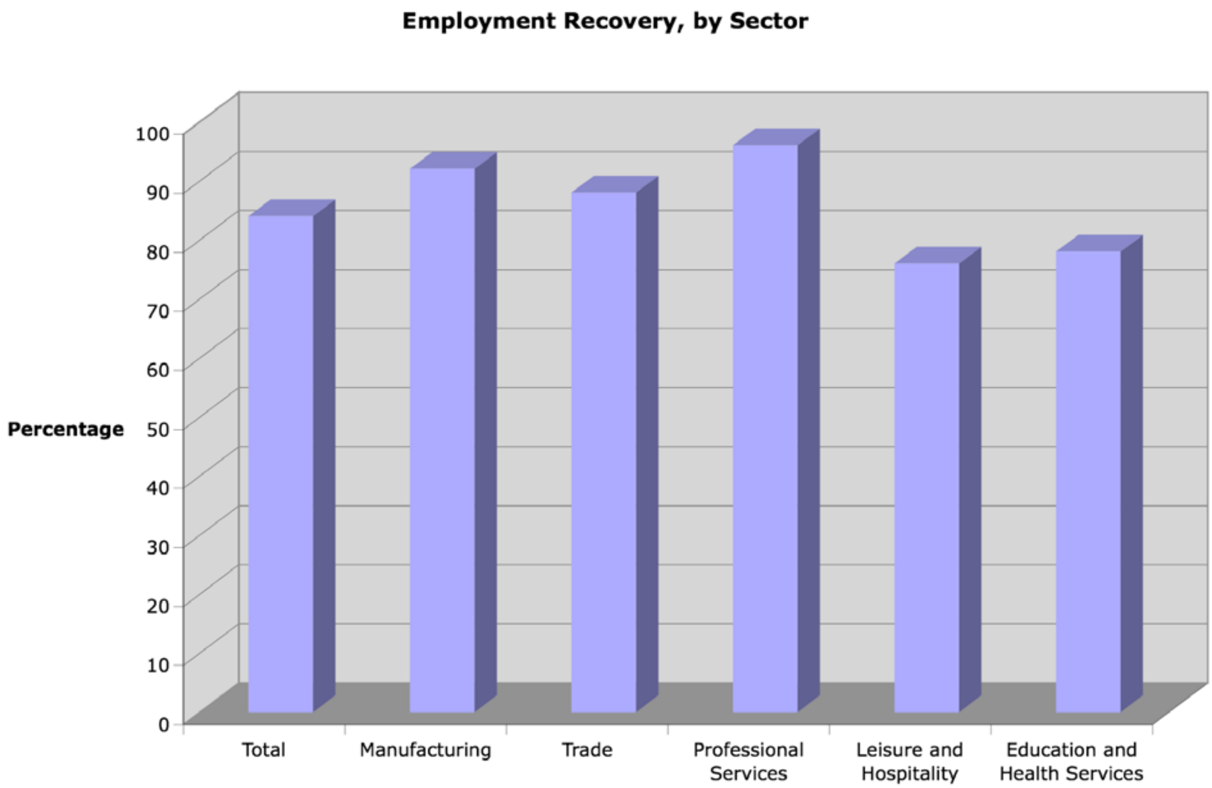


Table 1
Trade and Transportation; Leisure and Hospitality in Riverfront Neighborhoods

	Business Establishments	Employment	Wages and Salaries
Pre Katrina 2Q 2005	1,691	45,883	$279 million
% of Total Business in Riverfront	48%	47%	30%
Post Katrina 4Q 2006	1,201	28,725	$248 million
% of Total Business in Riverfront	42%	43%	26%

Table 2
Trade and Transportation; Leisure and Hospitality; Professional Services in Riverfront Neighborhoods

	Business Establishments	Employment	Wages and Salaries
Pre Katrina 2Q 2005	2,455	54,895	$411 million
% of Total Business in Riverfront	70%	57%	44%
Post Katrina 4Q 2006	1,924	37,171	$452 million
% of Total Business in Riverfront	67%	56%	50%

Table 3
Trade and Transportation; Leisure and Hospitality; Professional Services, Education and Health Services in Riverfront Neighborhoods

	Business Establishments	Employment	Wages and Salaries
Pre Katrina 2Q 2005	2,614	67,910	$546 million
% of Total Business in Riverfront	75%	70%	58%
Post Katrina 4Q 2006	2,044	43.795	$537 million
% of Total Business in Riverfront	72%	66%	59%

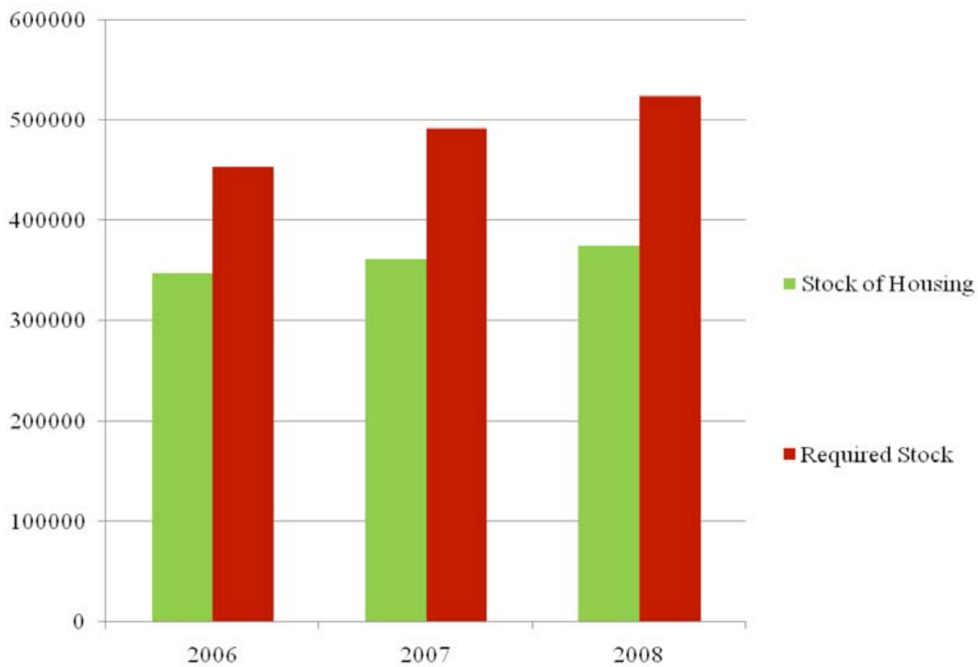
The Riverfront is the business center of the city. Improving the attractiveness and appeal of this area is crucial not only to the retention of important employers and the improvement of established industries, but also in attracting new industries and better diversifying the city's economic significance.

Housing Issues and Sustainable Quality Growth

The strengthening of established industries and the attraction of new industries is essential to sustainable growth. Housing, however, plays a unique and important role in urban growth. For New Orleans, a city that suffered catastrophic damage to its housing stock, housing is the imminent binding constraint for continued and sustainable growth. Housing will limit employment growth and consequently signal to industry unfavorable conditions for expansion. A balanced housing stock is elemental in retaining citizens, but it is crucial for attracting new residents and industries. The Reinventing the Crescent project aims to expand the housing stock and provide mixed-income housing in addition to high-density, mixed-use opportunities.

It is important to keep in mind that Orleans Parish incurred damage to over 70% of its housing stock. Almost 54,000 owner-occupied homes suffered major or severe damage and almost 52,000 rental units incurred major or severe damage. Figure 2 illustrates the comparison of the existing housing stock in the New Orleans Metropolitan Area compared to the required stock of housing assuming both a growth in employment and a ratio of housing to population comparable to pre-Katrina levels. The housing difference for the metropolitan area has two significant notes: (1) persons can live in a number of parishes but work in Orleans and (2) the Orleans housing shortage can be estimated to be about 40 percent of the metro housing shortage. At any moment the housing shortage may appear to be over. However, the sustainable growth of the housing stock is essential to the sustainable recovery of the Orleans community.

Figure 2
Housing Shortage in a Growth Environment



Housing additions in these riverfront neighborhoods will be crucial to those returning to New Orleans, attracting back former residents, and attracting new industries and new residents to the city.

Another distinction of this development is the improvement in the quality of life for citizens. Recent studies have explored how a city's characteristics and environment affect its growth and attractiveness. New Orleans is renowned for being a unique city conducive to creativity, but it has still failed to attract and retain the Creative Class, a class of workers characterized by transformative endeavors in their respective fields, from engineering and the sciences to the creative arts, media, and technology. Fundamentally, Florida is referring to individuals on the cusp of advancement, whether it is in art or technology.

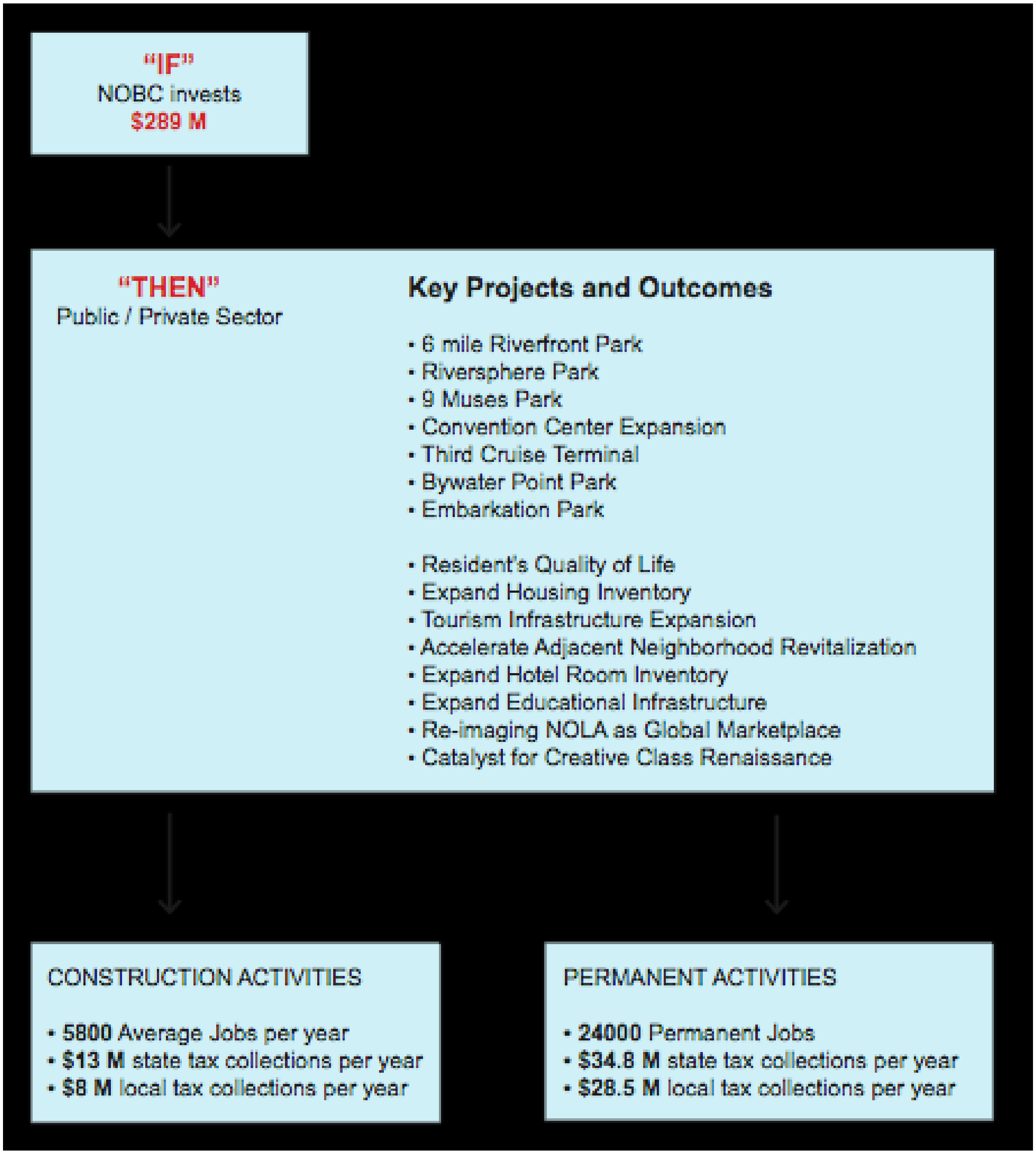
The Financial Characteristics of Reinventing the Crescent

Financial characteristics of Reinventing the Crescent center around strategic public investments targeted to stimulate substantial private investments. We will first detail the proposed uses of the strategic public capital expenditures and then we will focus on the proposed sources of the funds necessary to make the capital expenditures.

The proposed public/private investments are presented with an IF/THEN model. The IF investments are public/private funds that in turn initiate other capital expenditures, hence the term 'THEN' investments. The IF investments are the strategic public/private/non-profit capital expenditures necessary to initiate the reinvention of the Crescent. The THEN investments are projected to be made by developers and other entities based on the simple criterion of a return on investment rather than philanthropy. The confluence of these investments is projected to create a series of economic activities leading to an increase in housing stock, a revitalization of riverfront neighborhoods, an augmentation of the tourist industry ranging from conventions and cruise ships to everyday visitors to the New Orleans area, improvement in the education and research offerings in New Orleans emphasizing science and the performing arts, and an improved image enabling New Orleans to attract new industries and citizens. By both undergirding an important industry and creating an atmosphere for growth, this economic activity will have a lasting impact on the city.

Ultimately, this is the intention of the IF investments – to strengthen and improve the city for additional private investments, and thus it is necessary to demonstrate it prior to investing public and private dollars. Private dollars will follow targeted and effective investments of public dollars, and when public investments demonstrate a plan for improvement, private capital investment is more easily justified; this is the basis of the IF/THEN model; the initial investments of public/private funds will provide an incentive for the investment of further capital, 'THEN investments'. This process is illustrated in Figure 3. In addition to the temporary economic outcomes realized by construction activity, it is expected that permanent activities will spur consequential and sustainable growth.

Figure 3
'IF/THEN' Process:
Instigating Private Investment through Targeted Public Expenditures



Proposed Uses of Capital Expenditures

The initial public financial inputs in establishing the redevelopment and reinvention of the New Orleans Riverfront—the IF investments-- are illustrated in Tables 4 through 6. The plans are phased in over a nine-year period from 2008 through 2016. The investments are framed within three phases: Phase 1 consists of projects undertaken from 2008 through 2010; Phase 2 is a four year period from 2010 through 2013; Phase 3 will begin in 2013 and last through 2016.

Phase 1 includes 'IF' investments of $157.3 million on projects ranging from developing the riverfront in Celeste Park near Jackson Avenue to developing the riverfront in Holy Cross downriver. Capital expenditures per year are estimated to be $6 million in 2008, $70.6 million in 2009, and $77.6 million in 2010.

Phase 2 includes 'IF' investments of $77.3 million from public/non-profit sources ranging from a $4 million expenditure on a Jackson Avenue Ferry Terminal to a $17.1 million investment to upgrade the Moonwalk. It is estimated that in Phase 2 the IF investments will be $4 million in 2010, $34.3 million in 2011, $31.1 million in 2012, and $7.9 million in 2013.

Phase 3 includes 'IF' investments of $59 million, including $16.7 million for Poland Fields, a park for the Bywater neighborhood that will also serve as a buffer for the neighborhood from the development of two ship berths for cruise ships, and $10 million for a Bywater Point Amphitheater. It is anticipated that 'IF' investments will be $11.25 million in 2013, $17.55 million in 2014, $17.55 million in 2025, and $12.15 million in 2016.

Altogether, the IF capital projects amount to $294 million. These amounts include design and engineering fees as well as any funds needed for demolition and remediation. The 'IF' funds will come primarily from the public sector. These are the strategic public investments along the Riverfront that will reshape the historic New Orleans landscape and are projected to revitalize the commercial core of the city and region.

Table 4
New Orleans Riverfront
Reinventing the Crescent: Phase 1: 2008-2010
A Plan for the Recovery and Redevelopment of New Orleans

Projects For New Orleans Riverfront: from Jackson Avenue to Holy Cross along River	IF: Initial Investments: City, State, Federal, and Non-profits
Celeste Park	$18.8 million
Wind Turbines	$0.5 million
Market Street Promenade	$4.5 million
9 Muses Amphitheater	$30.0 million
French Market Connection	$2.4 million
Mandeville Connection	$3.4 million
Mandeville Wharf	$5.3 million
Press Street Landing	$12.1 million
Piety Park	$21.1 million
Sanctuary	$2.0 million
Holy Cross	$5.6 million
Design and Engineering	$14.6 million
Demolition and Remediation	$7.0 million
New Orleans Cold Storage Facility	$30 million
Aggregate Strategic Investment	$157.3 million

Source: New Orleans Riverfront: Reinventing the Crescent (November 2007)

Table 5
New Orleans Riverfront
Reinventing the Crescent: Phase 2: 2010-2013
A Plan for the Recovery and Redevelopment of New Orleans

Projects For NO Riverfront: from Jackson Avenue to Holy Cross along River	IF: Initial Investments: City, State, Federal, and Non-profits
Jackson Avenue Ferry Terminal	$4.0 million
Riversphere	
9 Muses Square	
Julia Street/River Terrace	$7.3 million
Convention Center Boulevard	
Spanish Plaza	$11.2 million
Canal Street Ferry	$15.0 million
Moonwalk	$17.1 million
Turbines	$0.96 million
Design and Engineering	$7.9 million
Demolition and Remediation	$7.0 million
Renovation of Wharf	$7.0 million
Aggregate Strategic Investments	$77.3 million

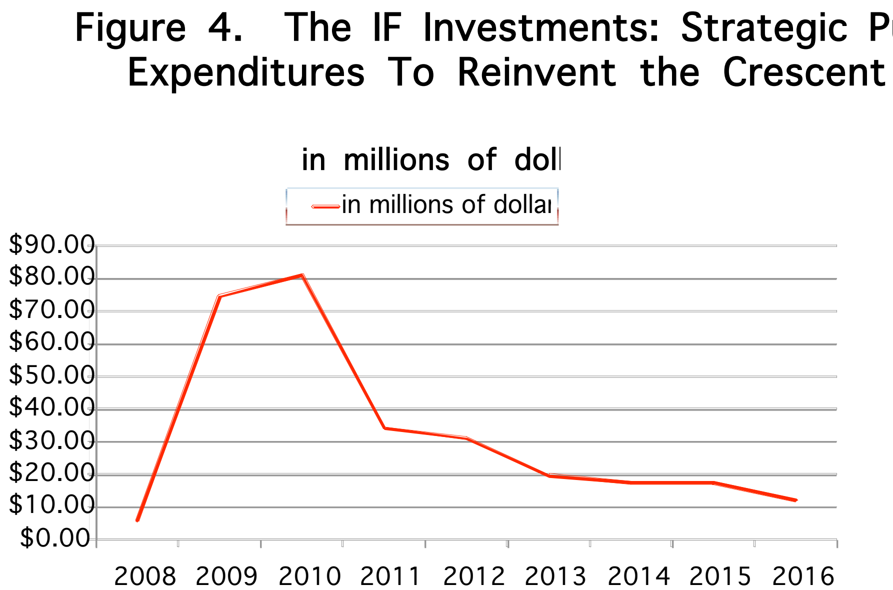
Source: New Orleans Riverfront: Reinventing the Crescent (November 2007)

Table 6
New Orleans Riverfront
Reinventing the Crescent: Phase 3: 2013-2016
A Plan for the Recovery and Redevelopment of New Orleans

Projects For New Orleans Riverfront: from Jackson Avenue to Holy Cross along River	IF: Initial Investments: City, State, Federal, and Non-profits
Woldenberg Park	$11.8 million
Portage Plaza "Slice"	$4.0 million
Poland Fields	$15.7 million
Bywater Point	
Bywater Amphitheater	$10.0 million
Port of Embarkation Redevelopment	
Turbines	$0.96 million
Design and Engineering	$5.9 million
Demolition and Remediation	$6.0 million
Other Investments	$5.0 million
Aggregate Capital and Expenditures Investment	$59.4 million

Source: New Orleans Riverfront: Reinventing the Crescent (November 2007)

The estimated timing of the strategic capital expenditures over the nine-year period is depicted in Figure 4. This figure includes only 'IF' investments. The 'IF' capital expenditures are the essential starting point to motivate the 'THEN' capital contributions, the next round of investment along the Riverfront. The overall project requires both types of capital expenditures to reach its goals and potential economic outcomes. But the 'IF' investments are the essential investments required to enhance and encourage private activity. The timing of the public investments will range from $6 million in 2008 and peaking at just over $81 million in 2010, but averaging about $33 million over the nine-year project plan.



Sources of Capital Funds

Upgrading a riverfront and creating a new standard quality of life in a community are typically public responsibilities. Private investment is less likely to undertake such projects because the private rate of return is not sufficient, while from the public's perspective the rate of return may be extremely high. The IF capital expenditures will have to come almost entirely from local, state, and federal sources. A breakdown of possible sources is listed below and then illustrated in Figure 5.

Local support can come from opportunities relating to the riverfront property owned by the city. NOBC has been granted a $30 million Community Development Block Grant (CDBG) from the New Orleans Office of Recovery Management. The NOBC has recently leased the World Trade Center to a developer for conversion to hotel space and residential living options. A projected lump-sum lease payment of $24 million is scheduled for March 2008. There will be opportunities for NOBC to lease properties on the riverfront for residential uses. NOBC expects to receive at least $26 million from the leasing opportunities on the riverfront for hotel and residential uses. These three sources alone provide the $65 million of the $294 million proposed strategic capital expenditures with $15 million in capital reserve or operating trust funds.

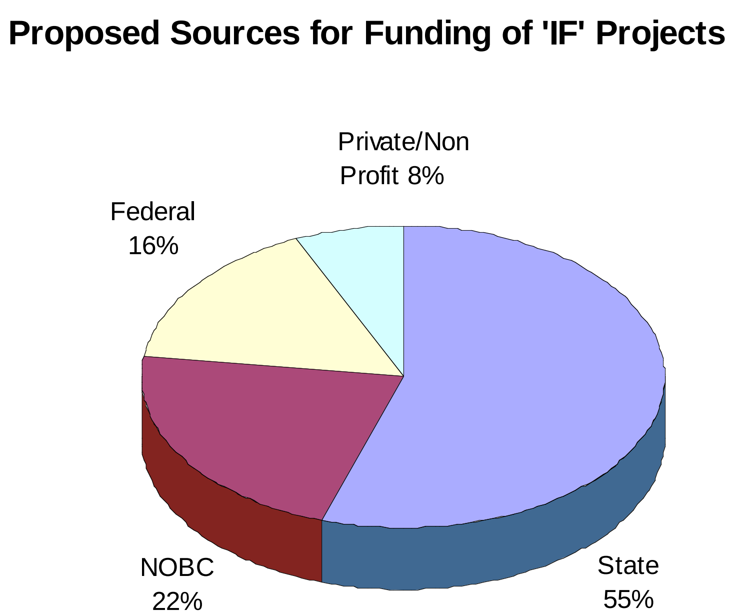
It is recommended that federal agencies such as the U.S. Army Corps of Engineers, the Department of Energy, and the Department of Transportation be approached for grants of $47 to $50 million. This is a reasonable request given the nature of the development and the responsibilities of these federal agencies. Riverfront structural support, transportation alternatives, and research on alternative energy sources are all issues the federal government has a role in establishing and supporting. Proposals for these federal agencies will be based on the special projects being promoted, but the overall Riverfront development will be important to the case for each individual project.

The NOBC will need to request $162 million from the state for its share of support in Reinventing the Crescent, reinvigorating the New Orleans economy and enhancing the city's ability to grow. The $162 million project represents about $18 million per year for nine years, though the funding will need to be frontloaded since the majority of the capital spending is scheduled for the first six years. NOBC will ask Louisiana to allocate $87 million in 2008; $42 million in 2010; and, $33 million in 2013.

Finally, this will leave about $20 million to be solicited from private non-profit organizations, representing about 8 percent of the total. Foundations dedicated to environmental enhancement, the recovery from Katrina, the efficient and productive use of public lands, and other such issues will be targets of this effort.

A summary of the sources of funding is illustrated in Figure 5. Another alternative is to appreciate that certain projects may be on the request list of other local entities. It is important to work with these other local organizations not to put in duplicate requests.

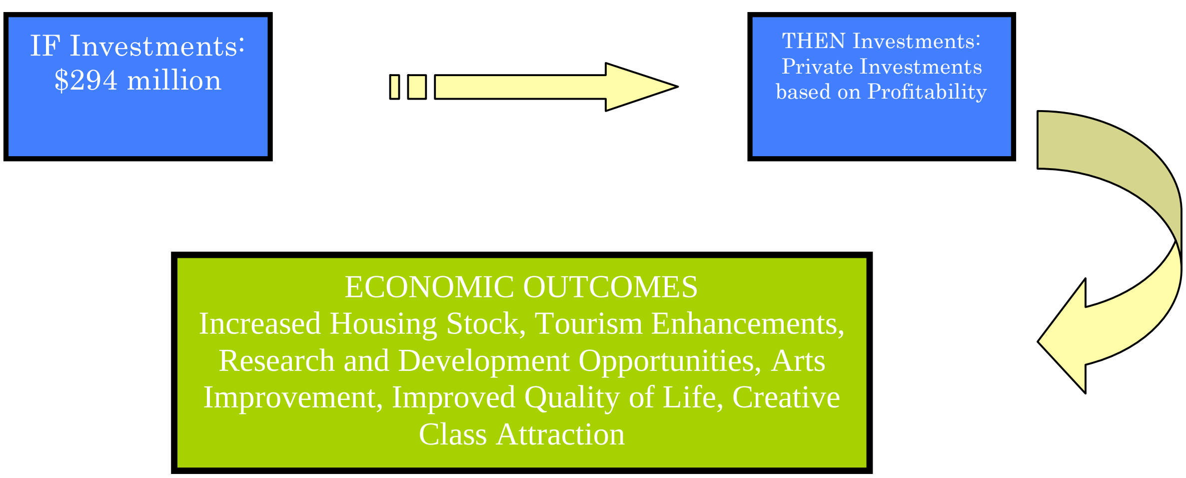
Figure 5
Breakdown of Public Expenditures



Summary of Linkage Between IF Projects, THEN Projects, and Permanent Economic Outlooks

The local, state, and federal governments make commitments for the 'IF' projects and consequently establish interest for the 'THEN' projects within the private sector, which will have the ability to contribute to the overall well-being of the New Orleans community and develop profitable projects. These investments provide two types of economic benefits. The investments provide temporary economic benefits during the period of construction including increased business activity, additional earnings in the community, new jobs, and additional state and local tax collections; such activity, in this case, will last the nine years projected for the project. The direct economic benefits associated with the construction projects are substantial and occur over a long period of time. As with all construction activities, however, these investments will come to an end. Construction activity and the resulting economic benefits are temporary. The long-term benefits from these investments are the ongoing activities associated with this project as illustrated in Figure 6—the economic outcomes. These ongoing economic outlooks are permanent. In this manner, the investment projects have a very long payback period. Figure 6 illustrates simply the sequence of events and the ultimate results that will be generated.

Figure 6
Flowchart of Strategic Public Investments, Private Investments, and Outcomes



Private Investments in Riverfront: The ‘THEN’ Investments

The purpose of the strategic public investments, the ‘IF’ investments, is to initiate a continuous round of private investments, hence ‘reinventing the crescent’. Obviously the ‘THEN’ investments are estimates or benchmarks. The results of the associated strategic public investments are an asset even if they do not encourage a single dollar of private investment; however, it is a guarantee that the public investment as proposed in this plan to reinvent the riverfront will create a substantial round of private activities. Our estimates are cautious, but they still must be appropriately classified as estimates.

The estimated ‘THEN’ investments are illustrated in Figure 7. Private investments classified as Phase 1 initiatives suggest these private activities are based on public investments during the first phase, 2008 through 2010—as can be seen the private activities related to public investments of Phase 1 will continue long after 2010. Private investments classified as Phase 2 private initiatives are related to the public activities embarked on in Phase 2, from 2010 to 2013. Finally, Phase 3 private initiatives are related to the public activities undertaken during Phase 3, 2013 through 2016. The $294 million in strategic IF investments over a nine year period are projected to encourage private activities from 2008 through 2024, a 17-year period, of just over $3.6 billion. This small public investment can generate such large private activities for many reasons: the riverfront is the commercial core of New Orleans; the riverfront is a historically relevant and culturally rich part of the city; perhaps most relevant, the proposed development is along the high areas of the city, thus reducing investment risk. No one can guarantee exactly $3.6 billion in private investments, but the outcome will be substantial.

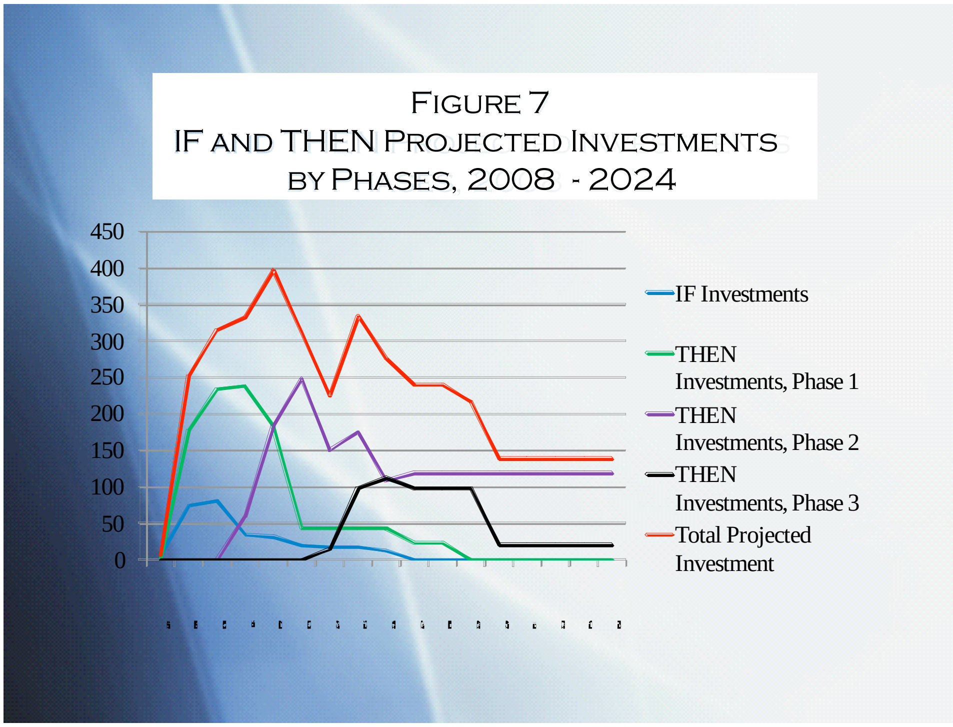


FIGURE 7
IF AND THEN PROJECTED INVESTMENTS BY PHASES, 2008 - 2024

The 'THEN' investments range will also include special investments by groups that will be on the public property affected by the 'IF' investments. The $13.5 million investment in RiverSphere, a proposed joint Tulane / Xavier research and teaching facility relating to river dynamics, environmental science, and renewable energy sources, and $34.8 million for Nine Muses Square, a public park intended to be a 21st century Jackson Square with room for residential, commercial, and convention uses are perfect examples of entities with direct connection to Riverfront sites that will be enhanced by these strategic public investments.

Possible sources of funding for the very specific projects related to the development of the Riverfront are broken down as follows:

RiverSphere Park .... Tulane University/Developer
Nine Muses Park .... Convention Center
Convention Center Blvd .... UpgradeConvention Center
Bywater Point Park .... Developer
Embarkation Landscape .... Developer

The RiverSphere will serve as part of the research programs at Tulane University. The university may not fund the structure directly, but is more likely to engage interested parties to provide facilities that would house more than just the Tulane research programs. Nine Muses Park and the Convention Center Blvd upgrade will enhance the appearance and quality of the entrance to the current Convention Center. It also provides an opportunity for the Convention Center to establish residential and commercial properties on its land—activities that will be revenue generators. Bywater Point Park and Embarkation Park provide residential opportunities and enhancements of environmental quality and quality of life to improve the adjacent neighborhood, Fauborg Marigny. The state will fund the amphitheater at Bywater Point, but it is anticipated that the private sector will fund the actual residential developments. 'THEN' investments will be on and off public property, but all will be undertaken because of the long-run expectation of a return on investment, either directly or indirectly.

Economic Benefits Associated with the Construction Activity for Reinventing the Crescent

Construction activity represents direct spending that initiates a series of economic repercussions—additional business activity, additional earnings for persons living in the region, new jobs in the region, and additional state and local tax collections because of the augmented economic activity. Just as one example, a purchase of materials to be used in the construction project will encourage the companies producing these materials, wholesaling them, transporting them, and retailing them to hire additional personnel, add new shifts, create a larger capacity for operations, and so on. The persons working for these companies providing materials for the construction project will spend their earnings on typical market basket items such as food, shelter, transportation, recreation, insurance, and other common purchases. Based on the New Orleans Input-Output Model created by the U.S. Bureau of Labor Statistics, a million dollar input of construction activity in the New Orleans Metropolitan Area leads to a $2 million increase in overall business activity, an increase in personal earnings of $0.66 million, and a net increase of 22 jobs in the metropolitan area.[3]

The projected economic impact on the New Orleans Metropolitan Area economy of the 'IF' investments is illustrated in Table 7 for business activity, personal earnings, net new jobs, and state and local tax collections for the nine year time period, 2008 through 2016. Direct capital expenditures range from $6 million in 2008 to a high of $77.6 million in 2010 with subsequent business activity representing $12.7 million in 2008, a high of $163.7 million in 2010, and scaling back to $34 million in 2015 and $23 million in 2016. The number of net new jobs is projected to be 127 in 2008, 1646 in 2010 and then falling over time as the magnitude of 'IF' investment projects trails off. Personal earnings range from $4.2 million in 2008 to $54.4 million in 2010 and then falling off to $11.4 in 2014 and 2015 and $7.6 in 2016.

The economic activity associated with the construction along the riverfront also leads to state and local tax collections amounting to $0.5 million in 2008, $6 million in 2011 and falling off to just about $1 million from 2014 through 2016. State collections alone will total $13.4 million from 2008 to 2016, or about 8 percent of total state funds being requested. Net contributions of the state will be the initial expenditures of $162 million less the motivated state tax collections because of the capital projects ($13.4 million), or $149.6 million.

[3] Regional Input-Output Model (RIMS) by U.S. Bureau of Labor Statistics, 2004.

Table 7
Economic Impact of IF Strategic Investments Along Riverfront, 2008 through 2016

YEAR	ESTIMATED DIRECT CAPITAL EXPENDITURES (MILLIONS $S)	BUSINESS ACTIVITY (MILLIONS $S)	PERSONAL EARNINGS (MILLIONS $S)	NET NEW JOBS CREATED	STATE AND LOCAL TAX COLLECTIONS (MILLIONS $S)
2008	$6.0	$12.7	$4.2	127	$0.5
2009	$74.6	$148.9	$49.5	1,498	$5.5
2010	$81.1	$163.7	$54.4	1,646	$6.0
2011	$34.3	$80.8	$22.9	813	$3.0
2012	$31.1	$74.0	$24.6	745	$2.5
2013	$19.7	$37.8	$12.6	380	$1.4
2014	$17.6	$34.4	$11.4	346	$1.3
2015	$17.6	$34.4	$11.4	346	$1.3
2016	$12.1	$23.0	$7.6	231	$0.8

Source: Regional Input-Output Model by the U.S. Bureau of Labor Statistics.

The construction activities lead to the reinvention of the riverfront enabling this area to transform the city with additional permanent housing, a more attractive tourist market, the development of research and educational facilities, and a quality of life attraction that can serve as a magnet for new industries and new residents. But the construction activities also provide a payment to the state that amounts to 8 percent of the requested funds.

The real impact of the 'IF' expenditures is the continued investments that are projected to be made around the riverfront of $3.6 billion. The economic impact of these investments and the 'IF' investments is illustrated in Figures 7 through 10. In Figure 8 total spending created by the business investments, both 'IF' investments and 'THEN' investments, is noted to jump to almost $500 million in 2009 and rise continuously until 2012 to almost $800 million and then decline over the next 12 years to about $300 million per year in the 2020s. Total spending includes the direct construction spending and all indirect spending associated with it. The impact on earnings is illustrated in Figure 9; the net new jobs created in Figure 10; and state and local taxes collected due to this economic activity in Figure 11.

Perhaps the best way of visualizing the economic impact is to think in terms of average total spending, earnings, net new jobs, and state and local tax collections over the period from 2008 through 2016 and the period from 2008 through 2024. These averages are listed in Table 8. Net new jobs per year from 2008 through 2016 will average almost 6,000, while from 2008 through 2024 net new jobs will average almost 5,000 per year. State and local tax collections will average $21 million per year from 2008 through 2016 and $17.3 million per year from 2008 through 2024.

These economic impacts are related to the 'IF' and 'THEN' construction activities and not to any ongoing economic activity that might be taking place because of this investment activity.

Figure 8
Total Spending Resulting from Projected Public and Private Construction Activities

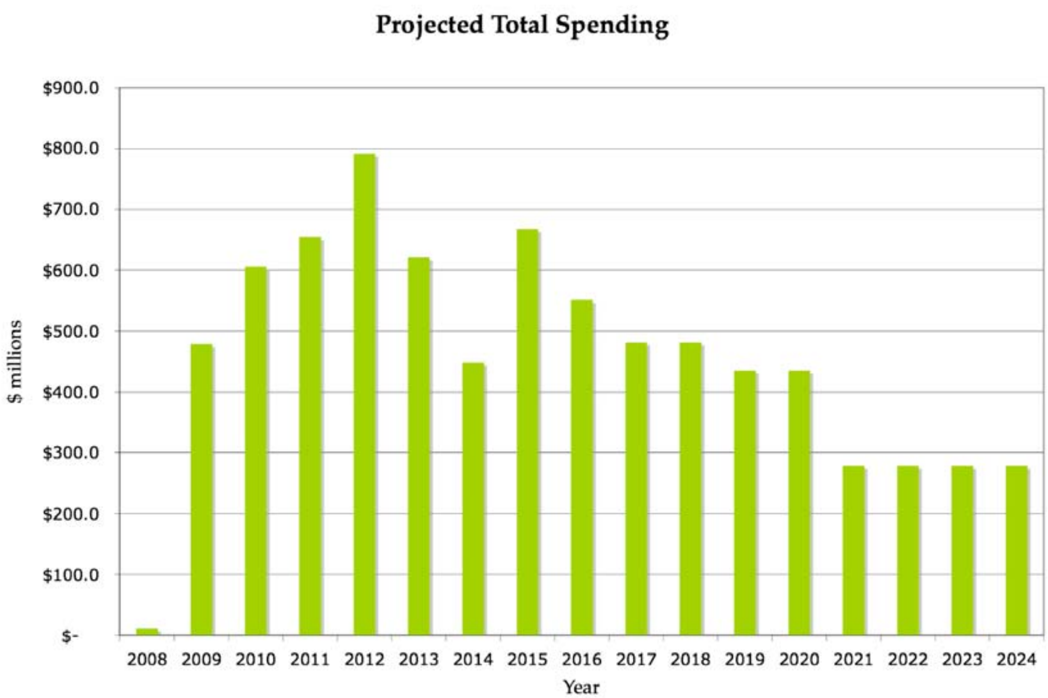


Figure 9
Earnings Resulting from Projected Public and Private Construction Activities

Figure 10
Net New Jobs Resulting from Projected Public and Private Construction Activity

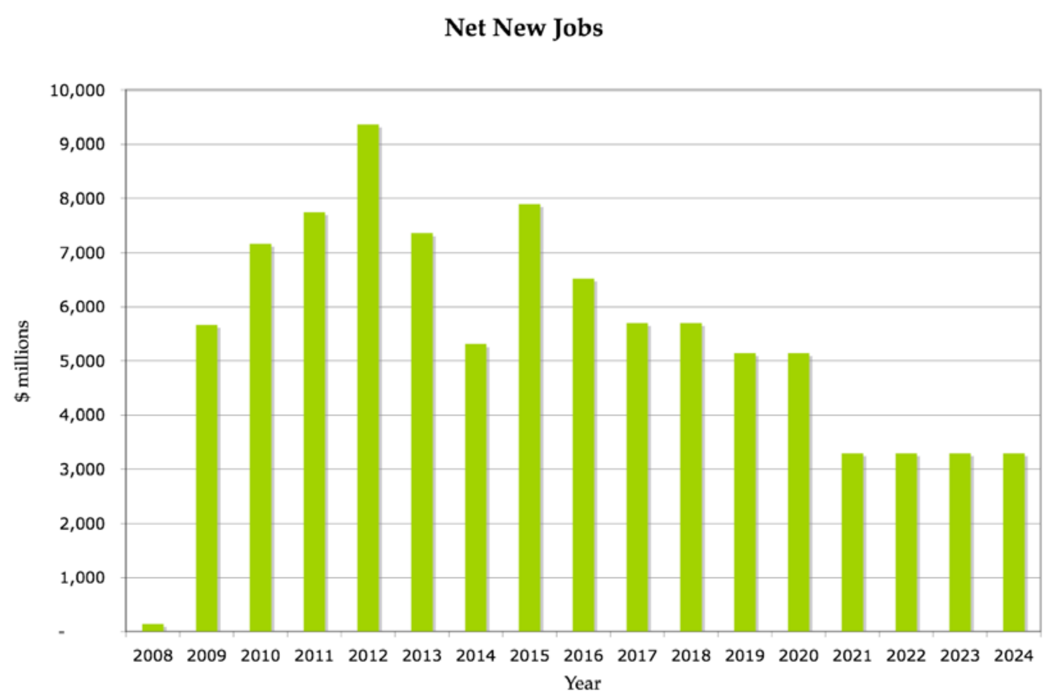


Figure 11
State and Local Tax Collections Related to Projected Public and Private Construction Activity

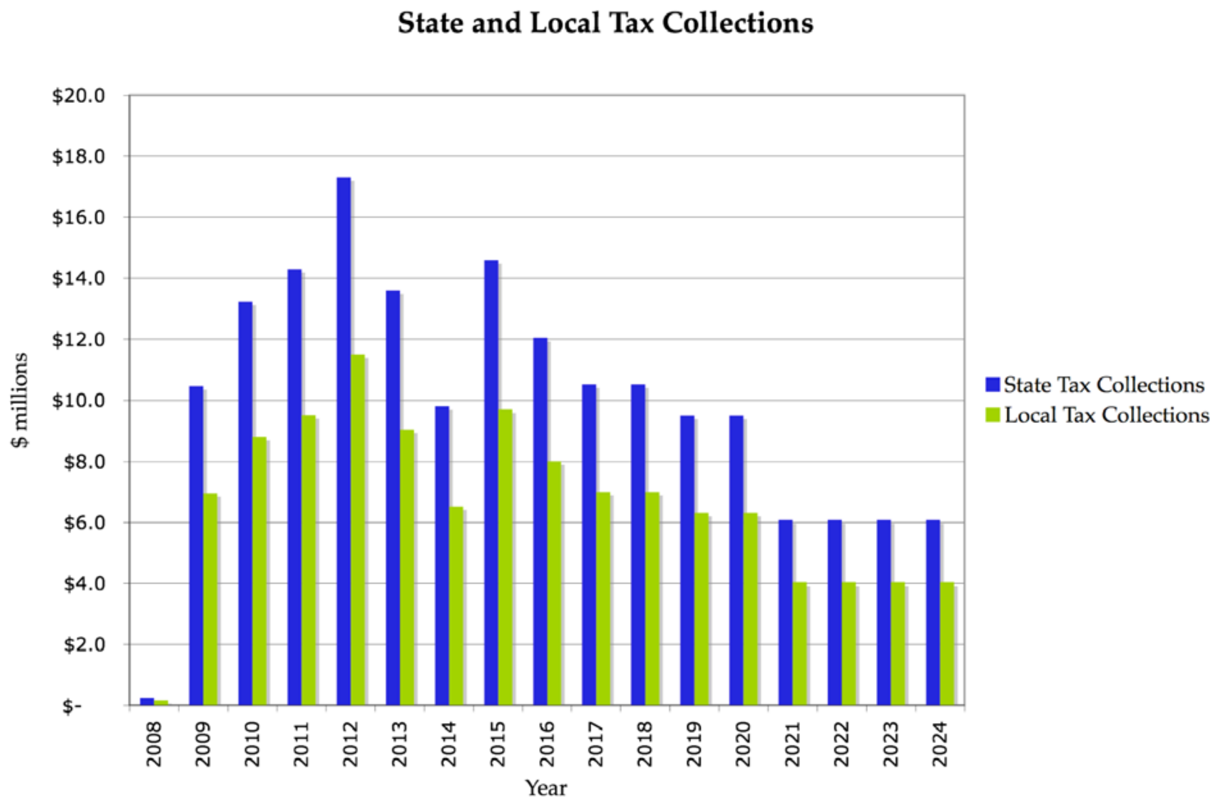


Table 8
Average Yearly Economic Impact for If and THEN Investments for 2008 through 2016 and 2008 through 2024

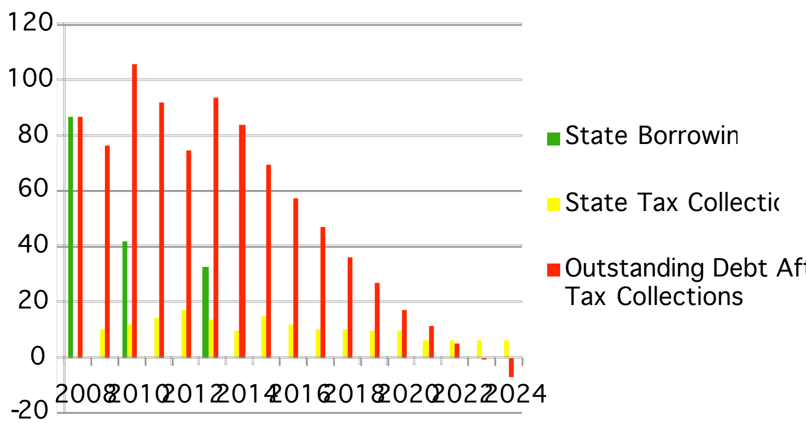
ECONOMIC CATEGORIES	2008 THROUGH 2016	2008 THROUGH 2024
DIRECT SPENDING	$271.5 MILLION	$224.2MILLION
TOTAL SPENDING	$572.8 MILLION	$473.0 MILLION
EARNINGS	$190.4 MILLION	$157.2 MILLION
NET NEW JOBS	5,781	4,757
STATE TAX COLLECTIONS	$12.6 MILLION	$10.4 MILLION
LOCAL TAX COLLECTIONS	$8.4 MILLION	$6.9 MILLION

Source: author and US Department of Commerce, Regional Input-Output Tables

In Figure 12 the reduction of outstanding debt related to state borrowing to finance the 'IF' projects is illustrated. State borrowing commences in 2009 with about $40 million of bonds being issued and then another $40 million in 2010. In 2011 the state will need to borrow about

$23 million and then $20 million in 2012. In 2013, 2014, and 2015 the state will need to borrow about $10 million per year and then in 2016 the state will need to borrow $7 million. The state tax collections that will be forthcoming because of the additional economic activity will offset some of this borrowing or allow the state to redeem the debt early if it so chooses. Net outstanding debt, defined as state borrowing less projected state tax collections due to construction activity, peaks at about $70 million and then the principal is completely paid off by 2023. The Reinventing the Crescent project will totally pay off the state debt principal due to the expansion of other private investments in the area—there has been no consideration of the state tax collections that will be forthcoming from the ongoing activities associated with these enhancements and investments along the Riverfront.

Figure 12. Projected Reduction of Outstanding Stat
Related to New Orleans Riverfront Development



Permanent and Recurring Economic Benefits Associated with the Reinvention of the Crescent

The ultimate purpose of the reinvention of the riverfront is to enhance the economic vitality of New Orleans. This enhancement of the economic vitality of New Orleans is based on (1) augmenting the housing stock—a major issue in a city that saw over 80,000 homes incur major and severe damage from Katrina; (2) revitalizing existing neighborhoods along the riverfront—encouraging citizens to return to New Orleans and encouraging greater density along the higher grounds near the riverfront; (3) improving the tourist industry—New Orleans needs a vigorous recovery and expansion of the tourist industry—this includes the convention center, the cruise ships, the everyday visitor, and all other related segments; (4) create a new dimension of university and collegiate research and educational opportunities through a research center along the river and the expansion of a major arts academy; and (5) enhancing the quality of life for present citizens of the community and serving as an attraction to new industries and new residents—persons and businesses finding New Orleans to be the place to start a business and to live.

Augmenting the Housing Stock

Housing is a critical need for any community to rebuild and recover. The housing stock in New Orleans was severely damaged by Katrina, and the process of rebuilding is still in its infancy even over two years after the storm. It is important to appreciate the severity of the problem in order to appreciate the significance of augmenting the housing stock as it is included in the reinventing the crescent plan for recovery along the riverfront and throughout the city.

Housing Stock Shortage

The housing shortage is defined as the current existing stock of housing less the demand for housing. The existing stock of housing for 2006 is the estimate of housing stock by the US Census as of 2002 less the houses destroyed or declared uninhabitable because of Katrina. Projected growth suggests that the housing stock should increase by 13,657 houses annually based on the net increase throughout Louisiana from 1990 to 2002. Thus, the stock of housing in 2006 is increased by 13,657 to estimate the stock of housing for 2007, and the 2007 housing stock is increased by another 13,657 to estimate the 2008 stock of housing.[4] The current demand for housing is based on the actual or projected employment, the estimated population based on the employment estimates and the pre-Katrina persons per house.

The housing stock shortage for the projected growth scenario for the New Orleans Metropolitan Area is illustrated previously in Figure 2. In 2006 the housing shortage was estimated to be approximately 105,000 houses. The deficit had to be handled by trailers, other temporary living quarters, commuting, or other methods that accounted for a population that exceeded housing availability. By 2008 the housing shortage under the projected growth scenario is estimated to be about 149,000 houses since employment growth outpaces the building of new houses and the renovation of damaged houses.

It is important to note the recovery in New Orleans slowed in the last half of 2006 and throughout 2007.[5] From November 2005 to June 2006 employment grew by 7,400 per month in the metropolitan area; from July 2006 through December 2006 employment grew by 2,000 per month; and from January 2007 through August 2007 employment has grown by 900 per month.

[4] This estimate is not necessarily the number of houses built since some houses could also have been demolished, although it should be very close to the number of houses built. This estimate is for the entire state and the assumption is that all housing construction will take place in the New Orleans Metropolitan Area.
[5] *Louisiana Economic Outlook, 2008-2009*. Loren C. Scott, James A. Richardson, and Dek Terrell, (E. J. Ourso College of Business at Louisiana State University, October 2007).

Expanding the Housing Stock and Revitalizing the Historical Neighborhoods

The Riverfront development will enhance the housing stock in two ways: first, there will be residential property opening on public lands along the riverfront. Over 7,000 residential units are projected to be built on or near the riverfront. Three 12- to 15-story buildings are to be constructed near the Market Street area. Nine Muses Park will accommodate about 2,500 residential units. Developments in conjunction with the reinvention of the riverfront, such as the multi-use facility in the old smokestack building near Market St., which is projected to have 750 residential units, will be enhanced by the project. These 7,000 units will be scattered along the Riverfront from Jackson Avenue to the Holy Cross area.

The improvement in the environmental quality of the area will encourage construction of private residential developments in surrounding areas not necessarily connected to the riverfront reinvention. These activities that will take areas that are now zoned as light commercial and convert it to residential zoning will lead to more housing opportunities—these are the conversions that will allow the city to grow in numbers and in employment opportunity.

For New Orleans to recover and grow, housing is critical. To achieve its pre-Katrina levels of population given the present housing is impossible. This project provides not only direct additional housing to mitigate the expected shortage, but also encourages growth in surrounding areas. Despite very public demonstrations, the real effects of the shortage have not been fully realized and will not be until more growth is achieved; concerns about housing must be a concern for residents and leaders. Increasing the housing along the riverfront has two very significant economic impacts: first, the construction activity initiates economic ripples across the entire community; second, the additional housing allows new industries and businesses to establish their base in New Orleans as the workforce grows and the city prospers.

The reinvention of the Crescent will also allow historically residential neighborhoods such as Holy Cross to recover fully. Presently, it is estimated that Holy Cross has less than half of its residents back, two years after Katrina. Other riverfront neighborhoods have over 90 percent of their residents back, but with the conversion from light commercial to residential zoning, these neighborhoods can accommodate larger populations. With the development of the Medical Complex and potentially the development of an arts district along Canal Street, there will be a demand for additional residential opportunities in the Riverfront area.

Enhancing the Tourist Industry

The tourism industry continues to be an important aspect in the city's recovery. New Orleans will benefit from focusing on the industries that were most effective before the storm as it attempts to attract new industries that will strengthen its economic base. Prior to Katrina, 2005 was on pace to be a phenomenal year for the tourism industry. With over ten million visitors spending almost $5 billion dollars, New Orleans enjoyed great growth potential in the industry. A renewed focus on improving the attractiveness of the city will in turn increase the returns of investments through the expansion of the tourism industry.

This study refers to five important ways to improve and strengthen the tourism industry: the expansion of convention opportunities at the Morial Convention Center; the expansion of hotel conferences; adding cruise ships to be docked in New Orleans; encouraging visitors to increase their stay by one day; and fostering a family-oriented visitor experience in addition to present attractions.

According to a study by Tim Ryan of the University of New Orleans, the year from November 2006 to November 2007 illustrated the ability of the convention market to expand to its pre-Katrina levels. Today, conventions are supporting about 60% of the jobs with less than 40% of attendance numbers and about 60% of direct spending compared to the three years before the hurricane. The Riverfront development envisions a technologically enhanced convention center making it competitive for new conferences and showings.

With respect to cruise ships New Orleans is ranked tenth in cruise embarkations with 308,000 per year, well behind Florida, which estimates 4.8 million embarkations and significantly fewer than Texas with about 630,000 embarkations. Improved facilities will provide an incentive for more cruise ships to embark from New Orleans, in turn increasing the number of cruise ship customers spending in the city. The Port of New Orleans is working on methods of enhancing cruise ship activities in New Orleans. The enhanced riverfront will assist in those efforts.

The addition of five convention center events in New Orleans, fifty hotel convention events, and an additional cruise ship berth is projected to account for an estimated $203 million in direct spending annually. These activities will bring an additional 142,500 visitors to New Orleans and over 350,000 overnight stays in the city. These fundamental convention activities also establish the process by which large numbers of visitors can be encouraged to stay one more night in New Orleans.

New Orleans also relies on visitors whose sole purpose is the city. The reinvention of the crescent will improve the quality of the city for these visitors. Improved parks and greenspace fully integrated by a pedestrian path along the entire six miles will increase the overall appeal of New Orleans and make the city appear more family-oriented. Before the hurricane, there was an estimated 10 million visitors to the city, a record year. A conservative estimate for future visitation is 8 million persons. If ten percent of all visitors increase their stay by one day, the direct spending impact is $500 million. Also, if by increasing the family-oriented atmosphere of the city 20,000 families visit New Orleans, a conservative estimate, then the direct spending impact will be $37.5 million.

Improving the riverfront will increase tourist activity. The market for tourism should focus on encouraging persons to spend one extra night in New Orleans—these are persons already in the city and this is the city's chance to make itself so appealing, either in terms of the arts, the scenery, the culture, the food and entertainment, and the atmosphere, that a person or family wants to extend their visit. The above estimates are conservative in terms of calculation, but significant in terms of economic activity. These improvements could entail multiple new events with over 900,000 persons spending over $700 million. The numbers discussed are illustrated below in Table 9. These are not one-time economic outcomes like the construction activity; these outcomes are expected to be recurring benefits for the city and the state. Table 10 illustrates the expected economic outcomes of this increase in tourism. The state would see tax revenue increases of $33.4 million, and local tax revenues will increase by $27.4 million annually. Nearly 23,000 new jobs will be created by the additional activity with personal earnings exceeding $500 million, and these impacts are expected to remain.

Table 9
Expanded Tourist Activity

Focus of Tourist	New Events	Attendees	Nights in City	Direct Spending
Convention Center	5 new events	70,000	210,000	$140.7 million
Hotel Conferences	50 new events	12,500	25,000	$25.1 million
Cruise Ships	Adding cruise ship berth embarkations	92,000	92,000	$71.9 million
Extend Stay in NO by 1 day	goal of 10% of visitors	800,000	800,000	$500 million
Family Focus	20,000 families	60,000	120,000	$37.5 million
Total	Multiple	942,500	1,155,000	$703.3 million

Table 10
Economic Activity of Increased Tourism Activity

Focus of Tourist	Total Spending	Personal Earnings	Net New Jobs	State Taxes	Local Taxes
Convention Center	$287 million	$91.0 million	3,799	$6.0 million	$4.9 million
Hotel Conferences	$51.3 million	$16.4 million	678	$1.1 million	$0.9 million
Cruise Industry	$146.7 million	$46.8 million	3,916	$3.1 million	$2.6 million
Extend Stay in NO by 1 day	$1,020.0 million	$326.4 million	13,500	$21.5 million	$17.6 million
Family Focus	$76.5 million	$24.5 million	1,003	$1.6 million	$1.3 million
Total	$1,581.4 million	$505.9 million	22,906	$33.4 million	$27.4 million

Research and Educational Opportunities

The research and educational opportunities associated with this project are less easily quantified since increased activity of this sort has positive ulterior impacts on a community. Some dimensions, however, can be gauged. Net new direct spending emanates from both students, especially those from out-of-state, who move to the area and research grants and contracts acquired by the institutions seeking expansion.

Tulane University's proposed RiverSphere is a multi- and inter-disciplinary research center focusing on the confluence of art, science, and technology and concerning the great rivers of the world. The proposed design will include research studios for a variety of disciplines surrounding a main lobby featuring both permanent and rotating exhibitions. It is a novel concept and a laudable exploration of interdisciplinary education, housing not only scientists and researchers investigating pertinent challenges but also working artists.

Beyond the value of such a project to the community and the surrounding neighborhoods, RiverSphere is projected to attract around 300 research-oriented personnel and net new research contracts and grants supporting the creation of nearly 700 new jobs with $16 million in personal earnings, total spending of $42 million with $2 million in net new state and local tax collections.

The proposed expansion of the New Orleans Center for Creative Arts (NOCCA) is projected to expand the options in the performing arts, in turn attracting grants and opening hiring opportunities for new instructors. Although the performing arts grants and contracts are not as substantial as those in science and technology, they still result in net new direct spending. As a result of the proposed expansion, it is projected direct spending will increase by $5 million, yielding more than 160 new jobs, over $4 million in personal earnings, and state and local tax revenues of $500,000.

Combined Economic Impact of Projected Tourism and Research

The overall impact of an expanded tourism market and the increase in research and educational activities is summarized in Table 11. Almost 24,000 net new jobs will be created and supported by the expansion in tourism and research and educational activities. The state is projected to collect almost $35 million in taxes each year, while local governments are projected to collect more than $28 million each and every year. The projected economic impact focuses only on existing industries—it does not extrapolate to potential or emerging industries. The proposal will have positive impacts on the existing industries in the New Orleans area, but will also create an environment that attracts new industries and new residents.

Table 11
Economic Outcomes from Expanded Tourism and Research/Education

	Total Spending	Personal Earnings	Net New Jobs	State Tax Revenues	Local Tax Revenues
Tourism	$1,581.4 million	$505.9 million	22,906	$33.4 million	$27.4 million
Research and Education	$51.7 million	$20.1 million	851	$1.4 million	$1.1 million
Total	$1,633.1 million	$526.0 million	23,757	$34.8 million	$28.5 million

The improvement of the surrounding riverfront will in turn improve the attractiveness and feasibility of private sector projects. If the public spending is properly targeted and effective, as this proposed reinvention of the riverfront is, then the private spending will be more robust and effective. The robustness of the private investment spending will assure the permanent and ongoing economic impacts will be accomplished. The strategically placed public investments are the first step in accomplishing the reinvention of the crescent.

Rate of Return on the State's Investment

Businesses examine the rate of return on investment as one measure to determine if a project is profitable. State government can use the same financial procedure. In this case, the state will be making an investment of $162 million and, in return, the state will ignite an investment process and recurring activities that will generate a stream of net new state tax collections. The state's net cash flow will be the projected revenue stream on an annual basis less any capital expenses and ongoing operating expenses. The state will put up $162 million but will not incur any ongoing operating expenses and will reap the net new tax collections for years to come. The internal rate of return is the discount rate that makes the net cash flow equal to zero. These rates of return are illustrated in Table 12.

Rates of return are calculated for six different scenarios: first, for 20 year and 30 year time horizons. Reinventing the Crescent is a long-term economic development project—it is not just beautifying the riverfront, but it is making the riverfront a desirable for tourism, research and education, and promoting new commercial ventures as well as residential revitalization. Second, the rate of return is calculated based on the forecast of private investment of $3.6 billion over the period from 2010 to 2024 and 1.15 million new nights being spent in New Orleans starting in 2017. These are the projections based on what the author believes is likely to happen. Third, however, rates of return are also calculated on the basis of smaller private investment and not as substantial increase in tourism. Two scenarios were developed with one being there is a 25 percent reduction in the original forecasts and one being there is a 50 percent reduction in the original forecast.

In all cases the rate of return is higher than the interest rate on 30 year government securities, the Baa corporate bond rate, and the bond rate on high-grade municipalities—all rates that are indicative of the borrowing rate for state government.

The projections are further made cautious by not including any inflation in the sales tax projections over this long time period. This assumption is introduced to make the rates of return just as cautious as possible. In addition, no increase in tourism is projected until all three phases of IF investments have been completed. This assumption is cautious as well as increases in tourism could easily take place as early as 2011 or 2012. Again the purpose is to keep the rates of return based on extremely cautious projections. In other words, the rates of return in Table 12 almost surely underestimate the ultimate impact of the state's investment in the New Orleans Riverfront.

Finally, the rate of return calculation does not include the most profound and transformational change in New Orleans due to this investment and that is the attraction of new forms of commerce and the creative class. Reinventing the Crescent creates the atmosphere and environment that will make persons want to stay in New Orleans and attract new persons and businesses to the city. This becomes the process by which the city is transformed: it keeps it hospitality base as well as other existing industries but it becomes a legitimate region for new industries to put down roots.

Table 12
Summary of Internal Rate of Return on State Investments
Reinventing the Crescent: The New Orleans Riverfront

State's Commitment: **Invest $87 million in 2008; $42 million in 2010; and $33 million in 2013** **State will bear no recurring maintenance costs—these costs will be borne by NOBC**			
Time Period over which Internal Rate of Return is Calculated	**Basic Projections about Private Investment and Tourist Expansion**		
	Private Investment of $3.6 billion; 1.15 million additional tourist nights in New Orleans	**Private Investment of $2.6 billion; 862,500 additional tourist nights in New Orleans**	**Private Investment of $1.7 billion; 575,000 additional tourist nights in New Orleans**
20 Year Horizon	**17.0%**	**12.25%**	**7.0%**
30 Year Horizon	**18.0%**	**13.75%**	**9.0%**
Comparative Rates	**30 year US Security** **4.91%**	**Corporate Bond, Baa** **6.48%**	**High Grade Municipal Bonds** **4.42%**

Quality of Life and the Redevelopment of a City

Thomas Michael Power of the University of Montana urges local development strategies to focus not merely on the fundamental economic approach of 'jobs and income', but also to account for the less easily quantifiable community elements such as stability, access to biological and social necessities, job opportunities based not only on income, but also on employer satisfaction, and a stimulating variety. In a phrase, Power encourages *environmental quality* in development strategies. The proposed development of the riverfront satisfies a number of criteria that enhance the quality of life in the city. These factors are less accurately quantified but remain important in strategically directing the future of a community.

Some community characteristics that are important to people are not efficiently produced merely by commercial economic activity. Scenery, high-quality recreational opportunities, and clean, safe parks are part of a quality-enhanced community. With this in mind, a comprehensive development strategy necessarily includes aesthetically pleasing designs and available green-space. Certainly this correlates with a growing social-environmental awareness. Diverse businesses are necessary for economic growth, but quality living is a concomitant element of stable, sustainable growth.

Policy strategies can have a profound impact on noncommercial sectors of development. Developing along the crescent enhances the very foundation of New Orleans. Focusing a development strategy in areas where jobs are already located is elemental in manifesting a sustainable growth strategy. The prominent strategy for economic development has been to attract new industry; New Orleans will thrive if it focuses instead on the areas where jobs already exist. Power cites instances of city beautification and quality enhancement that attracted a greater variety of industry. Investment in quality is a sign that the city is committed to improving its image, and there is no greater symbol for this than the heart and lifeline of New Orleans, the Mississippi River.

A development of the riverfront will not only encourage surrounding investment from private industry, but it will additionally attract residents. Mobility must be seen as a lynchpin of development; the overarching strategy must be to both retain residents and attract productive members of society. A related notion to Power's 'Quality' thesis is Richard Florida's explanation of the Creative Class. Florida connects the improved economic status of areas such as the City of Austin, Silicon Valley, The Triangle of North Carolina, and Dublin with an economic shift toward the 'new economy' of technology and research and development. Included in this redevelopment is a class of workers charged with creating 'meaningful new forms'; essentially, their role is to explore unorthodox solutions and pursue solutions that can be widely applied. Such occupations include engineers, university professors, architects, and conventional artists such as poets and musicians. While a first glance it may appear that New Orleans has already achieved this, Florida explicitly mentions New Orleans as a city that has tried to attract the Creative Class but has failed.

This failure is not a reflection of the lack of creativity in the people of New Orleans, but rather an overall failure in policy directed development over many years. Florida's criteria for development are embodied in what he terms the "Three Ts": technology, tolerance, and talent.

While technology is the lynchpin of development, talent appears crucial to a sustainable development strategy; Florida focuses, though, not simply on human capital, but *creative* capital.

With a targeted improvement of the riverfront, complemented by the planned medical complex up Canal, the downtown sector of New Orleans positions itself to be the center of a rapidly growing recovery for the city and the region. The increased housing stock in those neighborhoods along the river will provide substantial residential opportunities for a growing sector of employment. The riverfront is a bastion of creative capital, from the Warehouse Arts District to Bywater's well-established local art and music scene. Improving access to the Mississippi River and increasing the housing stock in those areas will increase the likelihood that mixed-income, creative communities will develop. An opportunity for the emergence of new economic drivers will serve as a complement to the rich cultural traditions along the river.

The empirical evidence realized in other successful cities offers a value to these more qualitative aspects of this reinvention of the crescent. It completes the plan for the city. New Orleans has talent and tolerance, and with the state of the art medical complex anchored by this multi-dimensional development, the technology component is becoming well established. The riverfront is already a clear center for both employment and wages. The improvement will have far-reaching consequences for improving the image and attraction of this eminently important, historic part of New Orleans.

While this is a less easily quantified dimension of the project, it is arguably the most important and the aspect most directly related to the proposed activities. Improved environmental quality along with an attractive city for new industries and residents is the ultimate directly consequential facet of the reinvention of the crescent. The private endeavors could, theoretically, take place without these improvements; it is, however, almost certain that the aesthetic improvements and the integration of the city's waterfront will increase the likelihood of private investment. To achieve preeminent status, New Orleans and the state must invest in improving the quality of life in urban areas.

Summary and Conclusions

Reinventing the Crescent focuses on public/private investments along the Riverfront to encourage an augmented housing stock along the high grounds on the bank of the Mississippi River; revitalize existing neighborhoods for renovation and redevelopment; promote a more active tourist industry including conventions, cruise ship traffic, attractions for families and individuals wishing to visit the city as a destination or be persuaded to extend a visit to New Orleans for another day or so; establish an educational and research facility in conjunction with Tulane University along the Riverfront and expand the capacity of the New Orleans Center for the Creative Arts; and create an ambiance making the city even more attractive to new industries and new residents.

The public/private investment vision and plan are spelled out in the document prepared by Eskew+Dumez+Ripple[6] (E+D+R) for the New Orleans Building Corporation (NOBC) entitled

[6] E+D+R was assisted by Chan Krieger Sieniewicz (Cambridge, MA), Hargreaves Associates (Cambridge, MA), TEN Arquitectos (New York, NY), St. Martin, Brown (New Orleans, LA), Moffat & Nickel (Raleigh, NC),

New Orleans Riverfront: Reinventing the Crescent (November 2007). The economic dimension focuses on what the city and state potentially stand to gain from public investments in this proposed reinvention of the crescent along six miles from Jackson Avenue just to the north of the Convention Center all the way to the neighborhood of Holy Cross.

As can be seen, strategically focused public investments will generate multiple private investment dollars being placed in New Orleans. It is estimated that public investments of $294 million can lead to over $3.6 billion of private investment over a period of 17 years. It is further estimated that just the construction projects with the economic impacts from these construction activities will generate enough state tax collections to retire any state debt associated with these projects. It is further estimated that the economic activity associated with the construction projects will create over 5,700 jobs per years from 2008 through 2016 and just under 5,000 jobs per year from 2008 through 2016.

Once the construction projects are completed, it is estimated that the tourist industry and the enhanced research environment will lead to almost 24,000 net new jobs being created and supported along with almost $35 million per year of net new state tax collections and over $28 million of net new local tax collections.

Finally, the Riverfront proposal does reinvent the Crescent—it creates an environment that will cater to new industries and new residents. New Orleans will potentially become a city that does attract the creative class; a city that does integrate the new economy with the present economy; a city that maintains its rich and rewarding culture but also creates an economic dynamic that leads to a rising living standard throughout the region.

Reinventing the Crescent is a project that will enhance the appearance of the core business sector of New Orleans and the region; allow the tourist industry to expand; thereby, allowing the City to embrace the new economy based on information, technology, and the arts.

Kulkarni Consultants (Metairie, LA), Robinson et al (New Orleans, LA), Carol Bebelle (New Orleans, LA), and Julie Brown Consulting (New Orleans, LA).