North Riverfront Business Corridor

SLDC
Saint Louis Development Corporation
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EXECUTIVE SUMMARY

The North Riverfront Business Corridor Master Plan provides an assessment and a road map for the revitalization of one of St. Louis' major industrial corridors. Although the plan contains much detail, it can be reduced to a few simple concepts: create new sites for business location and expansion, improve the overall appearance of the area, and provide space for businesses displaced by the proposed new Mississippi River Bridge.

In order to identify opportunities and priorities for the area, the St. Louis Development Corporation (SLDC) selected URS Corporation to develop a comprehensive master plan for the North Riverfront Business Corridor (NRBC) project area. The NRBC is bounded by Cass Avenue on the south, Carrie Avenue on the north, Interstate 70 (I-70) on the west, and the Mississippi River to the east. The area contains more than 1,300 parcels of land, and approximately 283 businesses employing about 8,800 people. A wide variety of food, transportation, metalworking, and other businesses are located in the NRBC; it is part of a regional working riverfront area that is oriented primarily to a mixture of light to heavy industrial uses.

Although nearly 300 active businesses are currently located in the NRBC, at one time the area was home to more than 1,000 companies. Over time, as industrial production became oriented toward larger one-story facilities, many businesses abandoned multi-story industrial structures in the area to build new facilities on suburban sites. Those businesses that have remained are now facing expansion constraints as they have few viable strategies for land assembly. Potential expansion parcels in the area often have a history of industrial use that initially deters land assembly, but they can be assessed and remediated. Plans for the new Mississippi River Bridge at the south end of the Area call for the displacement of several dozen businesses that will need new locations. Many of these businesses wish to remain in the NRBC.

This plan proposes a method for revitalizing this important business corridor through the development of three new business campuses and key business Area improvements. These campuses will provide sites for businesses wishing to expand or locate in the NRBC, including companies displaced by the new Mississippi River Bridge. Each campus will be competitive with suburban business parks and will offer amenities such as controlled access, parking and docking areas, landscaping, lighting, and accessory retail/commercial space. These plans for redevelopment capitalize on improved highway access, as well as enhanced access to adjacent neighborhoods and the Riverfront Trail.

The Produce Row Business Campus will capitalize on anchor food industries in the area, proximity to downtown, and servicing of regional and downtown companies. It will be geared toward non-industrial business users with site sizes of one to five acres. The Adelaide Business Campus will be a general business and light industrial campus with a focus on logistics and possible multi-modal opportunities. It will accommodate commercial and light industrial tenants requiring 5 to 10 acre

sites. The last campus scheduled for development, the Tyler Business Campus, will have a general business theme, incorporating businesses relocated by development and taking advantage of some large Port Authority-owned parcels. Sites within this campus will be from one to five acres.

This master plan provides both land use and site plans for the three business campuses, as well as recommendations regarding zoning, business support, infrastructure, environmental concerns, financing and phasing. Findings from the market analysis suggest that the NRBC area would benefit from a zoning designation as a protected industrial corridor, as well as the expansion of existing business advocacy groups to facilitate business-government interaction and advance redevelopment of the area. Site planning should be kept flexible to accommodate a range of end users. Streetscaping along major corridors should be completed to improve and unify the area's appearance. Infrastructure-related priorities should include reworking dangerous intersections, rebuilding obsolete bridges and sewer improvements. Areas of environmental concern should be further assessed, and an area-wide environmental remediation framework should be created to facilitate remediation. Financing recommendations include the establishment of a phased Tax Increment Financing (TIF) Area for each campus. A recommended timeline for campus development that maximizes identified funding sources is also included.

CHAPTER I Introduction

I.A. The North Riverfront Area

1. History

St. Louis was founded in November 1763, when Pierre Laclede and his band of traders from New Orleans landed at what is now the foot of Walnut Street. The settlement immediately began to prosper and in 1816, the separate town of North St. Louis was laid out. Within this area is the NRBC, currently defined by Carrie Avenue on the North, Cass Avenue on the South, the Mississippi River on the East, and I-70 on the West. It is one of the oldest industrial areas in St. Louis.

During the mid- and late 1800s, transit infrastructure in the NRBC area developed rapidly, creating the foundation for the economic success of this business corridor. In the 1850s, Broadway was dedicated as a public highway and the railroads began their development in the area. The continued evolution of transit options consequently produced a great deal of infill development throughout the NRBC area in the early 1900s, attracting such businesses as lumberyards, furniture, barrel, and wagon making. The NRBC was now part of a city known as a major hub for shipping and a provider of early forms of mass transit.

Transportation and industrial trends beginning in the and continuing into the post-World War II period contributed to the decline of the NRBC's role in the regional economy. The rise of the automobile and the development of the Interstate highway system brought many changes to the regional and national economy. The Mark Twain Expressway (Interstate 70), completed in 1957, was constructed to accommodate increased vehicle traffic and to connect downtown to the Lambert-St. Louis International Airport, Northwest St. Louis County, and the interstate highway network. This construction furthered the decline of the NRBC area, as it made greenfield development sites more accessible and as it severed the residential and industrial areas and forever changed the character of the neighborhood. Rail traffic also declined as truck service became faster and more cost-effective. Beginning in the 1960's, changes in many manufacturing industries shifted production to other parts of the country or to locations abroad, causing the St. Louis industrial base to decline dramatically. These industrial shifts hit the NRBC area particularly hard.

Since then, industrial firms have continued to be the mainstays of the NRBC area, though many properties in the area now are in poor condition and suffer from obsolescence. Companies that have remained in the area now require expansion space, and many parcels in the area are under-utilized and need to be assessed for environmental contamination. Plans for the new Mississippi River Bridge also call for the displacement of a number of area businesses.

Rail traffic has remained significant in the NRBC area and the City has strengthened its position as a major rail and trucking center. Substantial railroad and barge traffic continue to flow through the

NRBC area and the businesses that are located there. Bulk shipments by barge on the inland river system at the Port of St. Louis have more than doubled since 1950, although waterborne commerce volume growth has slowed in recent years.

Currently, three City wards represent the NRBC area (Figure I.1). They are Ward 2 represented by Alderwoman Dionne Flowers (area north of Branch Street), Ward 5 represented by Alderwoman April Ford- Griffin (Branch to Mullanphy), and Ward 7 represented by Alderwoman Phyllis Young (Mullanphy to Cass). Additional community resources include the Grace Hill Neighborhood Services, Friedens Haus, North Broadway Business Association, the 5th Area Businessmen's Association and nearby churches and schools west of I-70.

2. Prior Planning Efforts

Previous planning efforts that are directly related to the North Riverfront area include the Booker Plan (1981), the Sedway Report (1998), the 5th Ward Plan (1999) and the Confluence Greenway Master Plan (2002). The results of these reports have formed a basis for understanding the needs of the area.

I.B. 2003 NRBC Master Plan

1. Scope of Work

a. Team and Goals

URS assembled a team of consultants from various disciplines to produce this Master Plan. These companies and their roles include:

- URS – Overall Planning, Land Use Planning, Market Analysis, Business Retention and Expansion, Environmental Concerns and Overall Implementation
- ABNA Engineering – Infrastructure Analysis and Planning and Overall Planning Assistance
- HOK – Streetscaping and Overall Planning Assistance
- Jack Frauenhoffer Associates – Market Analysis, Business Retention, Business Expansion and Overall Planning.

A series of goals were identified for the development of the Master Plan:

- Identification of North Riverfront challenges and opportunities
- Conduct workshops and develop plans and designs
- Provide Mayor's office and aldermanic briefings and presentations
- Develop a plan that is implementable.

b. Products

Work products provided during the development of the Master Plan include:

- **Preliminary Market and Feasibility Study –** This study analyzes market opportunities, absorption rates, surpluses, and forces affecting the desirability of the study area within the region. The plan includes analysis of facility suitability for businesses that choose to participate in the study, market niche refinement and location identity and branding.
- **Existing Business Expansion Plan and Multiple Developable Sites Plan –** This task was performed as a logical follow-up to the Preliminary Market and Feasibility Study. The Existing Business Expansion Plan will assist businesses that have identified a need to expand as well as create opportunities for longer-term business attraction. Building upon Business Expansion Plan data, the Multiple Developable Sites Plan identifies locations for new businesses to locate and for existing businesses to expand or relocate, with recommendations for parcel size, campus amenities and transportation access.
- **General Land-Use Plan–** The General Land Use Plan is the central document for the project, identifying the study area's pattern and intensity of uses, relationships to the transportation network and integration into the community. This plan brings together the character and quality of the recommendations, summarizing the intentions for job creation, tax revenue, community character and capital improvements. A description of the redevelopment sites, proposed reuse, site design recommendations, and a proposed redevelopment strategy are included for each site.
- **Infrastructure Plan –** To complement the Land Use Plan, an Infrastructure Plan was also developed. Project area conventional infrastructure is old, deteriorating, and, in some areas, non-existent. This plan identifies prioritized infrastructure improvements necessary to meet the needs of the overall Master Plan.
- **Environmental Concerns –** A plan identifying environmental concerns was developed to help define and prioritize areas that may need more detailed investigation. An Area-wide Assessment (Modified Phase I) was completed for the project area.
- **Streetscape Plan –** Urban design, landscape architecture, architecture, and planning and traffic professionals prepared a Proposed Street Network that reinforces the general land use plan, the green infrastructure plan, and helps unify the study area with the greater community.
- **Implementation Plan –** The Implementation Plan is a summary document for the comprehensive plan with specific, action-oriented recommendations and direction to stakeholders.

The Master Plan document is a compilation of all tasks and products described above.

2. Process

a. Team Workshop Approach

The URS Team approach to the project revolved around team/client workshops.

Team workshops, facilitated by team members, provided a forum for presenting data, brainstorming issues, needs and solutions, airing concerns, and agreeing upon recommendations and actions with the responsible parties in attendance. The generalized process consisted of:

- Project Kick-off – City representatives and portions of the URS Team met to discuss the processes, desires and goals of the master plan
- Discovery and Summary of Findings – An iterative process of identifying challenges and opportunities and then summarizing our findings.
- Synthesis – Incorporation of ideas and concepts that develop out of the Discovery and Summary of Findings process
- Recommendations & Implementation – Iterative development of recommendations and implementation strategies
- Master Plan Review and Comment
- Finalize Master Plan.

Additionally, numerous consultant team meetings were held that provided a great variety of perspectives and the opportunity to develop a vision for the project area. Participants to these meetings included urban, natural resource, economic development, and port planners, road, railroad, and highway engineers, landscape architects, and architects.

Finally, monthly client and consulting team meetings were held. These workshops offered dialogue, understanding, and direction to occur between both groups. Participants to these meetings included representatives of the Mayor's Office, the Board of Aldermen, SLDC, the North Broadway Business Association, and the consulting team.

b. Incorporation in Geographic Information Systems (GIS)

The master plan process has incorporated drawings, sketches, ideas and concepts into an implementable "action plan." All of the final products of this plan that have a specific geographic reference within the project area has been incorporated into the project GIS. This system is built on the City's system and will be importable to that system. This plan, therefore, not only identifies a vision for the project area, but also will be able to evolve and allow for unique queries of its database.

3. General Redevelopment Concepts and Strategies

The extent and kind of demand for redevelopment of light industrial property was established from the market analysis and review of existing businesses in the study area. Building on this information and adding land use and infrastructure analysis of the area, the team identified the advantageous concept of providing multiple developable sites for the NRBC. These multiple sites, defined as three separate and relatively distinct campuses, are proposed to serve different industry users based on a particular "theme" or concept for redevelopment of each area. The most immediately promising redevelopment site is the Produce Row Business Campus. This campus area is intended to capitalize and expand upon the existing produce industry, attract new businesses, and help existing businesses expand their operations within the NRBC area. Another campus identified is the Adelaide Business Campus. This campus will embody the theme of supporting the transportation and communication industries. It will utilize its central location and existing infrastructure to expand existing businesses and draw in new development. The last campus planned is Tyler Business Campus. This area capitalizes on several sizable City-owned properties and will be useful as a relocation site for those businesses displaced by NRBC redevelopment. See Figure I.2 for an overview of how the locations of existing businesses in the NRBC relate to the development of the proposed business campuses.

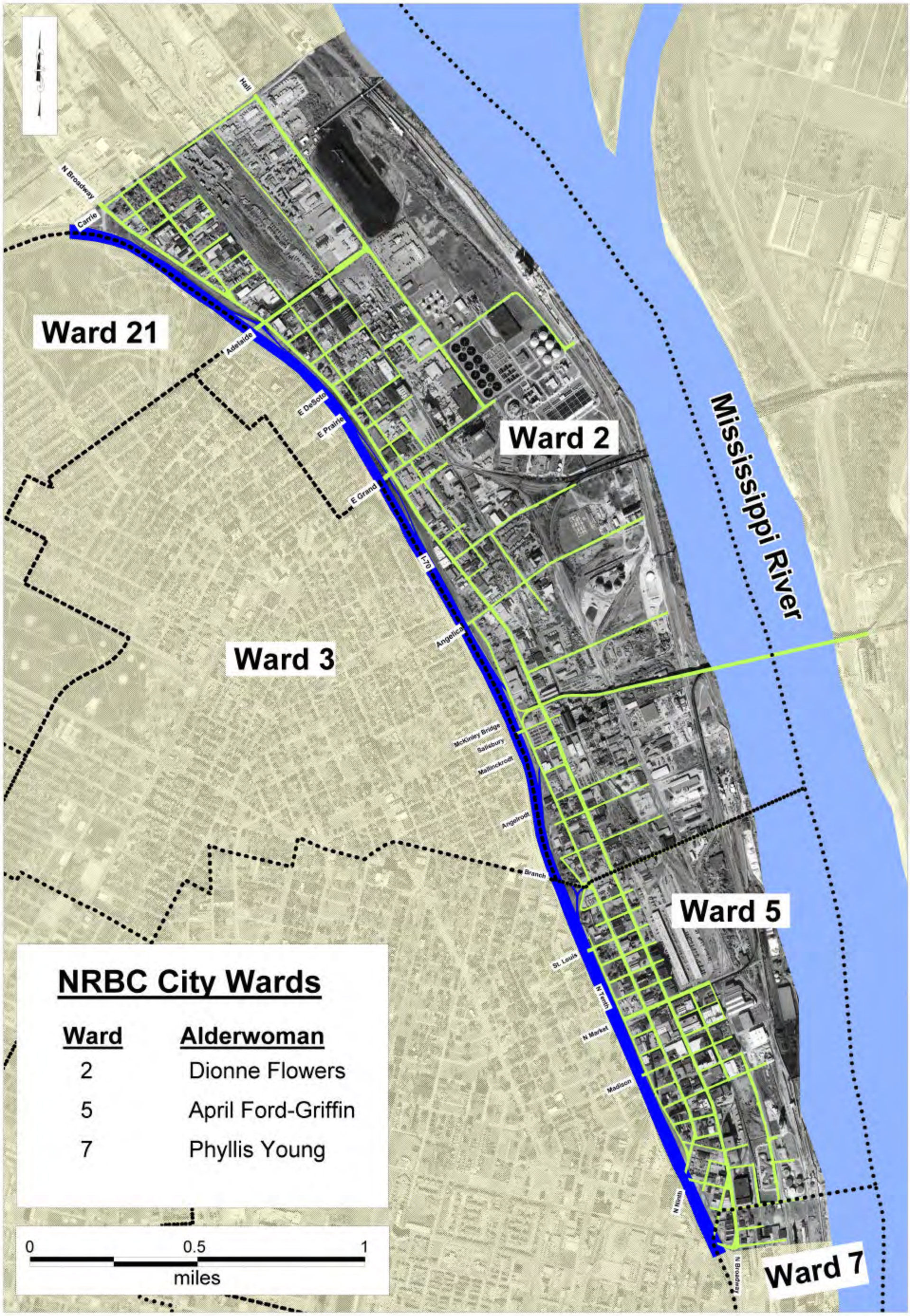


Figure I.1

ABNA Engineering, Inc

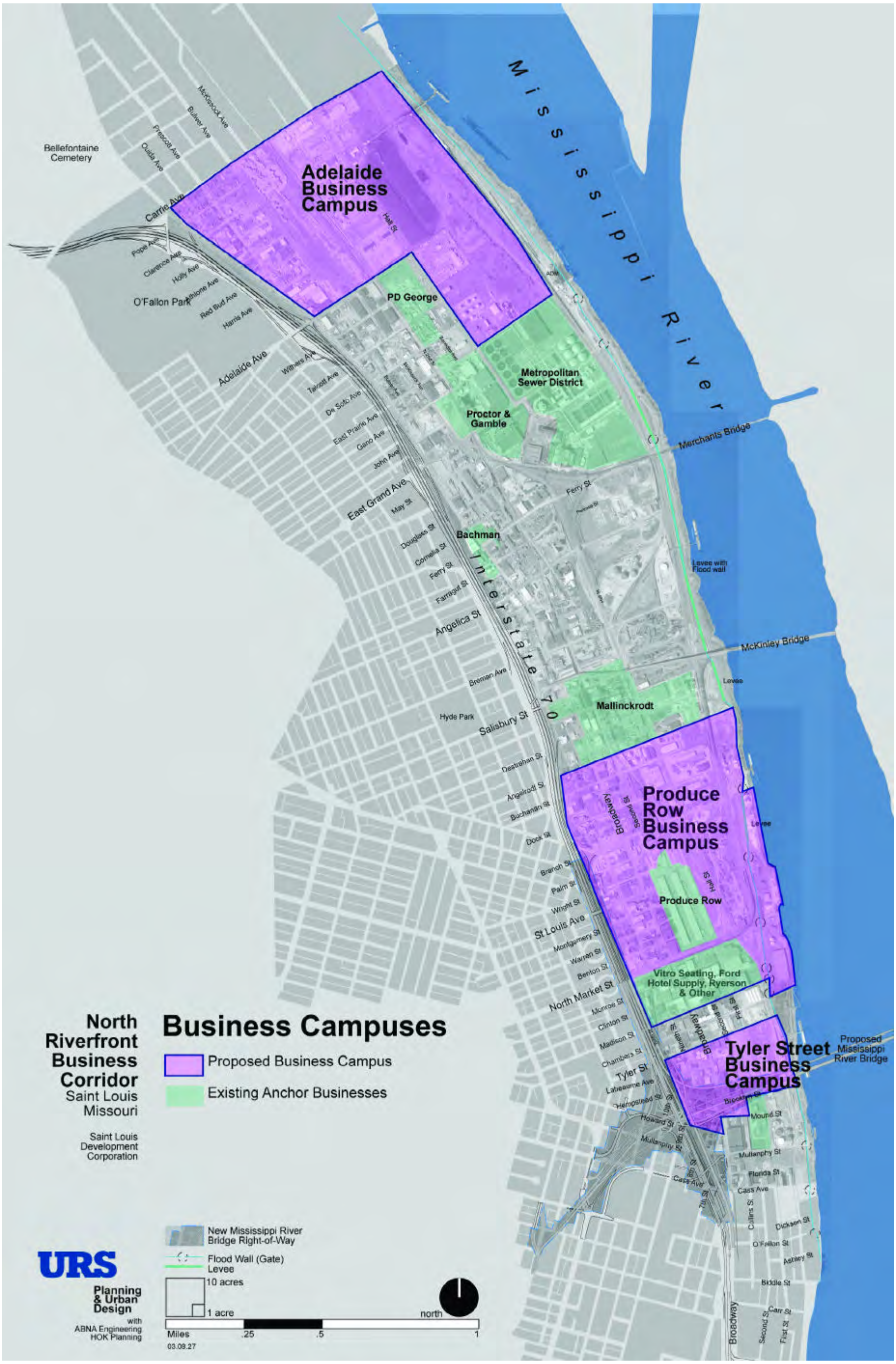


Figure I.2 NRBC Existing Businesses and Proposed Business Campuses

CHAPTER II Market Analysis

II.A. Summary

The North Riverfront area represents one of the most important, and difficult, economic challenges in the City of St. Louis and the St. Louis region. The area encompasses over 1,100 acres of land, much of it divided into small parcels and occupied by vacant buildings or marginal uses. The area retains significant industrial anchors, including Mallinckrodt, Procter & Gamble and the St. Louis Produce Market. The area has significant strength as an intermodal transportation hub: it is bordered by Interstate 70 and the Mississippi River and served by Norfolk Southern, BNSF and the Terminal Railroad.

The North Riverfront continues to be a significant employment center, with over 8,800 jobs in the NRBC study area. Virtually all of these workers travel from outside the study area, many from Illinois. Only 862 people live in the study area, and of those, 464 are in the NRBC labor force.

The employment mix in the NRBC area is dominated by the manufacturing industry, with wholesale trade as a distant second. Conversely, in Metropolitan St. Louis Area employment numbers, manufacturing ranked a distant third, with the services industry leading, employing more than one-third of those employed.

The analysis of industrial space suggests that there is a continued trend of increasing demand in the region, as construction of industrial space on both sides of the Mississippi River has seen significant increases in the last few years. Between 1999-2002, occupied space remained stable and vacancy rates increased as new space was created to accommodate the increasing demand for industrial space. The market will continue to see new space becoming available as obsolete space is replaced. This trend of replacement space will be particularly evident in the City of St. Louis, as so much of the 78 million square feet in the city is aging and in need of replacement.

Information regarding retention and expansion potentials of existing NRBC businesses was acquired through company interviews, and regional business parks were evaluated for their amenities and competitiveness with a redeveloped NRBC.

The analysis of the existing business base in the North Riverfront and the larger St. Louis region shows two significant growth opportunities for the North Riverfront:

- Food Distribution/Processing - The proximity to the Produce Market, the downtown hotels and restaurants and I-70, make this an ideal location for regional food and kindred products distribution and wholesaling and related food processing activities. A base concentration of companies in this sector already exists in the area.

- Transportation/Logistics - The unique transportation and logistical location characteristics of the area suggest an opportunity to expand on the existing base of wholesale distributors, third-party logistics providers, trucking and cross-dock operations, railroad inter-modal operations, and bulk rail/water transloading operations.

Incentives that would help facilitate successful redevelopment of the NRBC were identified. These included addressing perceived and real city regulatory concerns, creating an independent organization to aid in NRBC business-government interactions, and utilizing tax and financing incentive plans.

Much of the fundamental basis for the NRBC redevelopment described within this master plan is based on the current demand and supply trends of the St. Louis Region as analyzed and gathered in this Chapter.

II.B. Demographic Profile

URS has reviewed demographic information on the project area, the City of St. Louis and the greater region by the U.S. Census Bureau, U.S. Bureau of Labor Statistics, and the U.S. Bureau of Economic Analysis. While all real estate brokerage firms cover the entire St. Louis Metropolitan Area, few allow for the "drilling" down of data to the NRBC. Among the sources, Claritas appears to be the most comprehensive. Claritas researchers attempt to collect and continually update information from all available sources. As a result, the analysis of changes in demographics of the NRBC is based on data compiled by Claritas. Detailed tables of the information in this chapter are contained in Appendix A and the comprehensive information received from Claritas is contained in Appendix A as Item A.

Because the St. Louis Community Release Center is located within the NRBC study area, some statistics are skewed. Examples of potentially skewed statistics include: population, household make-ups, male/female ratio, education level, and per capita income.

The St. Louis Community Release Center is part of the Missouri Department of Corrections. The facility has been in operation at this location since 1996 and can hold 500 people. Offenders assigned to Community Release Centers participate in the Work Release Program and begin to assume responsibilities for employment, medical care, education and paying for a portion of the cost of their room and board. The facility provides a source of labor for NRBC businesses.

1. Population

The NRBC resident population grew in the 1990s. The current estimated population of 862 people is a 3.54% annual average increase since 1990. This population, however, has declined by 1.3% annually since 2000. Over the next five years, the population loss is expected to increase to 1.36%

annually. Population in the City of St. Louis as a whole retracted by 1.3% annually on average from 1990 to 2000 (Tables A.2-3).

The population in the NRBC is predominantly male (66.7%) and young. The median age of residents is 32.9 years old, younger than the national median age of 35.6. The population is racially mixed with 67% Black or African-American and 32% White. (Item A, Table A.3)

There are a relatively low number of households in the area. The latest estimates place the 862 NRBC residents in households with an average of 2.87 people per household. One possible explanation for these numbers is the location of the St. Louis Community Release Center within the study area.

Most of the dwellings in this area (56.3%) are estimated to be renter-occupied. For the surrounding Saint Louis Metropolitan region, the majority of the housing units, 71.7%, are owner-occupied (Table A.3).

The majority of housing units in this area (54.3%) are estimated to have been built before 1939 (Item A). In the Metropolitan Area, both the Missouri and Illinois areas contain a younger housing stock on average, with 1977 as the median year a structure was built.

The average household income is estimated to be $36,057 for the current year, while the average household income for the Metro Area is estimated to be $64,784 (Item A).

The current estimated per capita income for the NRBC area is $10,321, compared to an estimate of $27,106 for the City of St. Louis as a whole. In 2000, the last year for which data is available, the per capita income for the St. Louis MSA was $31,354, whereas for the entire United States it was $29,469 (Tables A.1, A.3).

2. Employment Data on NRBC Population

Of the population residing in the NRBC, 15.8% are registered in the Armed Forces, only 33.8% are employed, 20% are unemployed and 30% are listed as "not in the labor force[*]." For the Missouri portion of the St. Louis MSA area, 0.08% is registered with the Armed Forces, 63.58% are employed, 3.68% unemployed, and 32.66% are not in the labor force (Table A.3). National averages are 1% in the Armed Forces, 61% employed, 4% unemployed and 34% not in the labor force.

For the employed population age 16 and over in the NRBC area, it is estimated that they are employed in the following occupational categories:

- 29.4% are in "Technical, Sales, and Administrative Support"

[*] Defined as the source of trained people in a designated population from which workers can be hired.

- 23.4% are in "Service"
- 20.6% are in "Operators, Fabricators and Laborers"
- 9.1% are in "Precision, Production, Craft and Repair"
- 8.2% are in "Professional Specialty"
- 5.1% are in "Executive, Administrative and Managerial"
- 4.3% are in "Farming, Forestry and Fishing"

It should be noted that these statistics describe the labor force of the NRBC. The labor force that is used by NRBC businesses comes from all over the St. Louis region and may not be reflected in the above employment data of NRBC residents.

3. Education

For the current year, it is estimated that 10.4% of the NRBC population age 25 and over in this area had earned a Graduate or Professional Degree and 11% had earned a Bachelor's Degree (Table A.3). In comparison for the St. Louis Metropolitan Area, it is estimated that 9% had earned a Graduate or Professional Degree, while 16% had earned a Bachelor's Degree. Once again, it is important to note that this data might be skewed due to the location of the St. Louis Community Release Center in the NRBC area.

II.C. Employment Profile

1. Regional Employment Trends

The U.S. Bureau of Labor Statistics captures labor rates for varied industries and geographies. While current statistics are available for some areas, some are only available through 2000; for comparison, therefore, the St. Louis region employment base will be examined for the time period 1997 to 2000. The following table and chapter compare the NRBC area to the City of St. Louis, the St. Louis MSA and the State of Missouri. Detailed tables of the information in this chapter are contained in Appendix Tables B.1-B.2.

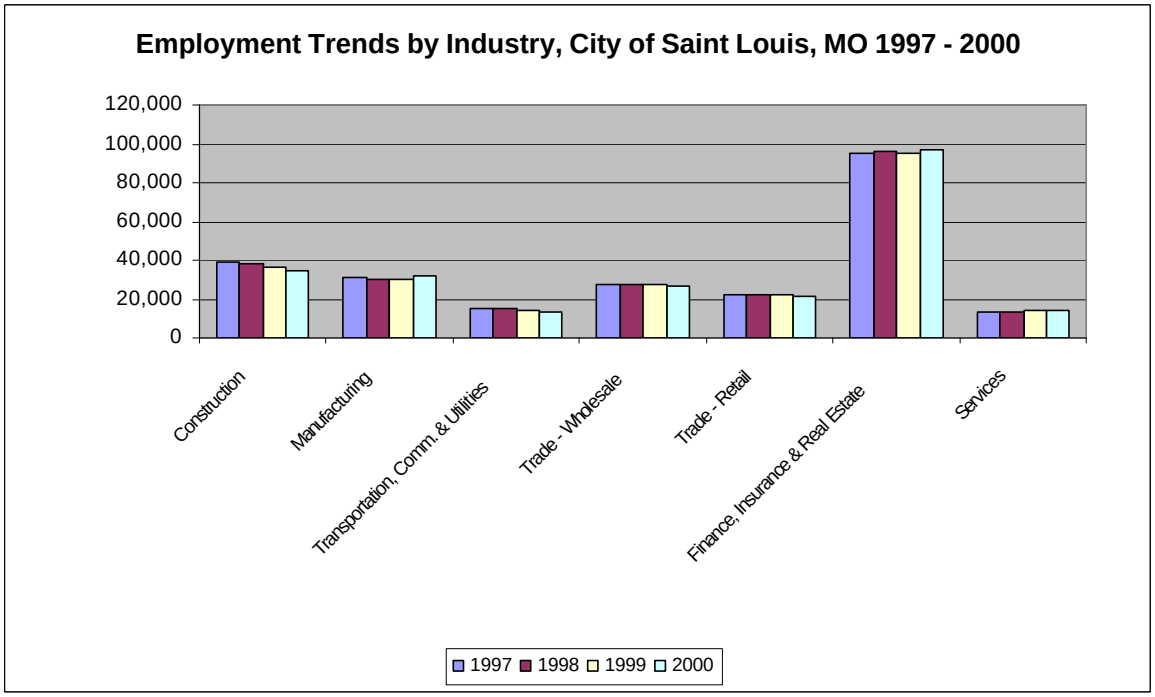
The St. Louis region, as defined by its Census MSA saw modest growth in employment from 1997 to 2000 of 31,300 jobs to a total of 1,257,100. This growth could have been greater had the region not lost over 12,400 manufacturing jobs over that time period. The greatest growth among industries was in the services sector, which gained 22,100 jobs, or 5.4%. In 2000, the largest industry was the services sector at 427,800 employees, followed by transportation, communications and utilities (312,500) and manufacturing (183,400). (Table B.1.b)

Table II.1 – St. Louis Regional Employment Mix, 2000

	N. Riverfront	City	MSA	State
Construction	**3%**	3%	NA	5%
Manufacturing	**43%**	14%	15%	15%
Transportation, Comm. & Utilities	**19%**	13%	7%	7%
Trade - Wholesale	**26%**	6%	25%	24%
Trade - Retail	**2%**	11%	NA	NA
Finance, Insurance & Real Estate	**1%**	9%	7%	6%
Services	**3%**	39%	34%	29%
Government	**2%**	6%	13%	16%

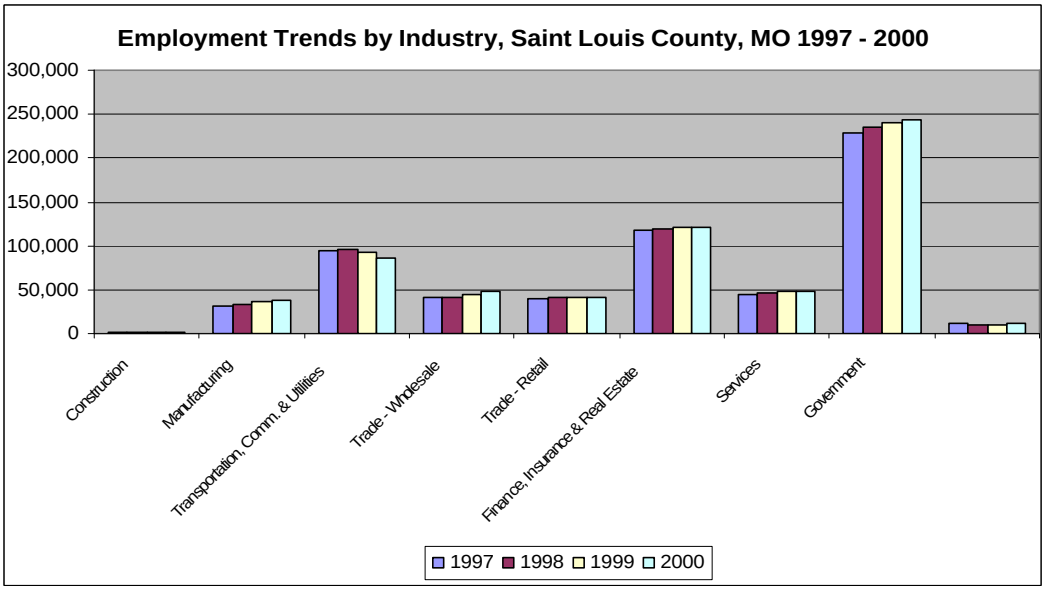
The City of St. Louis region saw an employment shrinkage of 1% from 1997 to 2000 of 2,526 jobs to total of 247,536 jobs in 2000. This loss is most pronounced in the manufacturing sector, which lost over 1,000 jobs per year totaling 4,186 jobs from 1997 to 2000. The greatest growth was in the services sector, which gained 1,567 jobs, or increased by 1.6%. In 2000, the largest industry was the services sector employing 97,102, or 39%, of all employees, followed by manufacturing (34,954, 14%) and transportation, communications and utilities (32,224, 13%). (Table B.2.a) Figure II.1 below shows employment trends by industry in St. Louis City.

Figure II.1 – Employment Trends by Industry, City of Saint Louis, MO 1997-2000



St. Louis County saw 1.5% annual average growth in employment from 1997 to 2000 to a total of 638,270 in 2000. This growth could have been greater had the region not lost on average 3.4% annually of its now 85,753 manufacturing jobs over that time period. The greatest growth in the other industries was in the services sector, which gained 14,473 jobs, or 2% annually. In 2000, the largest industry was the services sector at 243,091 employees, 38% of total county employment. The next two largest sectors of employment were retail trade (121,031, 19%) and manufacturing (85,753, 13%). (Table B.2.b) See Figure II.2 below for employment trends by industry in St. Louis County.

Figure II.2 – Employment Trends by Industry, Saint Louis County, MO 1997-2000



2. NRBC Employment Trends

Several data service firms track the employment inventory of the St. Louis region. URS has reviewed employment surveys by Dunn & Bradstreet and Sorkins. To assess the characteristics of the current employment base in the NRBC Redevelopment Area, URS obtained lists of employment by Standard Industrial Classification (SIC) Code for the area.

The following discussions of those lists illustrate two key findings: (1) the employment in the NRBC is diverse but with few large employers, and (2) the NRBC is losing companies faster than the lists can be updated. A full list of employers and industries represented in the NRBC can be found in the Appendix, below are highlights of that data. Detailed tables of the information in this chapter are contained in Appendix C, Tables 1-3.

- There are currently 283 companies operating in the NRBC Redevelopment area with 8,613 employees
- Of the ten major SIC classification codes published by the U.S. Bureau of Labor Statistics, eight are represented in the area
- Manufacturing employs the greatest number of people in the NRBC with approximately 4,000).
- Almost one half of all the manufacturing employees in the area work for chemical and allied product manufacturers

- The largest employer in chemical and allied products is Mallinckrodt with approximately 1,100 employees. Mallinckrodt is not only the largest chemical company but represents the largest single employer in the area overall
- Fabricated metal-products is the second largest subsection of manufacturing in the NRBC with 688 employees
- Wholesale trade is the second largest industry in the NRBC, employing almost 2,300 people. Wholesale trade is divided into two nearly equal subcategories, durable and non-durable
- Meat packers and the produce market characterize non-durable wholesale trade in the NRBC. The produce market employs more than 500 people at over a dozen companies.
- Durable wholesale trade in the NRBC is represented by 44 firms that employ on average over 23 people per location
- Transportation, communication and public utilities (TCPU) firms employ 1,700 people, mostly in transportation services, trucking and warehousing
- Combined, manufacturing, wholesale trade and transportation, communication and public utilities represent 89% of total employment in the NRBC, compared to 47% in the metropolitan area
- There is limited service industry employment in the NRBC area. Twenty-nine service firms employ only 301 people. Of the firms, 10 are related to auto repair and average 5 people a location
- The public administration industry is represented in the area by the 150 employees at the St. Louis Community Release Center.
- Retail trade and the finance, insurance and real estate industries complete the area employment. There is not a significant concentration of employment in any of these subcategories.
- Scrap metal related employment continues to be strong in the NRBC area. Companies like Grossman continue to grow as demand for tonnage of recycled scrap metal does also. These companies are more land- and material-intensive than labor-intensive, and thus diminish the future employment base of the area.

3. NRBC Companies

The information used to investigate the employment base in the NRBC also allows for review of firm size and types in the area. 283 firms employ 8,800 people in the NRBC as discussed previously. Company size in the NRBC ranges from fewer than 10 employees up to 1,100 employees. A

complete list of firms represented in the NRBC classified by type of industry and number of employees is located in the Appendix Tables C.3. and C.4. Highlights of these tables include:

- Approximately half (47.4%) of the area firms are those of ten or fewer employees. These small firms, however, employ only 6% of the total NRBC employees
- One company, Mallinckrodt, has over 1,100 employees
- Firms of 50 to 100 employees employ 18% of employees, the largest single portion
- The average number of employees per firm in the NRBC area is 31

While the companies in the area account for a representation of eight industrial classifications, they do not do so on an even basis. As Appendix Table C.2 demonstrates, there is a large concentration of manufacturing, trade and transportation related industry in the NRBC. Information in the table includes:

- The largest concentration of companies in a NRBC industry is in wholesale trade with 84 firms. The 84 firms on average employ 25 people per firm.
- The largest companies are in the manufacturing industry with an average employment of 59 people. This average is bolstered by the inclusion of Mallinckrodt with 1,100 people. Without Mallinckrodt, the industry still averages approximately 43 people per firm.
- 62 firms are classified as in the transportation, communications and public utilities industry. These firms employ an average of 28 people per company for a total of 1,712 employees.

II.D. Waterfront Profile

The City of St. Louis Port Area encompasses 19.3 miles of waterfront, 65% of which is managed by the St. Louis Port Authority. Waterborne commerce in the Area is currently at 33.3 million tons per year as shown in Appendix Table F.1. Over half the tonnage is goods moving through St. Louis by barge. The balance is goods either loaded or unloaded at St. Louis, which are originating or destined for the St. Louis market or transloaded at St. Louis to truck or rail. The volumes of the major terminals surveyed are as follows:

- Beelman – St. Louis Municipal Terminal – 1 million tons/year
- Beelman – Illinois facility – 1 million tons/year
- American Commercial Terminals – 9 million tons/year
- Lange Stegmann – 400,000 tons/year
- Tri-City Ports – 4 millions tons/year.

The three major commodities are coal, petro-chemicals and grain. The St. Louis region's main competitors are Huntington, West Virginia and Pittsburgh, Pennsylvania.

1. Port Authority of St. Louis

The Port Authority is governed by a seven-member commission appointed by the Mayor with consent of the Board of Aldermen. It is mostly a landlord operation, leasing land on 25-yr leases. The Port Authority operates within the St. Louis Development Corporation (SLDC) and has the power of eminent domain, which it has not yet used, and the ability to issue bonds.

The Port Authority of St. Louis facilities serving the NRBC include:

Bulk Services

- Grain transloading

Kiesel Oil

- Petroleum transloading

Lange Stegmann

- Bulk materials transloading (predominantly fertilizer, see Company Interviews for details)

ADM/Growmark

- Grain transloading (see Company Interviews for details)

American Commercial Terminals

- Coal transloading (see Company Interviews for details)

Center Point Terminal /Apex Oil

- Petroleum transloading

Continental Cement

- Two storage silos are located on site

City Municipal Terminal

- 28 acres with 90,000 sq ft of warehouse space and an office building
- The facility serves all bulk commodities, with an emphasis on scrap metal, salt and coal
- Two caustic soda tanks
- The terminal has two piers, a South and a North pier
- There are four cranes on the dock which the two piers share
- Future plans include connecting the two docks
- Facility is leased to Beelman Trucking until 2010

- In spring, 2001, Beelman opened a 65-acre coal transloading operation in Illinois. Most of the volume serving Granite City Steel has been shifted to this location
- Before Beelman, facility handled 40,000coal tons/yr. In 2000, it moved 2 million tons. In 2002, Beelman expected to handle under 1 million tons.

2. Tri-City Regional Port Area

The Tri-City Regional Port Area controls 1,500 acres of land on the east side of the Mississippi River in Madison County, Illinois. This industrial campus component of this project is profiled in detail in the Industrial Campus Profile section of this report.

The Tri-City Port currently handles 4 million tons per year. The major commodities are agricultural products (50% of volume), steel/metals and petroleum/liquids. The Port has the potential to be served by multiple railroads, although only Norfolk Southern currently serves customers in the Port.

The Port is proposing to build a new water transload facility below Lock 27. The current port operation is north of the lock, which adds up to $1,500 per barge in rates. The increased cost is due to the extra time and expense required to break down and move barge tows through the locks. The Port is looking to the U.S. Army Corps of Engineers, State of Illinois and private sources to fund the construction of the new port facility.

Tri-City Port has enhanced its position by co-locating port-related users, including three steel processing plants, a fertilizer bagging operation and a polymer blending facility.

3. NRBC Waterfront Issues

There are a number of issues that are currently impacting the St. Louis waterfront. These include:

- Rock shelf – A curve in the river and a rock shelf in the riverbed causes sediment to collect with subsequent frequent dredging to allow barge access to Lange Stegmann.
- Competitive position of port locations in Illinois, including Tri-City Ports
- Overall stagnation of domestic waterborne commerce in the U.S.
- Containers are not economically suited for domestic waterborne transit.

4. Conclusions

- Waterborne commerce will remain an important industry in the NRBC.
- While waterborne commerce itself is an important industry, very few other industries in the NRBC depend on water transportation.

- The most viable waterborne commerce facilities will continue to be the single-commodity facilities (ACT, ADM and Lange-Stegmann) located north of the McKinley Bridge.
- Water transload operations south of the McKinley Bridge, such as the City Terminal, can be maintained in their current state, but do not represent strong growth opportunities. These facilities are also not compatible with proposed uses for the Produce Market area, thus relocating the water transload operations from this area could be a viable option.

II.E. Company Relocation Inquiries

Companies investigating the possibility of relocation to the St. Louis region are tracked by the St. Louis Regional Chamber and Growth Association (RCGA) and SLDC. URS has reviewed data on the type of companies that inquired about relocating to the St. Louis area between 2000 and mid-2002. Data were provided for 244 official inquiries, 192 of which were identified as specific company relocation/expansion opportunities. Some of the other data pieces were from individuals doing research for nonspecific companies/industries.

While all companies were asked about the number of new jobs that would be created by locating in the St. Louis area, not every company answered. Of those that answered, many provided estimates. To use this data, the answers were averaged for each category. A detailed table of the information in this section is contained in the Appendix Table B.3.

The 192 companies inquiries that URS investigated fell into eight categories:

- Information Technology
- Advanced Manufacturing
- Call Centers
- Transportation/Distribution
- Life Science/Medical
- HQ/Nonprofit
- Banking/Insurance
- Other – Retail

1. City of St. Louis

In July and August 2002, the SLDC Business Development staff fielded 50 calls from companies looking for information on locating to the City of St. Louis. The companies that called ranged from local fast food operations to national manufacturers. While most (58%) of the inquires were from

firms classified as "other", 11 were advanced manufacturing, five transportation and/or distribution, three life science and/or medical firms and one each of banking and IT firms.

Compared to the greater St. Louis Market, the City attracts a greater share of advanced manufacturing companies while the surrounding market exceeds the City in the share of Information Technology inquiries.

2. St. Louis Region

The St. Louis RCGA fields calls from companies looking to relocate to or expand in the St. Louis region. The Association represents the 12-county, bi-state region comprised of the City of St. Louis, the Missouri counties of St. Louis, St. Charles, Jefferson, Franklin, Warren and Lincoln, and the Illinois counties of St. Clair, Madison, Monroe, Clinton and Jersey.

The largest number of firms that called the RCGA for expansion/relocation information came from the information technology industry and were interested more in the region than the City of St. Louis itself. A listing of inquiries by company type is as follows:

a. Information Technology

Information technology companies constituted the largest category by number of potential companies that called the RCGA with 44, or 23% of all calls.

- Average number of new jobs created per company: 145
- Locational investigation:
  - 12 County Region – 27
  - St. Louis City – 6
  - St. Louis County – 4
  - St. Louis City or County – 2
  - Other – 5.

b. Advanced Manufacturing

Advanced manufacturing companies constituted the second largest category by number of potential companies (17%) that called the RCGA with 33.

- Average number of new jobs created per company: 158
- Locational investigation:
  - 12 County Region – 13

- Missouri Counties – 8
- St. Louis City – 2
- St. Louis County – 4
- St. Charles County – 2
- Other – 4.

c. Call Centers

Information Technology companies constituted the largest category by average number of potential new jobs that called the RCGA with 733.

- Companies investigating the region: 28
- Locational investigation:
  - 12 County Region – 27
  - St. Louis City – 6
  - St. Louis County – 4
  - St. Louis City or County – 2
  - Other – 5.

d. Transportation/Distribution

Transportation/distribution companies constituted 23 potential companies (12%) that called the RCGA.

- Average number of new jobs created per company: 86
- Locational investigation:
  - 12 County Region – 14
  - St. Louis City – 2
  - St. Louis County – 1
  - St. Louis City or County – 1
  - Other – 5.

e. Life Science/Medical

Life science/medical companies constituted 12 potential companies (6%) that called the RCGA.

- Average number of new jobs created per company: 106
- Locational investigation:
  - 12 County Region – 7
  - St. Louis County – 5.

f. HQ/Non-profit

HQ/Nonprofit companies constituted 9 potential companies (5%) that called the RCGA,.

- Average number of new jobs created per company: 352
- Locational investigation:
  - 12 County Region – 6
  - St. Louis County – 1
  - Other – 2.

g. Banking/Insurance

Banking/Insurance companies constituted just 4 potential companies (2%) that called the RCGA.

- Average number of new jobs created per company: 128
- Locational investigation:
  - 12 County Region – 2
  - St. Louis County – 2.

h. Other – Including Retail

Other companies, including retail accounted for 39 companies (20%) that called the RCGA.

- Average number of new jobs created per company: 42
- Locational investigation:
  - 12 County Region – 26
  - St. Louis City – 2
  - St. Louis County – 2
  - Other – 9.

3. Summary Conclusions – Company Relocation Inquiries

Key conclusions from the analysis of company inquiries are:

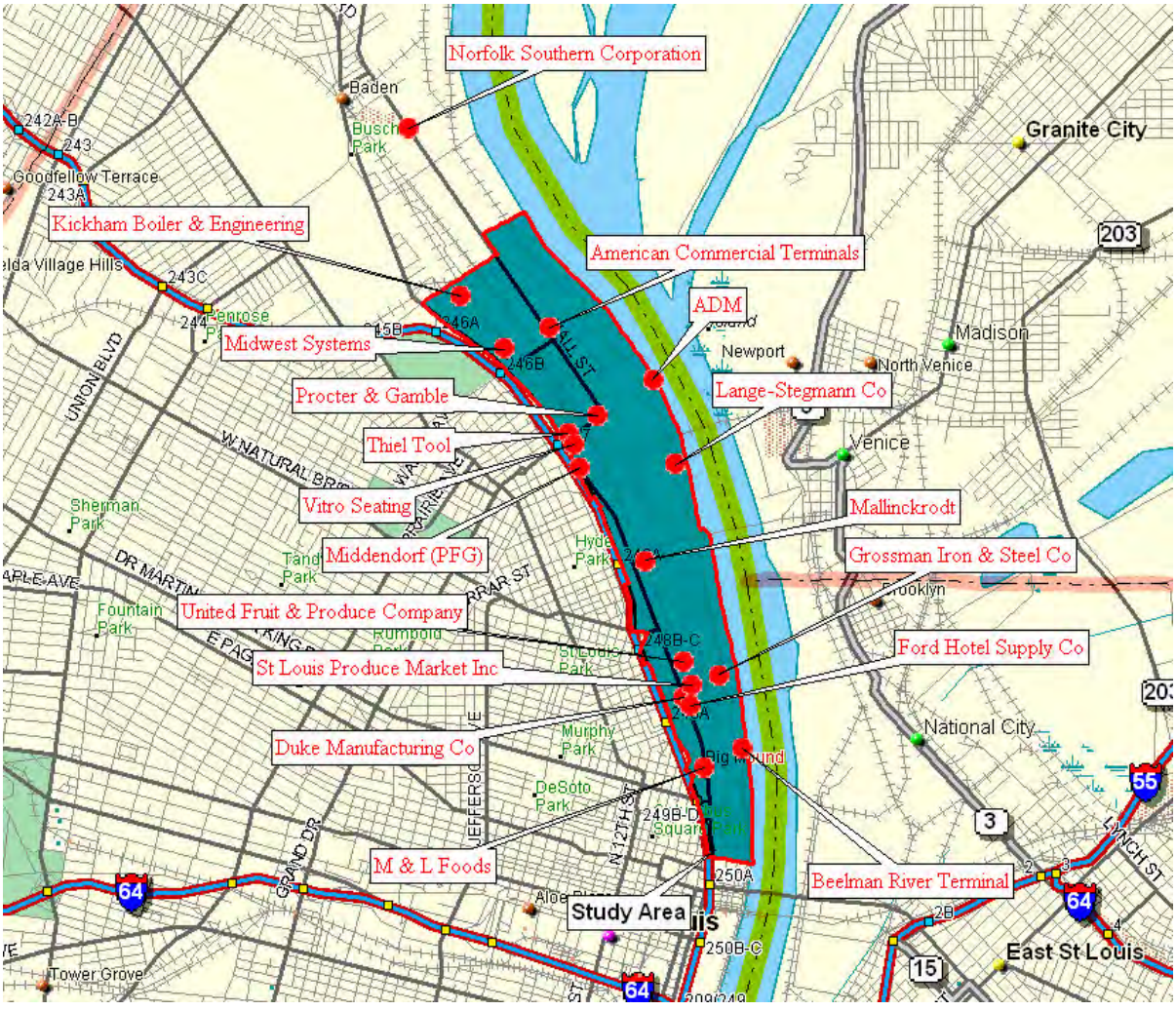
- The region still compels a strong number of company inquiries
- Some sectors could be attracted to modern business campuses in the City of St. Louis
- Sectors that could be attracted to the NRBC include transportation/distribution, some manufacturing and back office/call centers.

II.F. Company Interviews

1. Overview

The URS team met individually with 18 NRBC businesses. The companies that were interviewed, noted on the following map, Figure II.3, represent 3,700 employees, 40% of the NRBC total employment. Detailed tables of the information in this section are contained in Tables C.5.a-b in the Appendix.

Figure II.3 – NRBC Company Locations



Key Themes

- Growth sectors: food distribution/processing and transportation/ logistics
- Retention risks: manufacturing and fabricated metals (fabricated metals includes forging and stamping, structural metal manufacturing, machine shops, container manufacturing, spring and wire manufacturing, coating, engraving, heat treating and other metal forming and shaping processes).

Challenges

- Many businesses are landlocked and see few relocation/expansion options within the area. The following Table II.2 is a qualitative analysis of company interviews with regard to retention potential. A comprehensive summary of this interview information can be found in Appendix Table C.5.

Table II.2 – NRBC Company Retention Potential

Company/Owner	Expansion Potential Low	Medium	High
High Retention Potential			
Grossman Iron & Steel			■
St. Louis Produce Market			■
United Fruit & Produce			■
Lange-Stegmann		■	
Mallinckrodt		■	
ADM/Growmark	■		
American Commercial Terminals	■		
Norfolk Southern	■		
Medium Retention Potential			
Duke Manufacturing Co.			■
Middendorf (PFG)			■
M&L Foods			■
Vitro Seating Products		■	
Beelman River Terminals	■		
Kickham Boiler	■		
Midwest Systems	■		
Procter & Gamble	■		
Thiel Tool	■		
Low Retention Potential			
Ford Hotel Supply		■	

2. Company Interview Profiles

a. American Commercial Terminals LLC

The 65-acre ACT site is the former St. Louis City Landfill. ACT is currently utilizing the northern 40 acres but the southern 20 are unused. The company is a 24-hour, 7 days a week operation transferring of bulk commodities namely – Powder River Basin coal, which comes in by rail (BNSF) and goes out by barge. Volume has increased over last two years – from 7 million tons to 9 million tons with capacity as high at 12 million tons per year.

American Commercial Terminals employs 28 people, 7 of whom are salaried. The facility was originally developed as a partnership of BNSF, the barge line, coal mine and power plant. The plant currently operates at least one 119-car unit train a day. They would like to be able to accommodate larger 130-car unit trains but that would require a new track loop.

b. ADM/Growmark

ADM/Growmark transloads grain for export. The grain comes in from the Midwestern states and goes out by barge to be transloaded to ocean ships at New Orleans. Due to road congestion, it can be difficult to get product in from Illinois, a situation that is capitalized on by Illinois competitors such as Cargill in East St. Louis and Sauget.

There is no potential for expansion because they are landlocked by BNSF and the river. The current facility was built in the 1950s. Product is delivered by both truck and rail (BNSF) while it is shipped out by barge. ADM/Growmark currently has two barge load-outs, ability to handle up to 40 to 42 trucks per hour and can accommodate up to 110-car unit trains. To grow their business, they need a truck staging area during peak season and would like room to expand to accommodate 130 to 132 car trains.

The new Mississippi River Bridge will be an improvement because of the traffic pattern and poor conditions on Riverview Drive, I-70 and Prairie are challenging. The company has concerns about a proposal to develop a public park next door. Among their concerns are complaints about grain dust and other issues that are normal parts of their operation.

c. Beelman Trucking Company

Beelman has leased the St. Louis City Terminal from the Port Area since 1988. The lease expires in 2010. Beelman leases 28 acres from the City, including a 90,000 square foot warehouse, two docks and four cranes. In Spring 2001, Beelman opened a new water transload operation on 65 acres between the McKinley and Merchants Bridges in Illinois.

Beelman has also recently acquired the 195-acre site of the former Cahokia Downs Racetrack in Illinois, where they plan to develop a new truck terminal, office/warehouse/maintenance facility and parcels for industrial use.

Beelman handles three major commodities at the Missouri dock:

- Steel – scrap steel for Grossman
- Salt – road control salt, Morton and Gunther
- Coal – for Anheuser-Busch and Mallinckrodt.

Beelman expects to handle just under 1 million tons at the Missouri dock in 2002. The Illinois dock is expected to handle 1 million tons in the first year and could eventually handle 2 million tons. The Illinois dock handles product for Granite City Steel. On a busy day, the Beelman facility in Missouri handles 200 trucks.

Beelman sees limited growth in the water transload segment, which accounts for a very small portion of the company's total business. If a new port is developed at Tri-City Ports, it could impact their business.

Beelman employs 25 people in St. Louis. The Illinois operation employs 6 people.

Since it has become difficult to move trucks in and out of St. Louis, and the City has closed streets providing access to the dock, Beelman developed operations in Illinois. In addition, air pollution regulations have required the company to invest in an air monitoring system, street cleaning equipment, asphalt paving and the spraying of water on outside storage piles. In addition, Beelman faces challenges with rail grade crossings blocking access, river flooding and licensing fees.

d. Duke Manufacturing Company

Duke Manufacturing does sheet metal assembly of commercial kitchen equipment. They have two plants – St. Louis and Sedalia. The St. Louis plant does the assembly of worktables, steam tables, heat ventilators, holding cabinets, and ovens while the Sedalia plant assembles serving lines, food warmers, convenience store cabinets and equipment for Subway restaurants.

The St. Louis facility has 60,000 sq ft in the main facility. The St. Louis plant shut down in 1990 and reopened as a non-union shop in 1995. It reopened after Duke acquired Southern Equipment and shut down their 200,000 sq ft plant in south St. Louis. The equipment from Southern Equipment was moved to the facility.

Duke is landlocked in St. Louis. They acquired a 20,000 sq ft building from Ehrhart Tool & Dye and are considering renovating the buildings for office space. They have also acquired land under the trestle from the Terminal Railroad and rent a parking lot from Modern Screw.

Most of the growth has been in Sedalia where they have 120,000 sq ft on 20 acres.

Duke looks to minimize its costs wherever it can. They have considered moving to Illinois because of the lack of an earnings tax. They have also filed for tax abatement for their recent construction with SLDC.

The company is interested in creating a secure perimeter for both the plant and their parking. They feel that the vacation of 9th Street would be helpful towards this end.

e. Ford Hotel Supply

Ford Hotel Supply was founded in 1911. The company has two core businesses: design/build commercial kitchens and distribution of supplies. The company moved to this location in September 1993. It occupies 4.5 floors and 125,000 sq ft.

The center of their customer market is I-270 and Dorsett Road – St. Peters/O'Fallon. The company is interested in acquiring property to create a 125,000 sq ft facility on one level. They are not interested in Illinois, since most customers are in Missouri but are having problems finding affordable space in St. Louis to meet their needs other than what they already have.

There is a problem with Ford's vehicles being stolen and vandalized. They would like to construct a butler building to store vehicles.

f. Grossman Iron & Steel

Grossman moved to its current location in the 1940s, expanded to the north in 1971 and acquired some additional land from the City in the 1990s. Their property now totals 20 acres. While the company has not invested as much in land recently, they have made substantial investments in machinery including a $3.5 million hydraulic sheer in 1997.

Tonnage continues to grow. Their future plan is to expand the river business. They used to supply local foundries, which are largely gone. They now serve predominantly mini-mills, which are increasing their quality requirements. To meet these requirements, Grossman is investigating acquiring a new shredder that can help improve quality of scrap.

All inbound product to the facility comes in by truck. Cost structure is changing as suppliers move further out, making transportation a high percentage of operating costs. Product going outbound is

shipped via barge and rail. All barge product is shipped out via Beelman with rail service provided at the St. Louis Municipal Terminal. Rail use is continuing to decline.

Grossman feels that the State Enterprise Zone has yielded some benefits. They have not pursued every possible incentive. The current traffic situation costs them $50,000 per year, namely the closure of McKinley Bridge. Not surprisingly, they are concerned about construction of a new bridge and how it will affect them.

The company has its share of neighborhood issues, namely dust. There is an issue with "fugitive" dust from their operation and others. To reduce dust that is created on-site, Grossman has spent $500,000 on concrete and asphalt paving and uses street sweepers on and off their property.

g. Kickham Boiler

Kickham's original location was at 25th and Warren Streets. The company moved to their current location in 1961, where they now own 5 acres of land. Portions of their building pre-date the Civil War. Kickham's business is divided into two parts: field operations, such as general boiler work, repair, tank erection, and boilermakers, and a fabrication shop where they manufacture and repair tanks, pressure vessels, and waste heat recovery units.

Their customers are located in St. Louis, Southern Illinois and Southern Indiana. Their customer base however is shrinking. Their main customers are in the chemical (Mallinckrodt, Monsanto, Solutia), breweries (Anheuser-Busch) and automotive (GM, Chrysler, Ford) industries. They used to serve as many as 16 breweries but because of industry consolidation, Anheuser-Busch is the only one left. That is not the only industry to move on; the shoe and packing industries have all gone. Refinery work is disappearing (Mobil Oil is doing a $30 million expansion, all the work is being done in Malaysia).

h. Lange-Stegmann Co.

Lange-Stegmann has been in business since 1942. They own or lease 60 acres, including approximately 11 acres, leased from Land Reutilization Authority of St. Louis (LRA), including a river dock. They currently have an option on adjacent property.

Their main business is the transloading of bulk materials and liquids. Lange-Stegmann can both load and unload bulk barges and rail hopper cars. They can load and unload liquid barges but can only unload rail tank cars. Their main commodities are fertilizer, salt, construction aggregate and grain. For loading and unloading bulk rail and barge Lange-Stegmann has the capacity to hold 300 rail cars and four barges. The site is rail served by Terminal Railroad and BNSF. Material inbound comes via river (75%) and rail (25%). Ninety-five percent of material going outbound leaves on truck. They average 100 trucks a day over the year, 400 in the spring and 10 in the winter.

There is a benefit to be located near the grain elevators (Cargill and ADM) – trucks come in loaded with grain and take a backhaul of fertilizer. The company's competitive advantages are that they are specialized, do not handle coal and are a value-added service.

Lange-Stegmann's expansion potential is to take tons from someone else. They are seeing more imported products move from Gulf Coast to California. They currently have 200 to 300 customers located within a 150-mile radius. They see their customers being pushed further away (40 miles or more). Half of their clients are in Missouri and the other half are in Illinois. Typical customers are farm dealers or cooperatives.

The company is concerned about the levees and the major dredging costs they incur.

i. Mallinckrodt

Mallinckrodt, a division of Tyco Healthcare, is a global manufacturer and marketer of healthcare products. The company provides three essential areas of medicine: respiratory care, diagnostic imaging, and analgesic pharmaceuticals. Mallinckrodt's world headquarters is located in Hazelwood, Missouri and it has several manufacturing and research facilities in the St. Louis area. The facility in the NRBC manufactures diagnostic imaging agents and pharmaceutical preparations, specializing in pain relief and addiction therapy.

The facility, which covers over 40 acres, has been at this location since 1867 and has been expanded and upgraded numerous times. Recent capital investments in the facility include expansion, cost reduction, and environmental improvement projects. Mallinckrodt employs 1,100 people at this location. In addition, upwards of 300 outside contractors are periodically employed for project work.

Mallinckrodt expects to continue to make investments to support its current operations.

j. Middendorf (PFG)

Middendorf was founded in 1962. They are a broad line food distributor – handling 8,000 items as well as value-added processing: portion cuts and marinating. The company is projected to do $100 million in revenues this year.

Performance Foods of Richmond, Virginia recently acquired Middendorf. Performance also owns Quality Foods in Little Rock, Arkansas, Thomas Proessler in the Quad Cities and Pocahontas Foods. The acquisition will provide a source of capital to double the business in five years, allowing for the planning of a new $1.5 million dry warehouse addition.

Middendorf services 3,500 customers, mostly clubs, restaurants, associations, hotels and hospitals. Their customers are located in Illinois, Missouri, Indiana, Kentucky, and Kansas. Ten percent of their customer base is multi-unit restaurant chains such as Applebee's.

Middendorf recently completed a major expansion of their facility and saved $1 million by staying in the City. The incentive package was $500,000 for infrastructure, and $500,000 of state tax credits. Total investment on the 7.6-acre site was $6 million.

k. Midwest Systems

Midwest operates a logistics and trucking business on approximately 55 acres along Hall Street, north of Adelaide. Midwest leases 35 acres from Union Pacific and owns four adjoining facilities at 5601 to 5611 Hall St. Midwest formerly leased a 30-acre site from BNSF, but relocated to the Union Pacific site due to environmental contamination issues on their former site.

Midwest does not have any permanent structures on the 35-acre Union Pacific site. They use containers to construct temporary service bays, entryways, etc.

Midwest's operations include a container depot, container repair facilities, a trucking and brokerage business, sales and leasing of semi-trailers and an oil change facility. Midwest does not see growth potential at its current site, due to consolidation and difficult economics in the transportation business, movement of trucking companies out of the Hall Street area and competition from four other container logistics companies in the St. Louis market.

Midwest employs 95 people, 50 of whom work in the trucking business. Midwest's trucking business focuses on the less-than-truckload (LTL) segment within a 250-mile radius of St. Louis.

Midwest noted that there is a stigma on doing business in St. Louis, due to perceptions of crime, urban decay and high taxes. Midwest also has difficultly with rail grade crossings hindering access to their facility.

l. M&L Foods

M&L Foods is a fifth generation family business with 47,000 sq ft. Their 168 by 47 ft freezer holds 27 cases of meat. M&L invested $1.2 million in renovations in 1994 and is currently planning to extend their cooler. They are currently using 11 refrigerated trailers to hold excess product, increasing costs by 18%.

M&L is a full service food distributor – all meats, produce, and packaged goods. Through an affiliation with DOT Foods, they provide "end care" utensils, dishware, and cooking equipment. They are a seasonal business but are trying to flatten out the seasons. They have a strong fish

business during lent and supply the ballparks in the summer. Restaurants, hotels and retail customers (meat markets) are located within 75-mile radius, in Illinois and Missouri. All segments of business, except hotel, which has been flat, have been growing.

M&L is looking to expand, especially into the nursing home segment. To expand, M&L is looking for a 2-acre site to build a new facility. The site needs to accommodate six 18-wheeler loading docks (3 in, 3 out) and a 200 by 100 ft freezer. A location near the river is critical to attract will-call business from Illinois but there is a possibility to relocate the business to the suburbs.

Will-call business, customers who come to pick up their order, accounts for 40% of their business. It is critical to be near the Produce Market and East St. Louis to capitalize on this market. Part of the will-call business is jobbers – distributors who do not have a warehouse.

Goods are shipped out by "pup" truck – 26-ft long, 102-in. wide. Trucks leave at 6:00 AM loaded and return at 2:30 to 3:00 pm. M&L is losing $500 a week on average in overtime due to local road construction.

m. Norfolk Southern

The Hall Street Yard inter-modal facility is an important facility for Norfolk Southern. The yard was originally part of the Wabash Railroad. The facility has been an inter-modal facility for decades.

The 1999 Conrail split, saw Norfolk Southern and CSX each taking parts of its operations. CSX took control of the Conrail yard in Illinois serving St. Louis, so Norfolk Southern shifted its share of Conrail traffic to the Hall Street Yard. Also in 1999, Norfolk Southern relocated the Triple Crown facility to Edwardsville, Illinois. The $7 million facility occupies 50 acres in the Gateway Commerce Center Industrial Park. The facility has 300 truck parking spaces and room for expansion.

Norfolk Southern is a wholesale operation with customers predominantly being steamship lines, trucking companies and inter-modal distributors. Most of the Hall Street Yards business is serving the St. Louis market with a small amount of boxcar interchanging but not much inter-modal interchanging. A "good share" of the business is international.

Norfolk Southern operates 39 facilities, owning 31 of them. Over the past five years, they have opened six new facilities in Harrisburg, Atlanta, Cleveland, Decatur, Bethlehem and Savannah. In addition, approximately a third of the other facilities have had major expansions in the past five years.

n. Procter & Gamble

Procter and Gamble (P&G) occupies 35 acres on both sides of Grand Avenue. In the 1960s, P&G acquired land south of Grand Avenue for $1, on the condition that P&G would build a facility. Since that time there have been three expansions, the addition of two new product lines over past five years, a $20 million investment and a $60 million expansion in 1993. The next planned expansion is $6 to $8 million on the Cascade line. The NRBC site is one of four in Missouri, two others are in Kansas City and the fourth is in Cape Girardeau.

Products produced at the NRBC plant include: Cascade (for all of North America), Cascade Liquid, Mr. Clean, Fabreeze, and SpicNSpan which is now under contract to a new owner and will be discontinued.

The NRBC plant has the highest cost of capital of all P&G sites. Most of the other plants are in the south or outside of the United States. P&G has opened an 850,000 sq ft distribution center adjacent to 500,000 sq ft Lanter trucking facility at Gateway Commerce Park in Illinois, but if the St. Louis plant were shut down, there would be less benefit to have a distribution center there. Many companies are beginning to outsource significant volumes of production, which P&G has begun to follow.

The Gateway Commerce Park was chosen primarily because of its location factors: close to major highways, availability/size of site and no flooding risk. Tax considerations helped seal the deal.

The City has been cooperative at vacating roadways. P&G would like a steam supplier; Trigen cannot guarantee reliability or "food-grade" steam.

o. St. Louis Produce Market

The Produce Market is based in two buildings on 32 acres, which are divided into 90, 25-ft wide 2,000 sq ft units. The entire operation totals 196,000 sq ft, 65% of which is cooled space. Of the 32 acres, the market owns 18, leases 4 and is allowed to use 10 acres owned by Norfolk Southern. The facility is always open, running 24-hours a day, seven days a week with the busiest time between 8:00 PM and 2:00 PM.

Tenants have invested $25 million including enclosing the overhangs to meet "cold change" requirements and $5 million of exterior renovations such as angled loading docks (to accommodate 52-ft trailers) and dock expansions.

The produce market was setup as a condominium association in 1948. The vendors own stock. There are 98 units and the market owns two. Originally, the 96 units were owned by 47 different

shareholders. Today, there are 17 shareholders representing 57 different companies. United Fruit & Produce owns 34% of the shares. Four operations own 73% to 74% of the market.

For the owners of units, the monthly Common Area Maintenance charges are $400, including $50 for debt service. Trash removal is the largest line item expense for the market at $150,000 annually.

Twelve years ago the market catered predominantly to wholesalers/restaurant service. Today there are fewer wholesalers, those that are left are bigger (serving 350-mile radius), and more restaurant suppliers (break bulk, dairy), and "slicers/dicers", operations that are value-added, tubing tomatoes or three-packing corncobs for example.

At one time, they looked to move near the airport, however that is not going to happen because of the level of investment at the present site. Expansion options are to the east where they have first right of refusal on 30 to 45 acres of railroad land. The point of expansion would be to build a 200,000 sq ft metal building with 4,000 sq ft units (double depth). The units would be 28-ft wide and two stories tall plus 4 ft to allow for triple-stacked racks. United could take 100,000 sq ft of the potential building.

The market needs the City to rebuild key intersections to accommodate the largest tractor-trailers. Less than 2% of product now comes in by rail, 18,000 trailers a year now bring in the produce.

p. Thiel Tool

Thiel is a Tier II automotive supplier to Ford and DaimlerChrysler and has been in this location since 1964. They operate in a 100,000 sq ft facility of which 26,000 sq ft was added in 2001. The company owns the full city block it occupies.

Thiel recently invested $3.9 million in a new facility, including $600,000 for site preparation. Development challenges include: the potential for flooding and "200 years worth of previous development creating easements no one knows about". It would cost Thiel $30,000 to move the metal-stamping press equipment it already has in place to a new location.

Employment at the plant is down; volume is down. Missouri is the second largest auto producer in the U.S. and has long been a tool-making center. Pieces of the industry are beginning to move out of the country to China and Mexico.

Suppliers use barge and rail to bring in materials but Thiel uses trucks to send out its entire product.

Thiel has worked with the City before on economic development, obtaining a 10-year $100,000 forgivable loan, State Enterprise Zone blighting designation and real estate tax abatement for improvements. The State of Missouri has also helped through Rebuilding Communities tax credits.

Thiel is part of a neighborhood organization with six other companies working on getting better city services.

A concern is of the long-term viability of the Hazelwood Ford plant. Ford's reasoning is that it wants tighter control and to locate suppliers within 50 miles, which works against the Hazelwood location.

q. United Fruit & Produce

United is the largest tenant in the St. Louis Produce Market, with 34 units in Produce Row and a stand-alone facility across Market Street.

United's business has been growing rapidly, with revenues doubling since 1990. The current facilities are "maxed-out" and United is planning a 25,000 sq ft addition to its facility and is interested in anchoring a major expansion to the Produce Market. United expects to see its business double again within ten years.

The North Riverfront area and Produce Row are ideal locations for United, due to proximity to the interstate system and access to customers in Illinois and Missouri. New areas for growth and expansion include: fresh cut vegetables and fruit, organic food, and ethnic markets.

United and its affiliated companies employ 325 people, including 35 people in management and sales.

In order for expansion to take place, Grossman would need to be re-located. United has difficulty operating with the noise, particulate matter and image of the Grossman facility next door.

r. Vitro Seating Products

Vitro Seating Products is a third generation family business, founded in 1929. They are manufacturers of restaurant equipment: chairs, tables and booths. Their original location was at 9th and Dock Streets. The company moved into current building in 1968.

Vitro recently completed a $2 million addition and renovation of a 150,000 sq ft, six-story structure built in 1909. Due to unstable soil, they spent an extra $50,000 on site preparation costs. The company also owns storage buildings to the east of the main facility but have 7,000 sq ft that are unusable due to lack of sprinklers.

When they consolidated into one building they looked at other sites in Illinois, Iowa, Arkansas and Missouri. They made their decision to stay based on access to the labor force. The ideal new space would be 200,000 sq ft with expansion potential on 10 acres. The building would need five docks in and two docks out with some high-bay space.

Vitro operates on a very slim profit margin and faces competition from NAFTA and Chinese imports. With seven years remaining until its tax abatement expires, Vitro may soon start exploring its location options.

All of Vitro's transportation is done by truck.

The City helped Vitro consolidate its business, which had been broken up into nine buildings four years ago through tax abatement and real estate acquisition (acquired building for $1). Cost of business licenses is a concern, Vitro must pay $6,000 for manufacturers license as well as $6,000 for a business license.

II.G. Market Trends – Industrial Space

1. Overview

The inventory of industrial space in the St. Louis region is tracked by several brokerage firms. URS has reviewed industrial space inventory surveys conducted on a quarterly basis by CB Richard Ellis, Grubb & Ellis, and Colliers Turley Martin Tucker. While all the real estate brokerage firms cover the entire St. Louis Metropolitan Area, there are considerable differences in the overall size of the industrial space inventory, the classification of industrial space, and the geographic boundaries of individual submarkets. An added problem is that some firms have limited historical data available for review and analysis. Among the surveys, the CB Richard Ellis data appears to be the most comprehensive. The researchers attempted to include all properties of more than 20,000 sq ft and they tracked new owner-occupied expansions and constructions. Thus, while the inventory may not be totally comprehensive, and may still include some obsolete vacant buildings that should probably be withdrawn from the inventory, it appears to present the most comprehensive and consistent picture of trends in the region's industrial market. As a result, the regional analysis of changes in the supply of industrial space is based on data compiled by CB Richard Ellis. Detailed tables of the information in this section are contained in Appendix D.

2. Industrial Space Evaluations

According to data provided by CB Richard Ellis, the inventory of industrial space on the Missouri side of the St. Louis Region has increased in recent years, complemented by continued significant new industrial space construction on the Illinois side of the St. Louis Region.

Occupied space remained stable during this period of time and vacancy rates increased as new space became available as industrial space (Figure II.4 below). The market will continue to see new space becoming available as obsolete space is replaced. This trend of replacement space will be particularly evident in the City of St. Louis, as so much of the 78 million square feet in the city is in need of replacement.

Based on net new construction of 2.4 million square feet per year, URS absorption estimates show a 15.4% capture rate of 21 acres per year or 370,000 square feet per year for the total market growth of the NRBC.

a. St. Louis City

The City has seen a net decrease in amount of both built and vacant space. The following points highlight recent trends in the City of St. Louis while supporting tables can be found in Appendix D.

- The City of St. Louis continues to be the largest industrial sub-market in the region with 39% or 77.6 million sq ft. This share, however, is down from the beginning of 1999 when the City boasted over 78.6 million sq ft for a 41% share of the market (Tables D.1, D.7).
- The City has seen a decrease of occupied square feet (Tables D.1, D.7), with its share dropping from 42% in the first half of 1999 to a current 41% share.
- Vacancy in the City has risen from 2.78% in winter 1999 to 5.07% in 2002 (Table D.2 and Figure II.5 below). It remains the lowest in the St. Louis region.

Figure II.4 – Relative Occupied Square Footage

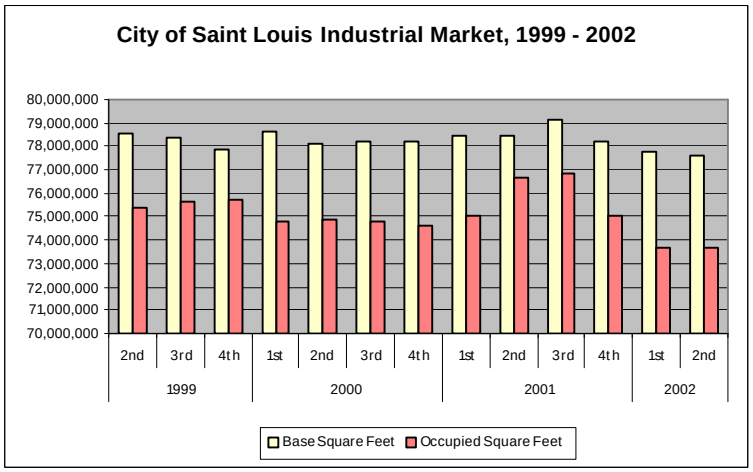
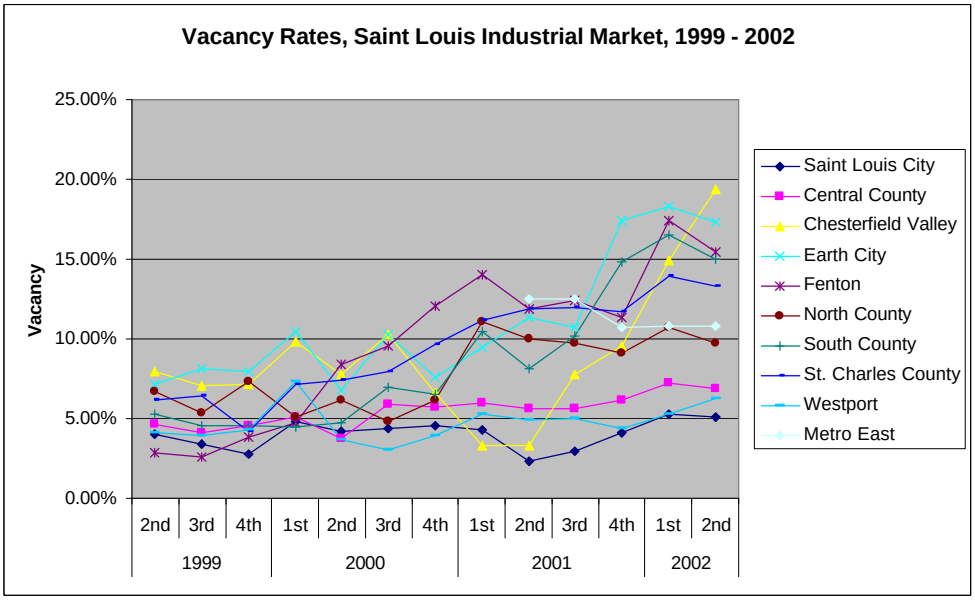
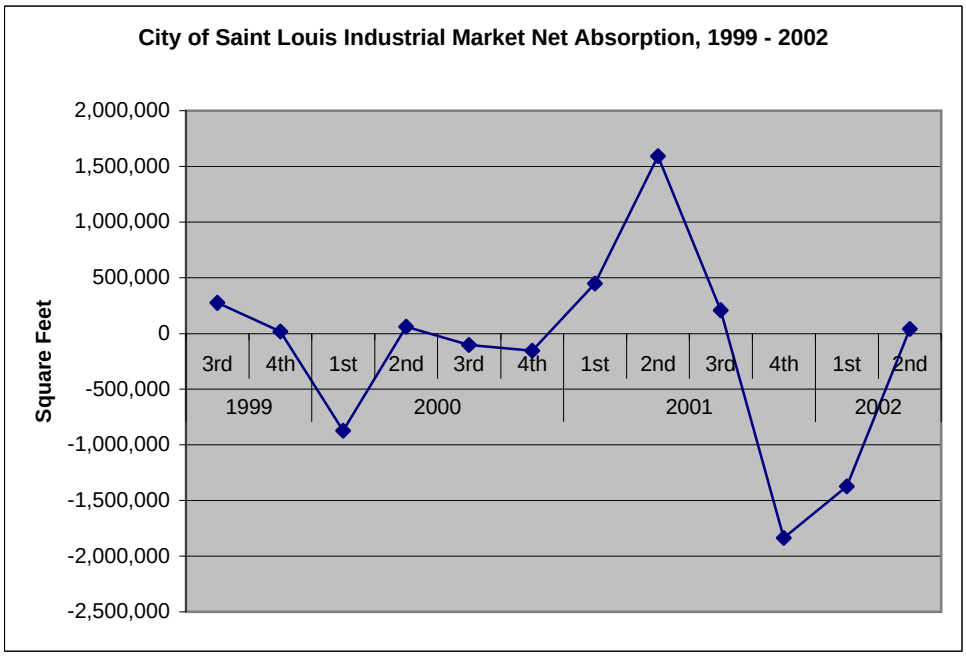


Figure II.5 – Vacancy Rates



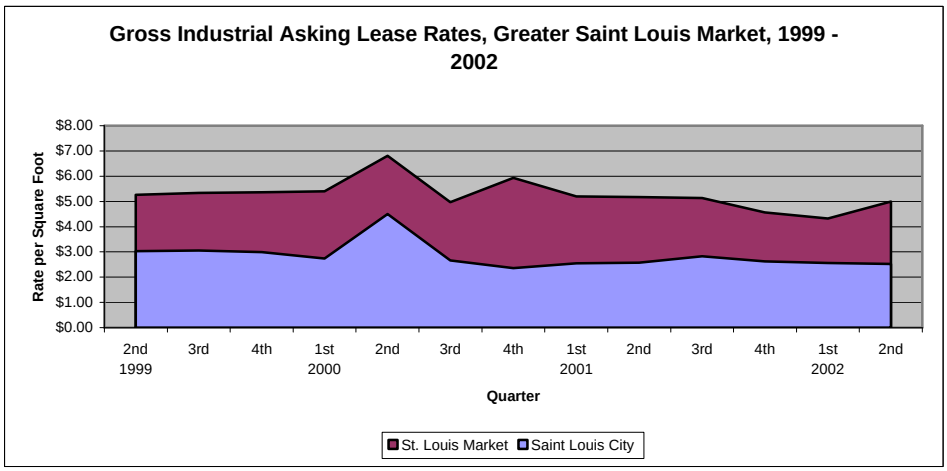
- The City has experienced a negative net absorption of 1.7 million sq ft since the spring of 1999 (Table D.3 and Figure II.6 below).

Figure II.6 – Industrial Market Absorption



- A review of business parks in the following section shows lease rates of $3.50 in newer City properties compared to $3.00 in modern suburban business parks (Table D.6, Figure II.7).
- Industrial property in the City has historically been achieving 50% to 60% of rent levels of the greater market. Gross rents in the City are currently $2.52 per sq ft, down from $3.03 per sq ft in the second quarter of 1999 (Table D.6).

Figure II.7 – Lease Rates



b. St. Louis Metropolitan Area

Because of its central location and network of a waterway, railroads and highways, St. Louis has long been a major manufacturing and distribution center. Though the nature of the manufacturing businesses in the region has changed and the percentage of the region's employment in manufacturing has declined, St. Louis' role as a center for warehousing and distribution has grown. The region continues to have one of the larger industrial markets in the nation. The following points highlight recent growth while supporting tables can be found in Appendix D.

- Between April 1999 and July 2002, the inventory of industrial space on the Missouri side of the market increased from 189 million to an estimated 197 million sq ft, a net increase of 8 million sq ft, or 2.4 million sq ft per year (Table D.1).

- The Illinois side of the market currently accounts for 18.5 million sq ft, or 12% of the greater market (Table D.1).

- During this same period, the occupied square feet of industrial space on the Missouri side decreased from 180 million to 179.9 million sq ft (Table D.3).

- The net result is that the overall vacancy rate for the St. Louis industrial market during this period has increased from a low of 4.44% in the last quarter of 1999 to a high of 9.39% in the first quarter of 2002. The second quarter 2002 vacancy rate for the St. Louis market was reported to be 9.03% (Table D.2).

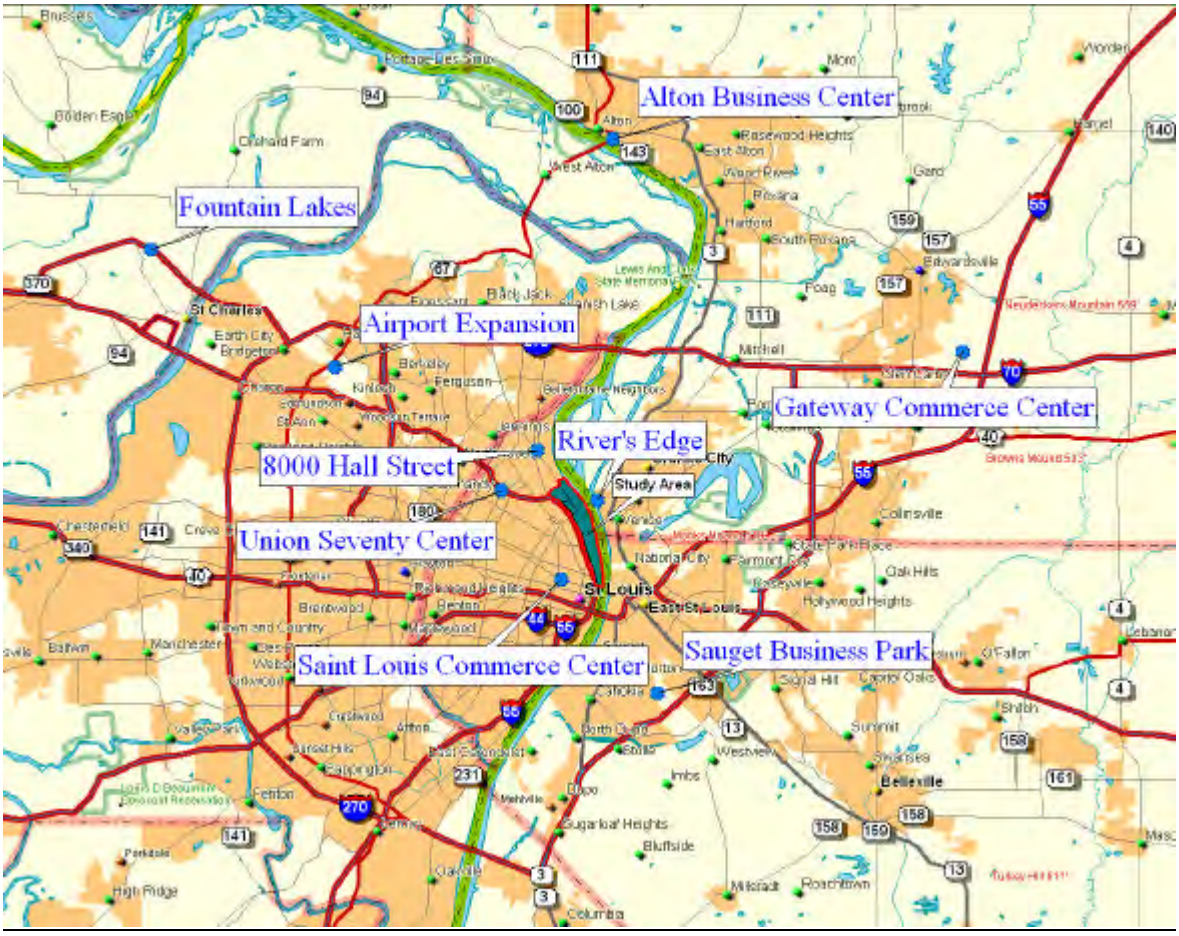
The population and employment growth in the region for the past 30 years has been to the northwest and south sections of St. Louis County, St. Charles County across the Missouri River and the Illinois side of the Mississippi River. Consequently, most of the new industrial park development has also occurred in these areas. The submarkets in the eastern portion of the region have increasingly introduced large, contemporary business parks developed and managed by a single entity.

Chemical plants, foundries and other heavy manufacturing enterprises have traditionally dominated the older industrial areas in the City of St. Louis, the near-south suburbs, and the Illinois waterfront. With the slow demise of these businesses, the areas in which they had been located became economically depressed and had huge, outmoded facilities to be removed or revamped. Many former industrial sites also have environmental problems and are oriented to railroads rather than highways. These older industrial areas thus suffer from the combined problems of having obsolete facilities, problematic development sites, decaying infrastructure, and negative images as places to do business. The industrial development that is now occurring in the eastern portion of the region is largely occurring on greenfield sites near interstate highway interchanges.

II.H. Industrial Business Park Profile

To assess the characteristics that would necessarily be incorporated into redevelopment of the NRBC to make it competitive, URS surveyed several potentially competitive business parks in the Greater St. Louis Industrial Market. See Figure II.8 below for locations of those business parks within the region. The following discussions with those business parks illustrate two key findings: (1) the competition comes less from specific business parks than from greenfield locations in general, and Illinois locations in particular, and (2) the NRBC has significant image and financial barriers to overcome if it is to retain existing firms and attract new investment. Detailed tables of the information in this section are contained in Appendix Tables E.1-2.

Figure II.8 – Business Parks Map



1. City of St. Louis Business Parks

a. Union 70 Center, St. Louis, Missouri

This 161-acre business park is characterized by its re-use of a former GM manufacturing plant. The Center has a mix of users including a variety within its three-story main distribution center. It is:

- Strategically located at I-70 and Union with excellent access and visibility from I-70
- Competitive because of its centralized location, between downtown St. Louis and Lambert-St. Louis International Airport
- In an industrial park environment with gated access
- Centrally served by rail and by large 60 ft interior streets.

Center Profile

- Over 4 million sq ft of space, mostly distribution
- Distribution center has 2 million sq ft alone:
  - First Floor – 1.1 million sq ft, $3.00 NNN lease rates, approximately 10% vacant
  - Second Floor – 600,000 sq ft, $2.00 – 2.50 NNN lease rates, approximately 50% vacant
  - Third Floor – 150,000 sq ft, negotiable lease rates, mostly vacant
- Major tenants include: Pepsi, Smurfit Stone and Save-a-Lot.

Summary

It is anticipated that the remaining vacant land will be developed in the next five years. There are five parcels of a combined nine acres remaining.

b. St. Louis Commerce Center, St. Louis, Missouri

This 490,000 sq ft complex is an urban infill site. The Center has a mix of distributors in two buildings. It is:

- Strategically located in the center of the City of St. Louis
- Gated access to parking

- Located in a residential community with high-perceived crime rates.

Center Profile

- Lease rates are over $3.50 per sq ft
- The Center has two buildings:
  - Building 1 – Finished in February 2000. Is now fully leased. 150,000 sq ft
  - Building 2 – Finished in February 2002. Was 60% preleased. 340,000 sq ft building with 50,000 sq ft available.

Summary

The St. Louis Commerce Center is an excellent example of urban infill industrial development. The site, however, has two problems to which other local industry professionals alluded: (1) lack of direct access to rail and highways, and (2) the perceived mindset that the surrounding area is crime ridden. The developer is looking to adjacent property to create a second phase of development.

c. 8000 Hall Street, St. Louis, Missouri

Also known as the Barry-Wehmiller property, this 20-acre site is directly north of the NRBC study area. The building is currently empty and promoted on the market as a whole or divisible property. It is:

- Located on the heavily traveled truck route Hall Street. The property is located close to both the Mississippi River, I-70 and is rail served.
- Being marketed as both warehouse and manufacturing.

Center Profile:

- 272,000 sq ft of space
- Clear ceiling heights of 24 to 28 ft
- Cranes of 5, 10 and 20 ton capacity
- Lease rates of $2.95 to $3.25 per sq ft

- Space is divisible down to 15,000 sq ft.

Summary

This property has direct implications on the redevelopment of the NRBC. The property, while technically outside the study area, is currently looking for the same type of client that the NRBC area, once improved, will be trying to attract.

2. Non-City of St. Louis Business Parks

a. Fountain Lakes, St. Charles, Missouri

This office-distribution center is in its third phase, having started in 1999. The Center has a mix of users. It is located on Route 370.

Center Profile:

- 851,850 sq ft of space, mostly distribution
- Lease rates of $3.35 to $3.90 per square foot are in line with the St. Charles County average of $4.45 Gross.

b. Gateway Commerce Center, Edwardsville, Illinois

This 2,700-acre greenfield development is one of the newest developments in the St. Louis market. The Center has a mix of users concentrating on large, regional distribution centers. It is strategically located at Interstate 255 and Interstate 270.

Center Profile:

- Distribution centers are averaging well over half a million square feet a building
- Major tenants include Dial, Lanter Corporation, Buske Trucking, and P&G
- The Center has rail access and is directly next to a new Norfolk Southern Triple Crown facility.

Summary

The businesses that are currently locating in Gateway are not looking for sites that the NRBC can competitively provide. The Gateway Center is becoming direct competition for other regional distribution markets like Indianapolis. The threat to the NRBC is that some of the space being

developed in Edwardsville is consolidation space from the Missouri side. The second threat to the NRBC is the implicit threat of smaller suppliers forming supplier business parks around the large users moving to Gateway Center.

c. Alton Business Center, Alton, Illinois

The Alton Business Center is the redevelopment of a glass manufacturer. One of the original structures has been renovated and the rest of the site cleared for future development. The center was envisioned to be a manufacturing/warehouse complex but it is turning towards back office use and becoming more of an urban business park.

Center Profile:

- 150 acre site
- Current square footage – 450,000, 50% occupied
- Rail access- UP and NS
- Land waiting for Build-to-Suit users
- Major tenants include American Water (customer service).

Summary

While the developers originally foresaw a distribution community rising out of this former glass manufacturer, they are not shying away from the chance to develop back office space.

d. Sauget Business Park, Sauget, Illinois

This 700-acre business park is a greenfield site directly north of the St. Louis Downtown Airport. The site for the center has been subdivided with hopes of attracting light manufacturing uses on sites of approximately 10 acres.

Center Profile:

- Access to Interstate 255, as well as rail and general aviation access
- Land asking price - $1.25 per sq ft

- Major tenants include Stellar Manufacturing, Holten Meat, MidAmerica Fiber and R&L Carriers.

Summary

The Sauget Business Park is being developed to attract light manufacturing companies. If the site continues to see limited development, the developer is open to the idea of allowing fewer, bigger distribution users.

e. River's Edge, Madison County, Illinois

The Tri-City Regional Port Area controls 1,500 acres of land on the east side of the Mississippi River. The development features a river barge port with inbound and outbound dry bulk and liquid bulk capabilities. The site is also served by the Terminal Railroad, which provides access to all five Class I railroads. The site is generally divided in three segments:

(1) Center Profile – Business Campus:

- Former U.S. Army supply depot
- Incorporates existing office buildings, 152 housing units, 18-hole golf course and day care center
- Office space is being leased out for back office functions
- Future plans call for removal of obsolete buildings, a new YMCA and U.S. Army Reserve Center.

(2) Center Profile – North Port:

- Existing built-out river barge port and 127-acre Harbor Side Industrial Park
- Dry and liquid bulk transload facility – barge, rail and truck
- Foreign Trade Zone
- Major tenants include: U.S. Filter, Laroche Industries, Robinson Steel and a Phillips/Dow/Apex Oil polymer blending facility.

(3) Center Profile – South Port:

- Over 500 acres and 2 million sq ft of warehouse space (constructed in 1940s and 1950s)
- 18 to 21 ft ceilings
- Lease rates - $2 - $4.50 triple net
- Future plans call for inter-modal rail container facility and new port below Lock 27.

Summary

River's Edge is particularly attractive for distribution, materials handling and processing businesses that need access to barge and rail transportation. In addition, River's Edge has ample land and building space available and competitive pricing.

3. New Supply

As part of the proposed St. Louis Airport expansion, the Lambert Airport Authority has acquired approximately 700 acres of land east of the Lambert-St. Louis International Airport, north of I-70 and east of Interstate 170 (I-170). While much of this property will be used for roadways and airport parking, there is approximately 244 acres available for industrial and office development.

St. Louis County and the City are currently negotiating an intergovernmental agreement with the municipalities of Kinloch, Berkeley and Ferguson. Potential developers include: McEagle, Trammel Crow and TriStar. Likely end-users include automotive suppliers, high technology, health care/biotechnology and office development.

4. Land Pricing

A survey of real estate brokers and comparable industrial parks (summarized below) suggests an upper limit on land pricing in the NRBC of $3 per square foot, with a more likely market average of $2.50 per square foot for serviced City industrial land.

Interviews with brokers and developers indicate the following land pricing comparables in the St. Louis market:

City of St. Louis (St. Louis Commerce Center) – $2.25 - $2.50 per square foot

- City of St. Louis (Union 70) - $3.00 per square foot
- Illinois (Sauget and Gateway) - $1.00 - $1.25 per square foot

- St. Louis County - $3.00 per square foot
- Earth City - $4.50 per square foot.

II.I. Tax and Incentives Analysis

1. Tax Factors

These are taxes that do not exist in other jurisdictions in the area. While these taxes do not represent significant dollar amounts for most companies, they serve as a symbol of the cost disadvantage of doing business in the City.

City Earnings Tax - The City of St. Louis levies a tax of 1% on salaries and wages of residents of the City and non-residents working in the City.

City Payroll Tax - The City levies a tax of 0.5% on the payroll of businesses located in the City.

Manufacturers and Inventory Tax – The City of St. Louis levies tax on personal property, including equipment used in manufacturing and business inventories.

2. Regulatory Factors

Similar to the tax situation, the regulatory burden is perceived as more onerous in the City than in other jurisdictions in the area. Areas of difficulty cited in the NRBC company interviews include: health and safety codes, fire codes, building codes and air quality permits. There is a perceived need for a greater degree of assistance in navigating the permitting and approval process for doing business in the City. Many of these issues may be more "perception" than reality, given the City's efforts to streamline approvals through the Business Assistance Center (BAC). An effective business assistance agency in the area, as discussed in more depth in the Implementation Chapter, would improve industry/City perception and communication.

3. Enforcement and Collection

There is also the perception that tax collection and regulatory enforcement is more rigorous in the City than in competing jurisdictions. Again, this is a perception more than a reality-based issue. There is some additional complexity added, though, due to the fact that City licensing and revenue collection are controlled by separate elected officials. This issue impacts the perception of the City as a place to do business.

4. Incentives

There are monetary and non-monetary incentives relevant to the redevelopment of the NRBC area. The City of St. Louis and State of Missouri have competitive incentive programs providing real

estate tax abatement and Brownfield tax credits. The City falls behind, however, in the lack of programs to front-fund projects. As possible models for St. Louis, other cities and states have successfully used Tax Increment Financing (TIF) Areas and refundable tax credits as means of providing front-funding for projects. Additionally, other incentives, such as provisions for workforce development services and a business assistance agency locally sited in the NRBC area would encourage redevelopment in the NRBC. A combination of existing and recommended incentive programs would offer significant encouragement for the revitalization efforts of the NRBC.

a. Property Tax Abatement

- The City offers property tax abatements of up to 100% for 10 years and 50% for an additional 15 years. The additional 15-year abatement has generally been phased out and is rarely offered.

- In addition, property tax abatements are available through the State Enterprise Zone.

- Chapter 100 Bonds - The City can enter into a synthetic lease transaction with a landowner where the City issues bonds to purchase property and then leases the property back to the user.

b. Brownfield Tax Credits

- The State of Missouri has a progressive Brownfield tax credit program. The program provides tax credits, loan guarantees or direct loans of up to 100% of remediation costs.

- Projects developed on Brownfield sites are also eligible for tax credits of $500 to $1,300 per year per new job.

- In addition to job tax credits, investment tax credits are available for Brownfield projects.

- AmerenUE is the leading purchaser of tax credits in Missouri, and typically purchases the credits at 10-20% discount to face value.

c. Tax Increment Financing (TIF)

The State of Missouri has a TIF statute.

- TIF Areas may be established to capture 100% of incremental property tax revenue and 50% of incremental local sales, earnings and utility taxes for 23 years. In addition, State TIFs (now under the MoDESA program) can capture 50% of state sales and income taxes.

- TIF has been one of the most important redevelopment financing tools across the country in recent years.

- According to many of the developers and economic development officials interviewed, TIF has not been frequently used for industrial projects in the City of St. Louis. Property tax abatement has been the preferred incentive.

d. Corporate Income Tax Credits

- Tax credits are available in the State Enterprise Zone for employees ($400 to $1,200 per employee) and 2% to 10% credit on capital investments for up to ten years.

- The Rebuilding Communities Tax Credit program provides state income tax credits of up to $125,000 for three years.

- The New and Expanding Business Tax Credit provides state income tax credits of up to $75 to $100 per new employee and $100,000 of new capital investment for up to ten years.

e. Up-front Financing

- Missouri Build - This state bond program is designed to fund public and private infrastructure improvements in order to close the "gap" between a Missouri location and competing locations. According to RCGA, the funding for this program has almost been exhausted.

- The Missouri Community College New Jobs Training Program is a $16 million program that provides up-front training funds that are repaid by state tax credits. Funding for this program is also almost exhausted.

- Missouri lacks programs comparable to Illinois First and the Illinois and Indiana EDGE credit programs. Illinois First is a $1.2 billion infrastructure program and the EDGE programs provide tax credits based upon the personal income tax liability of employees at new businesses.

f. Empowerment Zone

- The Greater St. Louis Regional Empowerment Zone (EZ) is a federally-designated area that benefits from programs targeted to stimulate investment, create jobs, expand businesses and foster community development. Private sector investment is leveraged using federal and local funds

- To qualify for EZ tax incentives, businesses must locate or expand within the designated geographic area, and/or locate in a county having an EZ and hire a certain percentage of employees who are residents of the EZ. See Figure II.9 for an outline of the EZ within the NRBC area.

- EZ neighborhood/community development tools have included new and rehabbed housing, improvements to public areas and support for education.

- Local workforce development tools include providing support to organizations that are effective in the areas of training and placement for sustainable employment.

- Commercial and industrial development has been assisted by local governments with funds to acquire and prepare sites for expansion and redevelopment.

- Other financing options include tax-exempt bonds, forgivable loans and low interest loans.

g. Workforce Development

Proximity to workforce training facilities is a critical factor in business location decisions. A workforce training facility in the NRBC area would be a significant asset to the area. It could include the following attributes:

- Training courses designed to serve existing and new businesses in the area

- Operated by a local community college and/or training staff of local businesses to provide customized courses

- Located in an existing renovated building or a new facility

- Proximate to the proposed business campuses

- Funded through TIF revenues, City and State workforce development funding sources and local business support.

A neighborhood-based business organization could be the entity to organize and operate a workforce training facility and also provide training programs on-site at local business.

h. NRBC Business Assistance

Currently the City of St. Louis has a Business Assistance Center (BAC) located in the Central Business Area (CBD) of St. Louis which serves as a liaison between city businesses and all St. Louis City departments. As a city government agency, the BAC offers assistance to businesses citywide to help ease some of the perceived and real barriers to doing business in the City. The BAC facilitates the permit process, offering itself as a "one-stop shop" for the processing of applications with the appropriate City departments. Additionally, the BAC coordinates with area development agencies to offer technical and financial assistance to businesses for expansion, relocation, renovation or acquisition. In its effort to retain and attract businesses to the City, the BAC promotes communication between businesspersons and government officials, and encourages the participation of businesses in political initiatives.

This type of business assistance, particularly when it comes from assistance agencies which are located in the community and are perceived as separate from city government, has been a decisive factor in the retention and attraction of businesses in other cities. See the discussion of Neighborhood-based Business Retention and Expansion Organizations (NBO's) and a Chicago example under "Organizational Framework" in the Implementation Chapter for more details.

i. Recommendations on Existing Redevelopment Agreements

Existing Chapter 99, 100, 353 redevelopment agreements with businesses in the NRBC will remain in place, even when new TIF Areas or other redevelopment Areas are created.

The addition of new types of incentives (such as a TIF Area) will add additional tools that the City can offer to assist in retaining and attracting businesses to the area. The City should continue to create new redevelopment agreements or renew existing agreements with businesses on a case-by-case basis, depending on the job creation and economic impact of the existing or proposed business.

Figure II.9 NRBC Empowerment Zone

CHAPTER III Land Use Planning

III.A. Summary

The Land Use Plan of the NRBC Master Plan begins by identifying the fundamental land use and site planning concerns identified in the NRBC area. The Plan then incorporates these issues into the creation of several general guiding principles for the redevelopment of the study area. These principles include: keeping the plan simple and thus flexible, solving the transportation problems by proposing an improved street network, and reusing infrastructure or phasing the redevelopment of necessary infrastructure improvements.

In addition to defining a proposed street network, this section also addresses particulars of NRBC redevelopment, such as campus environments, infrastructure, competitive campus amenities and suitable land use control provisions. Flexibility in the development process is suggested to provide for a wide variety of sizes of end users and development parcels. Additionally, existing zoning designations and code in the area are evaluated and recommendations regarding zoning modifications are made.

Evolving in conjunction with these ideas is the central strategy of creating several planned business campuses which would take advantage of much of the existing roads, railroads and other infrastructure of the area. The concept behind each of the three proposed campuses for the NRBC is developed here: (1) Produce Row Campus, which capitalizes on existing anchor food industries, proximity to downtown and the proposed new Mississippi River Bridge, (2) Adelaide Business Campus, which capitalizes on key regional transportation infrastructure, and (3) Tyler Business Campus, which capitalizes on several key city-owned parcels. The overall concept of multiple campus redevelopments was developed through the study of existing and effective future uses of land in the NRBC area.

III.B. Development/Redevelopment Issues and Concepts

1. Redevelopment Issues

The project area is a mix of industrial, commercial, and residential land uses. Industrial land use is by far the most prevalent. The City of St. Louis has identified a significant need for industrial land use redevelopment. The NRBC area represents one of the best opportunities for this redevelopment in the entire city.

In the creation of the redevelopment plan for the NRBC area, several key issues were raised and incorporated during the formation of the development concepts below. These include: access to the regional transportation network, the complexity and implications of the existing infrastructure network, and the current and future design possibilities and limitations for business campuses.

- **Poor Access --** Access to Interstate-70, the regional transportation network connection, is inadequate. Much of the existing access is substandard for use by trucks, the primary mode of transportation for the area's users. Additionally, the proposed Mississippi River Bridge will affect access to the area.

- **Rail Conflicts --** Rail corridors run parallel to the primary roadway systems in the NRBC, reducing options for street relocations and lotting configurations. Development of east/west streets as a basis for lotting leads to additional conflicts with at-grade rail crossings.

- **Existing Built Systems --** There is extensive in-place infrastructure in the form of existing streets with a relatively small block pattern and underground utilities that follow and conform to the street corridors.

- **Desirable Developments –** There is demand for creating secure campus environments achievable with physical barriers such as fencing. This often creates the need to centralize access points from the regional and sub-regional transportation corridors.

2. Redevelopment Concepts

From those primary issues outlined above involving land use concerns in the NRBC area, as well as from our own experience with redevelopment projects, several general concepts emerged as guiding principals for all subsequent land plan variations. The master plan includes these concepts as follows:

- **Keep the plan simple.** The more complex the plan is in its physical form and requirements for implementation, the less likely it is that redevelopment can be successfully achieved. The plan should strive to be simple in form and logical in progression and phasing over time. This includes making positive use of existing conditions whenever possible. For example, the proposed campuses have adopted a more north/south linear arrangement to accommodate rail corridors and patterns.

- **Maximize lotting flexibility to enhance marketing efforts.** Flexibility is a key criterion for successful implementation of business campus areas. The plan needs to provide opportunities for a variety of sizes of end users and available development parcels in order to appeal to the broadest possible range of potential users. In greenfield settings, this is usually accomplished by using street patterns to determine a variety of potential lot depths, and allowing user needs to determine lot widths and resulting lot sizes. To maximize flexibility in the NRBC setting, the goal is to achieve the longest practical street frontages unencumbered by intersections or other features that would limit the location of "side" lot lines. In a redevelopment setting with

constraints from existing street patterns and rail corridors, this is much more difficult to achieve. A number of street vacations will be required to achieve flexibility for lot configurations.

- **Solve the transportation problems.** This is the number one priority since all existing and prospective users and potential tenants appear to be driven primarily by the NRBC site's location and function as a multi-modal hub near the core of the St. Louis downtown area. In particular, extensive effort should be invested to preserve multiple access points to the NRBC.

- **Solve the access problems.** Redevelopment of the NRBC is particularly dependent upon and susceptible to changes in regional access from I-70. The Produce Row Campus Concept Plan utilizes the consolidation of access at St. Louis Avenue with the eventual development of a full-diamond configuration to replace slip ramps from Tyler Street to Branch Street as proposed by MODOT. At the north end of the corridor, the Adelaide Campus Concept Plan recommends modifications to the westbound off-ramp at Carrie Avenue. A critical proposed improvement that has come from the master planning process is the recommended realignment of North Broadway at the north and south approaches to East Grand Avenue. Realignment of North Broadway approximately one block to the east will provide additional separation between the I-70 ramp terminals and North Broadway, providing for a number of truck movements that cannot now be accommodated. A product of this master plan is the Proposed Street Network which accommodates these desires and is designed to improve vehicular access and reconnect pedestrian and bicycle traffic from the adjacent communities to the Mississippi River (Figure III.1). A major influence upon the street network within the study area is created by the proposed Mississippi River crossing. If implemented, this bridge will change circulation patterns for both access between the study area and the St. Louis CBD as well as to the region via the interstate network.

- **Re-use infrastructure; provide for phasing of needed infrastructure improvements.** Re-use existing infrastructure as much as possible. While a portion of the NRBC infrastructure is planned for reuse, some will need to be renovated or, in the case of larger-scale land assemblies, removed entirely. New infrastructure is needed in particular to solve some of the existing transportation issues related to regional access to and from I-70 and related to conflicts with existing rail lines and rail corridors. The proposed plans spread the necessary major roadway improvements over the entire life of the redevelopment, in some cases deferring improvements until later project phases or as other projects to be prioritized at a later time as funds permit.

These concepts identify the methods and land assembly opportunities that work towards the creation of "business communities" that are pleasing, secure, efficient, and desirable to modern business interests.

III.C. Planned Business Campus Strategy

The consideration for and incorporation of Planned Business Campuses in the development plan for the NRBC is a key strategy that evolved for the area in conjunction with the general redevelopment concepts described above. This strategy is specific to the redevelopment desires for the NRBC area to become a provider of expansion and relocation opportunities for existing companies and new firms. This strategy entails redeveloping the NRBC area to incorporate the above ideas and provide for features such as large parceling of land to provide end-user flexibility, Industrial Corridor Designation, gated environments, campus amenities, green buildings, and improved infrastructure.

1. Large Parcels

Based on our discussions with developers and end users, typical bulk distribution users—the businesses that the Adelaide Business Campus will be targeting in particular—are looking for parcel sizes of 10 acres and larger. The trends of developing business campuses appealing to these end users is building fewer, larger facilities, thus campuses need to be designed to allow for large parcels and flexibility in combining parcels. In addition to accommodating large-sized end-users, this type of planning also allows for a general flexibility in parcel size, providing for a variety of sizes of end-users.

2. Industrial Corridor Designation

A regulatory framework is a necessary component of creating a successful industrial Area. The entire NRBC, or select areas surrounding the industrial campuses, should be designated as an Industrial Corridor(s). This designation would allow for the following:

- Land use regulations can be designed to restrict uses that are not compatible with industry. Industrial users typically prefer not to locate adjacent to residential areas or other commercial and institutional land uses that may encroach on industrial areas.

- Certain ancillary uses are desirable for industrial users, such as fast food, convenience retail, day care, training facilities and other commercial uses that support industry (such as shipping, office space, retail, etc.). The industrial corridor plan must allow for appropriate supporting uses proximate to the industrial campuses.

- Designation of specific campuses can specify certain sub-categories of users, thus creating a sense of branding for specific campuses; for example, Produce Row Campus will be oriented toward food distribution activities, whereas Adelaide Campus could be more of a transportation-oriented campus.

- Industrial Corridors can be designed for expedited zoning approvals and permitting. Special codes can be drafted to ease the approvals process for industry, consequently reducing some current real and perceived costs of doing business in the NRBC.

- Designated Industrial Corridors can also serve as areas for special incentive programs, as is already the case with the redevelopment area and State Enterprise Zone designation. Industrial Corridors can also be defined as TIF Areas, thus introducing an important financing tool for redevelopment.

A Chicago Example

In the late 1980s, the City of Chicago created a Planned Manufacturing Area Ordinance to preserve and create areas for industry across the City. This ordinance can serve as a model for the creation of a similar ordinance in the City of St. Louis. Major characteristics of the ordinance include:

- Identification of the importance of a diverse industrial base for the diversified economy

- Identification of the need for manufacturing Areas to be of substantial size, five or more acres

- Encouragement of supplementary land use regulations in and around the Areas to enhance the character of the Area and promote the purposes of the ordinance.

A copy of relevant portions of the City of Chicago Planned Manufacturing Areas Ordinance is located in the Appendix.

3. Gated Environments

Especially in an urban environment, users demand the security and identity provided by a gated environment. A controlled entry feature enhances both the image and the perceived security of the campus. Perimeter fencing is also likely to enhance the marketability of the development. Provisions for security should be integrated and supplied in the form of a 24-hour manned entry point and/or roving patrols.

4. Campus Amenities

Campus amenities are those additional features that, if incorporated into the planned business campus strategy, increase the ability of the NRBC campus areas to compete with regional business campuses in attracting new and retaining existing businesses. These features include:

- Surface parking (depending on user profile, the ratio will vary from less than 1 to 6 per 1,000 square feet)
- Truck parking, marshalling and docking; sites should be sufficiently large to allow for truck movements
- Landscaping at the entry, site perimeter and along internal circulation
- Adequate and effective lighting
- Curbs and gutters on internal circulation streets
- Retail/commercial space, including fast-food, convenience retail and truck/auto-oriented retail, will be important to the success of the campuses
- Proximity to public transportation
- Workforce development amenities; proximity to a training center or community college facility
- Proximity to a child care center
- Energy efficient buildings
- Running/walking trails
- Adequate access to the workforce.

5. Green Buildings

Many companies have become concerned with facility energy costs, air quality, water usage and similar physical plant aspects. The incorporation of "Green Building Issues" in building renovation and new building construction plans should be considered as optional, relative to the perceived demand for such consideration by end users.

Green buildings:

- Reuse materials (existing buildings, materials from a variety of existing buildings, etc.) to recycle existing building materials
- Provide lower cost maintenance of facilities (lights, HVAC, etc.), saving money in the long term

- Provide healthier work environments
- Are an increasingly common desire of new facility occupants.

There are other benefits of green buildings, beyond those noted above. Green buildings represent a long-term commitment by a corporation and they therefore also represent:

- A long-term source for jobs
- A long-term source of tax revenues
- Likely investments in the community, a landowner interested in maintaining their facilities in a better manner
- A long-term "anchor" which will likely draw others into making the same types of commitment
- A long-term commitment from their suppliers and those that want to co-locate with the anchors.

An increasing number of corporations express a desire for such facilities. More information can be obtained from the Green Building Council (http://www.usgbc.org). This web page outlines the value and desire of these facilities as well as the Leadership in Energy and Environmental Design (LEED) Green Building Rating System.

6. Improved Infrastructure

As with any business corridor, the infrastructure system is critical to the area's success. In order for redevelopment of the NRBC area to be successful and competitive, the current basic infrastructure needs of existing and potential businesses must be addressed. These include: adequate utility capacity, including water, sewer, electric, gas and telecommunications, and improved transportation infrastructure, especially to provide adequate truck access to the campuses.

III.D. Zoning

The St. Louis Zoning Code does not include Areas that would ensure the implementation of the recommended amenities, mix of uses, or high-quality design standards assumed with a planned business campus. It is recommended that the development of such Areas be a high priority action for the City in order to facilitate successful redevelopment of the NRBC.

1. Options Under Existing Zoning (Figure III.2)

Currently, most of the study area is zoned as the "K" Unrestricted Area. This zoning is inappropriate as it allows salvage yards as well as many other "noxious" uses as conditional uses.

Other existing zoning Areas that may be more applicable to facilitate the desired redevelopment in the NRBC area were reviewed, including the I-Central Business Area, the J-Industrial Area, and the Planned Unit Development Area.

a. I - Central Business Area:

- Any use except heavy industrial uses. Excluded uses include foundries, auto salvage, storage of metal, carryout restaurants, and used car sales.
- Maximum building height: 200 ft.
- Minimum lot area: for housing units only.
- Parking: no parking requirements.

b. J - Industrial Area (found between I-70 and North Broadway):

- Same uses as the I-Central Area, except that gas stations, used car sales, auto body shops and carryout restaurants are permitted. Housing is not permitted except where housing already occupies 40% or more of frontage.
- Maximum building height: 8 stories or 100 ft; higher if side yard setbacks are increased proportionally.
- Lot area: Maximum floor-area ratio of 2.0 for nonresidential structures.
- Minimal front, side and rear yard setbacks.
- Parking: standard parking requirements – 1 space per 10 employees (this is much lower than typical standards, but businesses can provide more if desired).
- Loading: one loading space per 25,000 sq ft of gross floor area.

c. Planned Unit Development Area (PUD)

This type of special purpose Area offers a higher level of design review and requires a greater investment by the developer in site planning. The St Louis code, however, permits only residential, commercial and limited industrial uses under these PUD regulations. The limited industrial uses include wholesale businesses, dyeing and cleaning, and laundries, but not food processing or warehousing.

2. Zoning Recommendations (Figure III.3)

The J-Industrial Area appears to be the best short-term solution for the NRBC area. It already exists in the vicinity, and will prevent some of the more noxious uses from expanding.

The City should also consider, however, revising the PUD regulations to provide for a Planned Business Campus Area that includes the appropriate mix of uses, landscaping, lighting, signing and design standards desired in the NRBC redevelopment.

Proposed Standards for "Planned Business Campus Areas"

The purpose of designating an area as a Planned Business Campus Area would be to accommodate specific types of manufacturing, processing and distribution uses with low off-site impacts, accommodate related service and retail uses that support the primary business uses, and to ensure a functional, aesthetically pleasing environment.

Permitted uses within such a Area or within specific sub-Areas, if desired, could include both permitted "as of right" and conditional uses. Proposed dimensional standards could focus on minimum lot areas allowed, setbacks, floor area ratios, parking requirements, and loading requirements. See the box "Planned Business Campus Areas" on the previous page for more details on possible use categories and standards.

Planned Business Campus Areas

General use categories might include:

- Light manufacturing
- Packaging, warehousing and transshipment
- Wholesale trade
- Offices, showrooms
- Research and development facilities
- Workforce training facilities
- Related services: day care, food service, mailing services, etc.
- Restaurants, convenience retail
- Lodging (if desired)
- Transportation facilities (rail, truck) and services.

Design standards might entail:

- Architectural standards – finish materials, windows, roof treatments
- Landscaping standards – buffering, screening of parking, loading, etc.
- Street design standards, pedestrian facilities
- Treatment of outdoor storage and utilities
- Open space amenities
- Signage – wall and ground (monument) signs, directional signs, coordinated sign design, lighting of streets, parking areas, etc.

For an area to receive Planned Business Campus Area status, a plan review and approval process should be established. This process would include provisions for design review, master plan approval and the expedited review of individual site plans following master plan approval.

The Planned Manufacturing Area Ordinance created by the City of Chicago in 1980 offers an example of how to implement this type of zoning. Relevant sections of this ordinance can be found in Appendix G.

III.E. NRBC Campus Concepts

Upon study of current land uses in the NRBC area, several repeating land use themes of the area were identified. Further analysis and grouping of these themes lead to the identification of three distinct redevelopment areas, Produce Row Business Campus, Adelaide Business Campus and Tyler Business Campus. See Figure I.2. To differing degrees, each of these segregated areas capitalizes on aspects of the existing NRBC area tributes of anchor food and regional transportation industries, proximity to downtown and central location, current and proposed transportation and communication infrastructure, and City-owned land. The campus concept of the NRBC redevelopment entails that the physical redevelopment of each of these campuses coincides with the creation of a unique campus identity. This identity will then serve to propagate the total area redevelopment efforts and attract new businesses to the area and individual business campuses in particular.

The proposed size of each campus is dependent on the factors of existing NRBC land use and industry expansion demand, as well as on new business attraction potential specific to each campus's functional identity. The developable acreage in Produce Row Campus equals a total of 122 acres over three phases, with the greatest amount of land, 51 acres, developable in Phase II. Out of the three business campuses, Adelaide Campus will contain the most developable acreage at 141 acres total, and most of this land is planned for development in Phase III. Tyler Campus will be implemented in one phase, providing 21 developable acres. Below is a table summarizing the developable, undevelopable and total acreage by phased campus development.

Table III.1 Impacted and Developable Acreage by Campus and Phase			
	Developable*	**Undevelopable****	**Total**
Produce Row Campus			
Phase I	47	54	101
Phase II	51	51	102
Phase III	24	43	67
Total	**122**	**148**	**270**
Adelaide Campus			
Phase I	32	26	58
Phase II	27	39	66
Phase III	82	107	189
Total	**141**	**172**	**313**
Tyler Campus	**21**	**39**	**60**

**Developable refers to that acreage which is deemed to be useable in redevelopment plans.*
***Undevelopable refers to acreage which is either in the flood plain or anticipated to remain as railroad property or to areas where existing businesses cannot be relocated.*

The redevelopment of each campus is broken down into phases. Produce Row and Adelaide Business Campuses have three phases of development, while Tyler Business Campus will be completed in one phase. This division into phases is made to clearly identify priorities of the redevelopment process as well as to effectively plan for redevelopment funding. Redevelopment tasks were assigned to their respective phase by type of task, cost, and impact on and role in the total redevelopment process.

1. Produce Row Business Campus (Figure III.4)

This proposed campus is located around the existing Produce Market, generally from Angelrodt to Madison Streets within the NRBC area. The concept of this campus focuses on the area's anchor food industries, proximity to downtown and the proposed Mississippi River Bridge, and services it provides to regional and downtown core sectors. See Figure III.5 for the impact of the new

Mississippi River Bridge on the NRBC. The identity of this campus will evolve around the anchor food industries of the area.

Phasing

Three phases of redevelopment are planned for the Produce Row Campus.

- Phase I entails several fundamental developments. The Produce Market expansion, including the building of a new entry and expanding potential retail/restaurant space, is planned for this stage. This expansion represents the most immediate market opportunity and should, therefore, be pursued in the initial phases of the redevelopment process. Assistance to existing businesses complimentary to the new identity of Produce Row Campus will be provided. Several businesses in the blocks south of the Produce Market (North Market to Madison) provide stable employment in industries compatible with the Produce Row Business Campus. Infrastructure improvements and campus amenities should be provided in this area in addition to continued workforce development and other business development assistance. The area north of the Produce Row expansion to Angelrodt will be developed in this phase as well.

- In Phase II, the area west of Broadway to Interstate 70 will be developed. This area contains smaller lot sizes, and will be more time-consuming and expensive to assemble.

- In Phase III, the area east of the existing Produce Row to the Mississippi River will be developed. This area currently contains several large low-intensity land uses that may be expensive and time-consuming to relocate.

Parcelization

In general, parcels are expected to range in size from 1 to 10 acres.

Target End Users

The target end users of this redevelopment site will be wholesale distribution/food and related products, hotel/restaurant supply, food packaging, food processing, cold storage, beverage distribution, perishable goods (flowers, etc.), convention center/trade show displays, related plastics packaging/materials, and food/pharmaceutical/ chemical operations.

Acquisition

Some larger railroad parcels not in rail use should be acquired for Phase I projects. While railroad land acquisition is always challenging, discussions with the railroads and their representatives

indicate that a portion of the project area railroad lines may be acquired. This acquisition may occur through land exchange. Additionally, the expense and difficulty of vacating some rights-of-way should be considered to provide opportunities for assembling larger parcels. Phase II will require the acquisition of numerous small parcels, including several residential properties west of Broadway and vacating street rights-of-way. Many of these properties are under-utilized or abandoned, and many of the viable businesses in the area are very interested in expanding. It is, therefore, presumed that land acquisition deals can be made that could involve purchase, exchange, or some combination of both.

2. Adelaide Business Campus (Figure III.7)

This proposed campus is within the boundaries created by Interstate 70 to Hall Street and Carrie to Adelaide. It includes the Union Pacific site (30+ acres) which is leased to Midwest Systems. This campus will capitalize on the key regional transportation infrastructure of the area as well as key anchor users. This campus will be identified as a hub of transportation industry in the St. Louis area, but other types of businesses will be welcome in the campus as well.

Phasing

- Phase I includes the area from Interstate 70 to Bulwer. This phase is composed of redeveloping many small parcels that are currently in a variety of uses including commercial, industrial, residential and vacant. Assembly will be challenging but consolidation into large campus blocks with good arterial and highway visibility and access will result in more attractive business investment opportunities.

- Phase II includes the Union Pacific Site and the area from Bulwer to the Union Pacific Railroad. This phase is dominated by the redevelopment of a large parcel under single ownership. It represents an opportunity to bring larger sites to the marketplace. Several smaller parcels within the Phase II area are underutilized or vacant.

- Phase III covers an area stretching east from the UP rail tracks to Hall Street and two separate parcels extending to the east of Hall Street. Existing businesses in the Phase III redevelopment area could be relocated to the Phase I business campus area to allow for redevelopment of the Hall Street frontage.

Parcelization

Most parcels are expected to be 10+ acres in size, though Phase I redevelopment presents the opportunity of smaller lotting arrangements.

Target End Users

Adelaide Business Campus is expected to appeal to businesses seeking regional/bulk distribution, third-party logistics, trucking, cross-docking, rail inter-modal, bulk transloading, packaging, light manufacturing/assembly, communications operations, call centers, back office uses in a central location.

Acquisition Issues

There are large railroad land-holdings and other large concentrations of single ownership. While railroad land acquisition is always challenging, discussions with the railroads and their representatives indicate that some of the rail lines in the project area may be acquired. This acquisition may occur through land swapping or exchange agreements in Phase II. Other phases will require more acquisition of multiple parcels. Many properties are under-utilized or abandoned. Many of the viable businesses in the area are very interested in expanding; the expense and difficulty, therefore, of swapping, purchasing, or some combination thereof as a means of land acquisition should be investigated.

3. Tyler Business Campus

This is the third business campus planned for the NRBC area. It will be a campus capitalizing on a key City-owned parcel. The campus area is located immediately south of the Produce Row Campus and adjacent to the proposed Mississippi River Bridge. The identity of this campus will be less defined than those for Produce Row and Adelaide Business Campuses. Tyler Business Campus will be viewed as an area supportive of businesses and industry complementary to Produce Row as well as those businesses desiring a central location in the St. Louis area.

Phasing

There will be only one phase of development for this campus; this phase will entail the acquisition of adjacent parcels including the North Broadway frontage and some streetscaping work within the area.

Parcelization

Parcels will likely be sizes from 1 to 2 acres.

Target End Users

Those businesses seeking light manufacturing/assembly, communications operations, call centers and back office uses will be attracted by a central location to this campus.

Acquisition Issues

Many properties are currently under-utilized or abandoned.

03.10.24

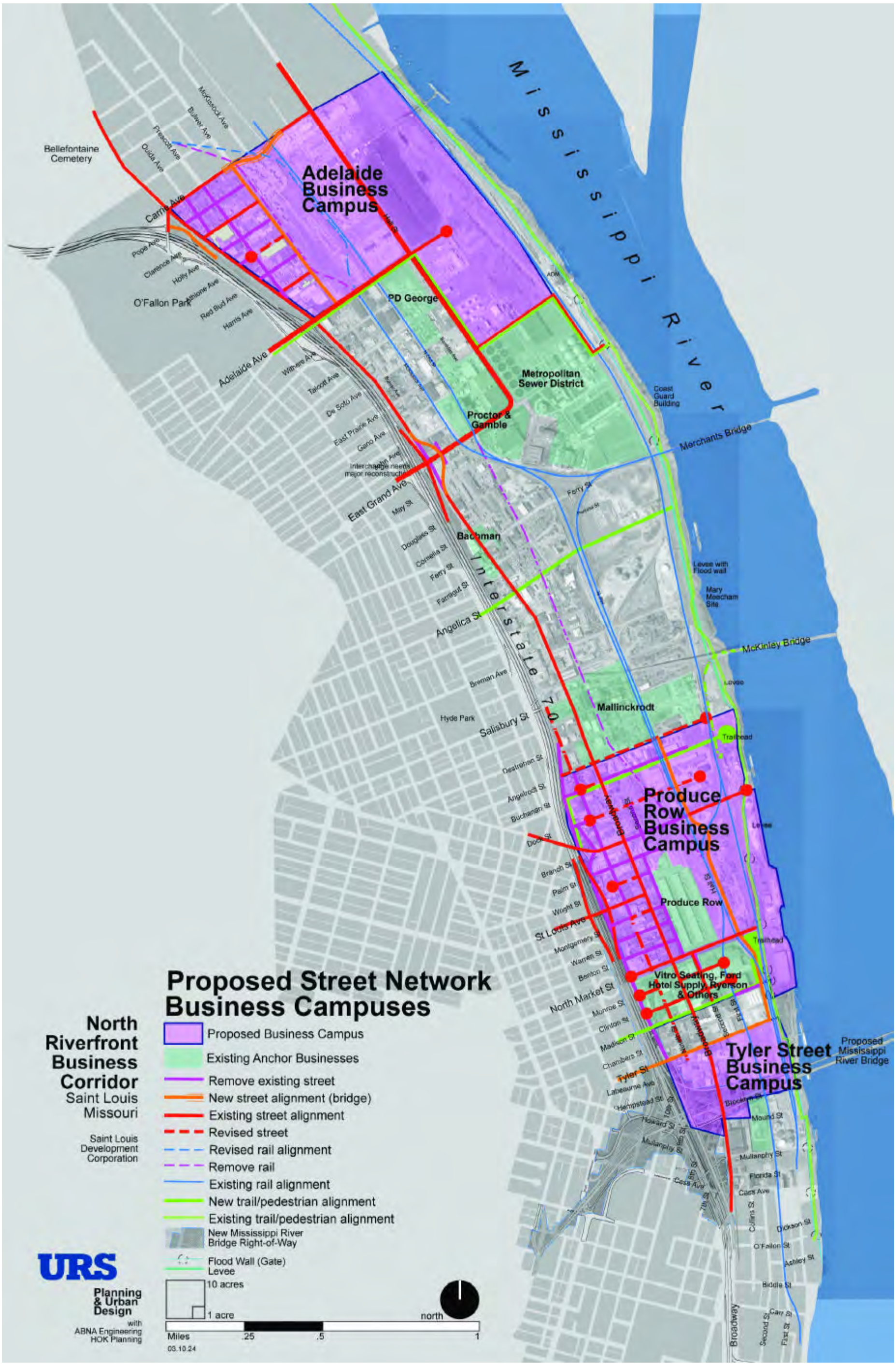


Figure III.1 NRBC Proposed Street Network and Existing Anchor Businesses

Figure III.2 NRBC Existing Zoning

Figure III.3 NRBC Proposed Zoning

Produce Row Business Campus

Phasing

- Phase 1 Redevelopment
- Phase 2 Redevelopment
- Phase 3 Redevelopment
- Assistance to Existing Anchor Businesses
- Anchor Business Buildings to Remain

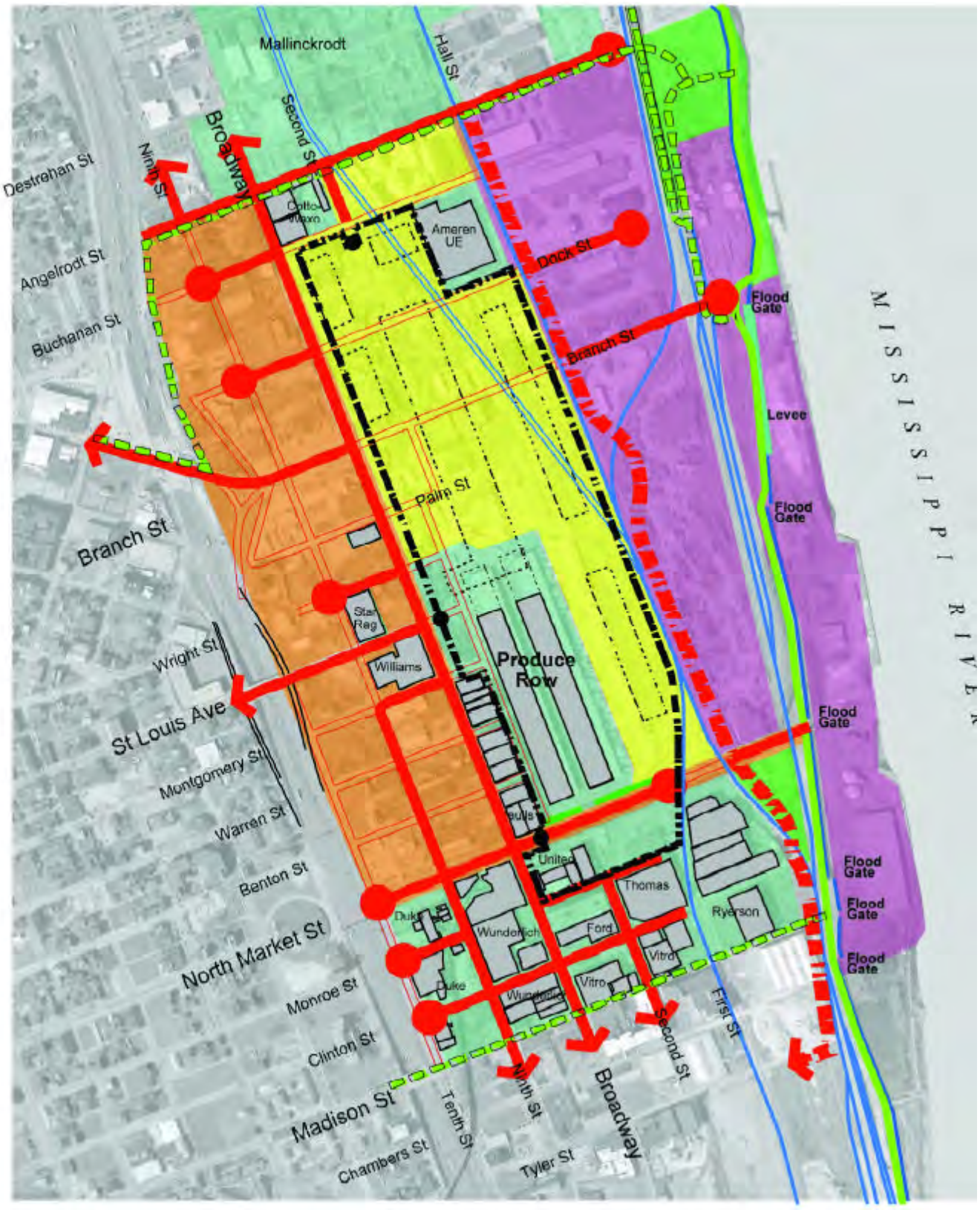
Circulation

- Existing road
- Remove road
- New road
- Existing railroad
- Remove railroad
- Existing bike/ped connection
- New bike/ped connection (trailhead)
- Secure campus boundaries (gate)

North Riverfront Business Corridor

Saint Louis, Missouri

Saint Louis Development Corporation



10 Acres

north

Feet 2000

URS Planning & Urban Design

HOK Planning
ABNA Engineers

Figure III.4 NRBC Produce Row Business Campus Area and Road Development by Phase

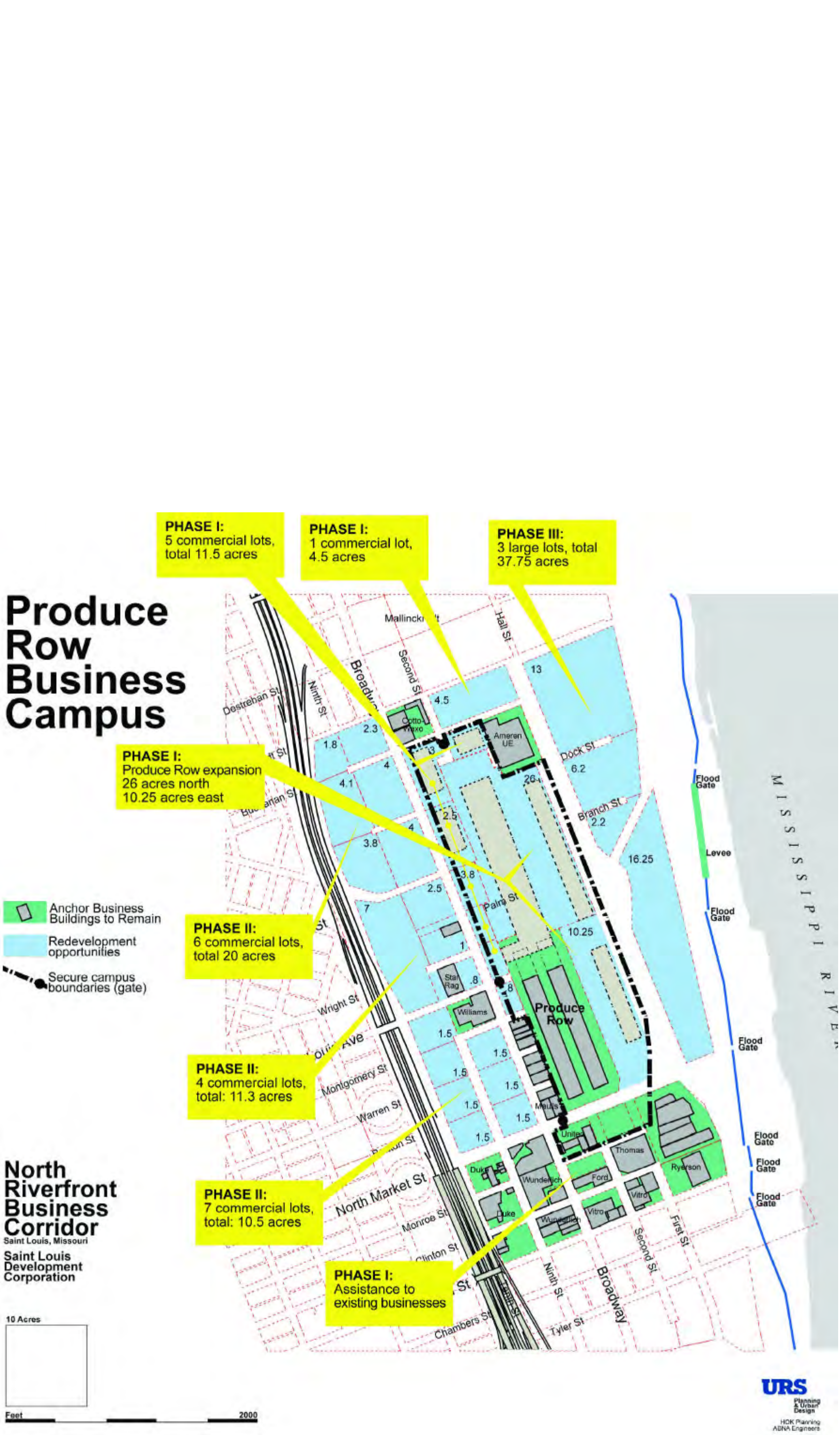


Figure III.5 NRBC Produce Row Business Campus Redevelopment Opportunities

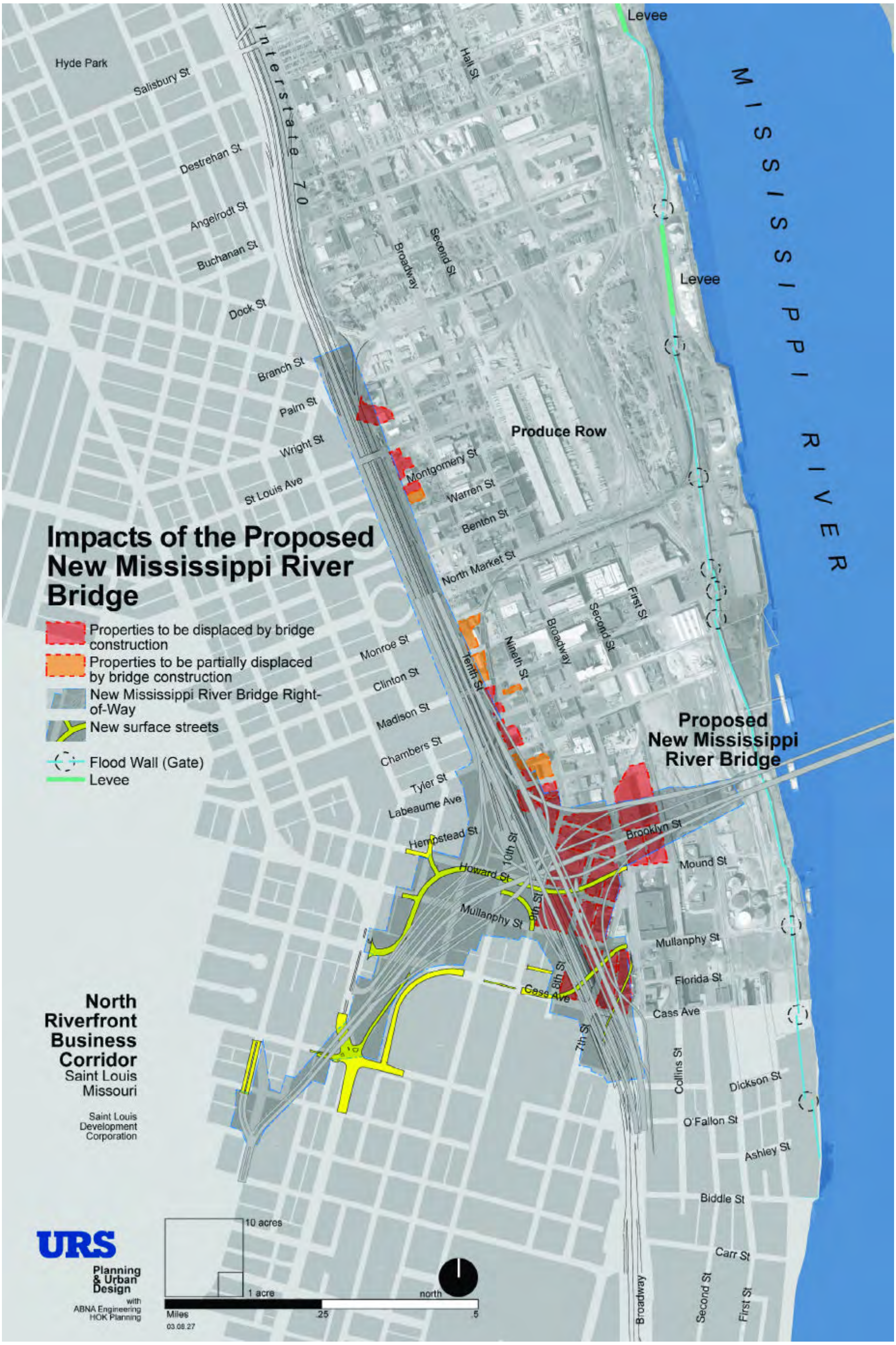


Figure III.6 New Mississippi River Bridge Impact on NRBC

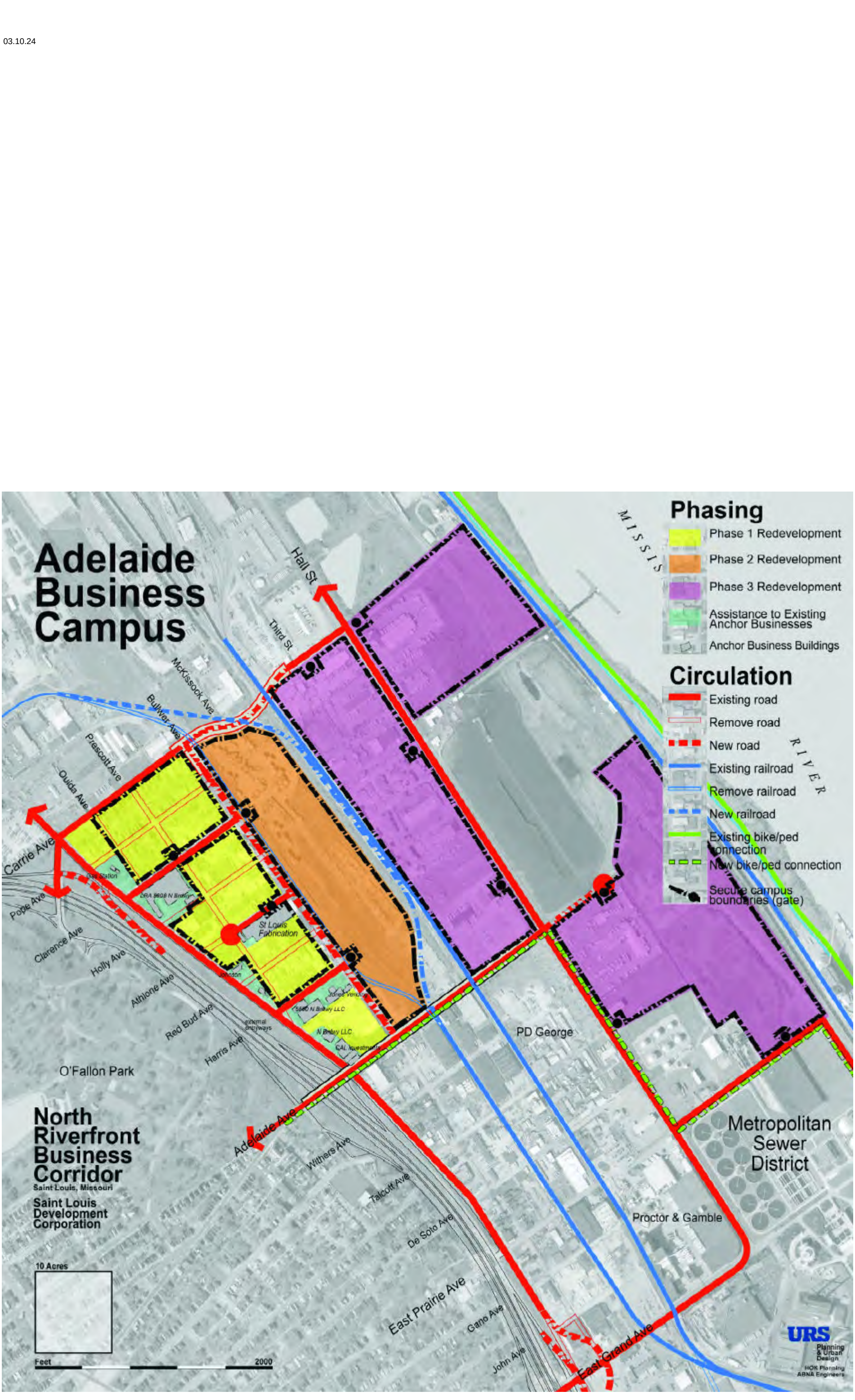


Figure III.7 NRBC Adelaide Business Campus Area and Road Development by Phase

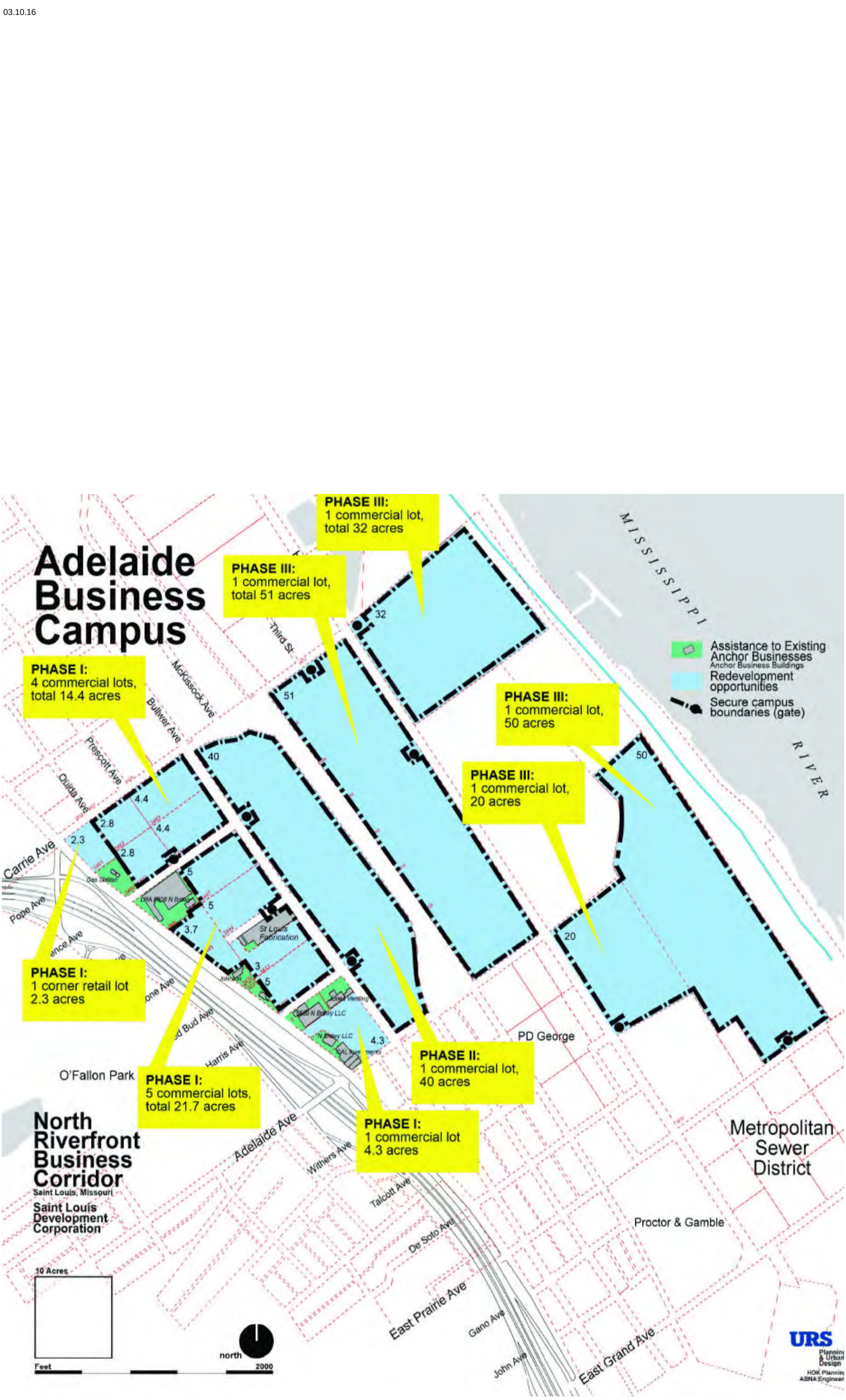


Figure III.8 NRBC Adelaide Business Campus Redevelopment Opportunities

CHAPTER IV Infrastructure

IV.A. Summary

The infrastructure plan assesses and makes recommendations for improvements to the infrastructure system within the NRBC. These improvements are necessary to sustain the current business base and accommodate the goals of the comprehensive Master Plan. Infrastructure components are broken into four main areas: transportation, drainage/wastewater, utilities, and service amenities. Transportation includes roads, rail and river transport. The drainage/wastewater section addresses the conveyance of surface runoff and sewage waste. Utilities include cable/fiber optic, electric, gas, telephone and water service. Service amenities address infrastructure elements such as public transportation, pedestrian/recreational emphasis, and snow removal routes.

Each component was researched and analyzed by maintaining the following information:

- Name of the owner or governing authority
- Scope and locations of each system
- Current concerns or problems of the system, and
- Plans of the owner (if any) to expand or improve portions of the system in the near future.

Based on the current conditions of the area and the goals of the Master Plan, recommendations for improvements include roadway construction and rehabilitation, bridge and access ramp construction, and sewer improvements. These improvements are identified as general transportation improvements or as part of either the Produce Row, Adelaide and/or Tyler Business Campuses redevelopment, and are anticipated to take from three to ten years to complete. For each of the business campuses, various phases of infrastructure improvements are specified. There is also a central infill area between the Produce Row and Adelaide business campuses for which development and infrastructure improvements have been identified. Funding sources for each improvement may entail local, regional, state and federal entities and are identified in the NRBC Pro Forma included in the Implementation Chapter of this Master Plan.

IV.B. Infrastructure Analysis

The following analysis of the infrastructure components of transportation, drainage/water, utilities, and service amenities employs information gathered from meetings with business stakeholders, city officials, and site visits, to assess the existing conditions and identify critical areas of concern within the infrastructure system of the NRBC.

CHAPTER IV Infrastructure

1. Transportation

One of the strengths of the NRBC is its access to various modes of transportation. The area can be accessed by I-70, by centrally located rail lines such as Norfolk Southern, Burlington Northern Santa Fe, and the Terminal Railroad, or via public and private terminals on the Mississippi River.

Travel throughout the area depends on the urban street system managed by the City of St. Louis. This urban system includes principal and minor arterials, collectors, and local streets. I-70, a major feeder into this street system, is managed by the State of Missouri. I-70 is classified as an urban principal arterial. For definitions and characteristics of these functional classifications, refer to Item J in the Appendix, East-West Gateway's Roadway Functional Classification Standards - "Urban Area Definitions and Standards".

Conversations with various manufacturing, wholesale trade and transportation, communication and public utilities stakeholders within the area confirm that heavy trucks are the principal means of moving goods throughout the corridor. Trucks account for a significant portion of the total average daily traffic (ADT[†]) of the vehicles in this area. While trucks are the primary source of the movement of goods, there are other transportation options, such as rail and water sources.

a.I-70

There are twelve points of access along I-70 that serve the NRBC area. The eastbound exits, north to south, are Adelaide Avenue, East Grand Avenue, Salisbury Street, St. Louis Avenue, 10th Street, and North Broadway/Cass Avenue on the southern end of the project. The six westbound I-70 exits, south to north, are Madison Avenue, Branch Street, Salisbury Street, East Grand Avenue, Adelaide Avenue, and North Broadway/Carrie Avenue on the northern end of the project. Most, but not all, of these routes offer return access to I-70.

Site visits and various discussions with surrounding businesses indicate that Branch Street is the preferred truck exit when accessing the area near the proposed Produce Row Business Campus. The Adelaide Avenue exit was identified as the preferred truck exit when accessing the proposed Adelaide Business Campus area. These preferences are also reflected in the City of St. Louis January 1999 Traffic Volumes Summary, which includes ADT data. See Figure IV.1 for example ADT data. Of the twelve I-70 exits for this area, Branch Street has one of the highest ADT's for the southern NRBC area and Adelaide Avenue has the highest ADT for the northern NRBC area. The Adelaide Avenue exit is a full diamond interchange, allowing full access to the I-70. Adelaide

[†] Average Daily Traffic volume – The total volume during a given time period (in whole days), greater than one day and less than one year, divided by the number of days in that time period of traffic counted for a given roadway segment.

Avenue also passes over several rail lines providing an important connection to Hall Street, which is a significant local truck route.

There are problems, however, with these preferred exits. I-70 was built during the 1950s and does not reflect current standards or the geometric features of today's highway design. For example, Branch Street only affords an exit from westbound I-70 and does not allow return access to the Interstate. Adelaide Avenue, the only full diamond interchange in the area, directs traffic onto a bridge structure that has serious deck deterioration. The other exits are plagued with congestion, inadequate truck mobility, and restricted turning.

Lack of effective signage or "way-finding" compounds the area's truck access problems. Truck drivers unfamiliar with the area lose time and money in driving errors due to lack of effective signage. For example, a trucker desiring to access the NRBC area using the North Broadway/Carrie Avenue exit via westbound I-70 can only turn left (north) onto North Broadway. To travel south on North Broadway, the trucker must travel north a few blocks beyond the NRBC area on North Broadway and then turn around. The other alternative is to try looping around on a side street such as Carrie Avenue. This, however, still poses a problem, as Carrie Avenue is a narrow street for turning around and it crosses two active rail lines at-grade. Since Carrie Avenue does not have any connecting cross streets except for Hall Street, which can only be accessed by crossing the aforementioned tracks, truck drivers could experience serious delays and frustration.

The Missouri Department of Transportation (MoDOT) governs the aforementioned exits and I-70. Currently, MoDOT has plans to revise selected exits to the NRBC area along I-70 in conjunction with the planned Mississippi River Bridge project. MoDOT's preliminary plans, dated August 29, 2002, include elimination of the Madison Avenue and Branch Street exits and the construction of a full diamond interchange exit at St. Louis Avenue. MoDOT and the SLDC are currently engaged in discussions about more efficient ways to access the NRBC. One of the potential solutions is to modify the westbound I-70 exit at Salisbury Street to make the exit more truck-friendly and improve turning radii on nearby streets. Another option to consider is the conversion of the North Broadway (Carrie Avenue) exit to a full diamond interchange.

b. Mississippi River Bridge

Through the combined efforts of the MoDOT and the Illinois Department of Transportation (IDOT), the St. Louis downtown area including the NRBC, will be the site of a new Mississippi River Bridge and its supporting structures. This new $1.6 billion transportation complex is set to vastly improve the flow of traffic through the area but may add some new concerns for flow within the area. Construction for this cable-stayed bridge is expected to begin in 2004, however,

funds have not yet been allocated in the 2003 Federal Transportation bill. The bridge will span approximately 2,000 ft with a breadth of eight main traffic lanes.

The complex includes several roadway projects that accompany the main span of the Mississippi River Bridge, such as the Parkway that will bring traffic from the northern end of downtown onto the new Mississippi River Bridge or to westbound I-70 (Figure IV.2). The Parkway project is discussed in more detail later in this chapter under *Recommendations for I-70*.

c. Existing Street Network

The principal and minor urban arterials that bolster the internal street system of the NRBC area are North Broadway, Hall Street, 9th Street, Adelaide Avenue, and East Grand Avenue (Figure IV.1). North Broadway is the main thoroughfare that traverses the entire length of the project area while paralleling I-70. It is designed with four traffic lanes (two in each direction) and two parking lanes. Other significant routes include Madison Avenue, North Market Street, St. Louis Avenue, Branch Street, Salisbury Avenue, Angelica Street, and East Prairie Avenue.

Both the proposed Produce Row and Adelaide Business Campuses consist of businesses that generate heavy truck use. Figure IV.3 gives an overview of the existing traffic and business land uses of the NRBC area. According to available truck data, the heaviest use occurs in and around Produce Row. 9th Street, North Broadway, and Branch Street appear to be the main routes for truck traffic within the southern portion. The aforementioned routes afford the greatest mobility for traffic, but 9th and 10th Streets are underutilized collector streets.

North Broadway, Adelaide Avenue, and Hall Street are the main roads which direct truck traffic through the northern area. Adelaide Avenue in particular provides critical east-west access over several rail lines.

The roadway infrastructure system in the NRBC area contains both roadways that are in good condition and those that are in serious need of repair. The City of St. Louis Streets Department, which is responsible for maintaining the roads, has resurfaced most of the significant routes (those with a functional classification greater than "local street") within the last five years. Most recently was the resurfacing of North Broadway in the summer of 2002.

Figure IV.4 presents roadway surface conditions for traveling vehicles on a scale of 0 (poor) to 100 (good), with 75 – 100 representing good smooth surface conditions, 50 – 75 representing fair surface conditions, and 30 – 50 representing surface roadways that require attention. During the infrastructure analysis, ABNA Engineering made various site visits to determine the general surface condition of the streets within the NRBC. Although a detailed analysis is warranted upon

the implementation of the Master Plan, this analysis considered any visual signs of surface road deterioration that would make vehicle traveling difficult, such as potholes and surface rutting.

The streets that are in the poorest condition are generally less than 700 ft in length and therefore contribute little to the overall network. Within the business campuses most of these smaller segments will be vacated to create larger lots. Please refer to Figure III.1 for proposed campus road development. There are a few street segments that range from ¼ mile to ¾ mile that should be resurfaced or reconstructed: These include the portion of 9th Street that lies north of the McKinley Bridge, Angelica Street east of I-70, and the Adelaide Avenue Bridge, which is anticipated to come under MoDOT's authority in 2004. Given the predominance of trucks using the road system in the NRBC, funding for regularly scheduled maintenance will be critical to business growth.

Other factors affecting the NRBC roadway system are the current repairs being made to the Salisbury Street Overpass and the closure of the McKinley Bridge for planned repairs. As a result, various area businesses have experienced negative impacts on schedules and, consequently, on profits.

During the investigation for this analysis, several specific roadway concerns were identified for four locations within the NRBC area. They include the East Grand/North Broadway intersection, the Adelaide Avenue Overpass, Salisbury and Mallinckrodt Streets, and Hall Street.

(1) East Grand/North Broadway Intersection (Figure IV.5)

Safety is a concern at the East Grand/North Broadway intersection. This location has little access control for the concentrated mixes of traffic flow entering and exiting. The conflicts and congestion at this interface are compounded by the interstate ramps that feed directly to this intersection. Currently, stop signs are the only intermediate provision of control. This lack of proper traffic control could lead to vehicle backups onto the interstate ramps and more seriously, crash frequencies.

The primary concern regards the intersection's inadequate turning movement for trucks. Trucks exiting from westbound I-70 must use the opposing traffic lane to effectively manage a turn in the east direction onto North Broadway. If other vehicles occupy this lane, however, the turn cannot be made. The same scenario pertains to the North Broadway traffic desiring to proceed onto the westbound I-70 ramp. In this case, the truck must invade a large portion of the intersection to make the turn.

At one time, the East Grand/North Broadway intersection was signalized. Currently, the City of St. Louis has plans underway for "smart signals" along the entire length of North

Broadway. These signals would provide more green time to heavier flows and improved signalization to emphasize through traffic movements. Signalized access points would facilitate overall coordination for traffic progression.

(2) Adelaide Avenue (Figure IV.6)

The Adelaide Avenue concern area consists of an overpass carrying traffic from the interstate to Hall Street and an underpass that connects North Broadway to several local streets and back to Hall Street. The overpass sees the most usage and as a result, has experienced progressive deck deterioration. The bridge was originally built in 1975, was under-engineered from inception, and has never undergone any major rehabilitation. It spans 1,500 ft and is 52 ft wide. Traffic data from 2001 reflect 23,100 ADT with 20% of this as truck traffic. City inspections report that the deck has spalled areas and rusted steel, as well as minor collision damage to the superstructure, the parapet walls along the deck, and major fire damage at the substructure's east abutment. Another problem is the lack of connection between the overpass and underpass. Where Adelaide Avenue touches down at Hall Street there is little opportunity for vehicles to attain full access between the overpass and underpass. For example, while traveling westbound on the Adelaide Avenue underpass, a motorist must venture a fair distance north on Hall Street and turn around in a nearby entrance in order to access the Adelaide Avenue overpass.

(3) Salisbury/Mallinckrodt Street (Figure IV.7)

Access to the soon to be rehabilitated McKinley Bridge and the presence of the Mallinckrodt Chemical Company makes this a popular interstate exit, particularly for trucks. This interchange has been reviewed at length with adjacent business owners and representatives of MoDOT. The existing exit affords access to Mallinckrodt Street, Salisbury Street, and the McKinley Bridge. Traffic deposits into the two northbound only lanes of 9th Street just west of Mallinckrodt. The tendency for motorists desiring to access North Broadway is to head east on Mallinckrodt Street. Mallinckrodt Street has two lanes, one in each direction and parking lanes on either side. Of primary concern is that vehicles exiting the highway must compete for lane position with motorists in the western northbound lane of 9th Street. This hazard will only intensify with the reopening of the McKinley Bridge in the next two to four years.

Another key concern is trucks heading east on Mallinckrodt Street attempting to travel south on North Broadway. There is a historic building, Bremen Bank and Trust Co., at the Southeast corner of Mallinckrodt Street and North Broadway that risks physical impact from large trucks that may have a difficult time making this turn. Unfortunately, given the historical

value of the building and its closeness to the edge of the pavement (less than 10 ft), improving the turning radii of this intersection does not appear to be an option.

(4) Hall Street

The limitations of Hall Street also create a general concern. Hall Street is classified as an urban principal arterial, and as such is designed to provide long trips throughout a transportation corridor. Within the Adelaide Business Campus study area, however, Hall Street's southern reach is restricted at East Grand Avenue by P&G and the St. Louis Metropolitan Sewer Area's (MSD) Bissell Plant 9.

d. Rail

The NRBC area is abundant with available rail lines such as Burlington Northern Santa Fe, Terminal Railroad Association, and Norfolk Southern. Refer to Figure IV.8 for the location of these rail lines. Some of the lines are active and some are inactive. Various businesses in the vicinity of these lines such as Beelman and Midwest Systems have expressed concerns with crossing these rail lines. The primary challenge is being caught behind or between traveling rail cars, as there are no grade separated railroad crossings in the Produce Row area. The only such crossing is the Adelaide Bridge to the north. Relocating these rail lines may be expensive and difficult.

e. River

The banks of the Mississippi River along the NRBC provide both public and private terminals that participate in waterborne transportation. For example, ADM has a private terminal located within the proposed Adelaide Business Campus and The Municipal Terminal, a public terminal managed by Beelman, is located on the southern end. Coal, petro-chemicals and grains are the principal materials transported through these facilities.

There are various on-going studies related to flood protection being conducted by the U.S. Army Corps of Engineers. There are no long-term plans being developed regarding water transportation improvements, however.

2. Drainage / Wastewater

The MSD is the governing authority for surface drainage and wastewater within the NRBC area. The majority of the lines maintained by MSD are combination storm and sewer. See Figure IV.9 and Tables H.1-H.2 for locations of these utilities. Per MSD's current policies, areas of new

construction for this area will most likely not require separated storm and sewer lines. Each future construction project, however, will be assessed on an individual basis.

There are basically two types of street cross-sections: urban and industrial/commercial. Urban sections generally include sidewalks and, therefore, curbs to separate motorists from pedestrians and to direct storm drainage to its final destination. Industrial/commercial sections are developed without curbs for the convenience of large trucks that may have difficulty navigating intersections and entrances with narrow turning radii. Of concern is the current lack of curbing on urban sections in the NRBC due to numerous street overlays. The advantage of provisions for adequate slopes and drainage structures along the industrial/commercial sections must also be noted. Fortunately, the absence of curbs has not generated street flooding in critical areas. Future developers, as well as City officials, should consider these factors in future road maintenance programs for the area.

MSD operates a wastewater treatment plant, known as Bissell Point, at the intersection of Hall Street and East Grand Avenue. It serves most of the North St. Louis area and a portion of South St. Louis. Conversations with MSD indicate no reported evidence of backups or sewer failures and that the overall conditions of their facilities within the NRBC are sufficient and in good shape. It has also been noted that the design capacity of the plant is 150 million gallons per day (MGD) while the reported permitted flow is 130 MGD. MSD staff has also indicated that it has no plans to expand or enhance the Bissell Point Plant; its future operations, therefore, will not be adversely impacted by adjacent development.

3. Utilities

The primary utilities in the area include water, gas, electric, and fiber optic cable and telephone service governed by their respective agencies, City of St. Louis Water Division, Laclede Gas Company, Ameren UE, City of St. Louis Communication Division, and Southwestern Bell Telephone. While the majority of these utilities are underground, there are some areas where telephone, electric, and cable utilities are strung overhead. To our knowledge, the majority of all of these lines are located within the street right-of-way. Tables H.1-H.2 in the Appendix list the availability of these utilities as estimated from street intersection to street intersection.

Based on interviews with government officials and business stakeholders, the various utility infrastructures are considered by all to be in good condition and adequate for use by the existing businesses. There was no indication by any utility to expand or upgrade their systems in the near future for general purposes. As seen in Tables H.1-H.2 in the Appendix, utility service is available along most roadway corridors. The existing utilities, therefore, should be able to serve any future development plans.

4. Service Amenities

The term "service amenities" refers to public services and physical appurtenances that maximize the efficiency and accessibility of the infrastructure systems. Such amenities include snow routes, public transportation, sidewalks, recreational trails and emergency management governed by their respective agencies, City of St. Louis Department of Streets, Metro – formerly Bi-State Development Agency, City of St. Louis Department of Streets, City of St. Louis/Trailnet/Confluence Greenway/Great Rivers Greenway (GRG) – formerly Metropolitan Parks and Recreation Area (MPRD), and City of St. Louis Department of Public Safety.

a. Snow Removal Routes

The City of St. Louis provides snow service for Hall Street, North Broadway, 9th, 10th, Adelaide Avenue, North Grand Avenue and Branch Street. This service is provided generally for at least the length of the roadway within the project area limits. No streets classified as "local streets" are afforded this service. Given the heavy truck traffic in and through the NRBC and the thousands of workers inhabiting the businesses, snow removal is paramount to continuing operations during inclement weather. Depending on future development, a few key snow routes may need to be added to maintain operations that must remain open regardless of the weather.

b. Public Transportation - Metro (service points)

Four bus routes managed by Metro (formerly Bi-State Development Agency) serve the NRBC. The "#40 Broadway" line traverses the entire length of the project area along North Broadway and affords access to points beyond the NRBC. It provides direct access to shopping malls and the sports, historic, and business concerns of Downtown St. Louis such as Busch Stadium and the Gateway Arch National Memorial. The three intersecting routes are the "#42 Sarah" available at East Prairie Avenue and North Broadway, "#70 Grand" at Grand Avenue and North Broadway, and "#30 Soulard", which can be reached at St. Louis Avenue.

Although light rail transit is not available to this area, two bus routes ("#42 Sarah", and "#30 Soulard") are directed toward light rail stations. Locally known as "MetroLink", this rapid transit system transports passengers to 27 transfer points in Missouri and Illinois such as Lambert-St. Louis International Airport, which is the primary airport for the region, the University of Missouri at St. Louis, which has two stops for each half of its sprawling campus, and Scott Air Force Base in O'Fallon, Illinois. On the Illinois side, the light rail system is connected to Madison and St. Clair County Transit.

The NRBC bus routes also offer access to the City's Art/University Center, which includes St. Louis University, a private Jesuit institution; Harris-Stowe State College, specializing in business

and education programs; along with several other medical and educational institutions. Although the choices for public transportation are limited, they offer access to and from working and middle class neighborhoods north and south of the project area and in neighboring St. Louis County. The closest MetroLink station to the NRBC area is at Laclede's Landing, seven blocks south of Cass Avenue. Taking one of the bus lines serving the NRBC to the nearest MetroLink station is the best way to access East St. Louis and other points in Southern Illinois. Ten of the 27 MetroLink stations serve the Illinois portion of the St. Louis Metropolitan Region.

c. Pedestrian and Recreational Amenities

While portions of the project area are "pedestrian functional" few are "pedestrian friendly." Although sidewalks are a physical appurtenance, they "service" roadway infrastructure by providing access to pedestrian users. Those sidewalks that do exist are generally found along portions of North Broadway and a few internal roads. Sidewalks and curbs are difficult to maintain as trucks often run over them to turn around on narrow side streets. Although there was a larger residential community and therefore more pedestrian population within the area in the early part of the 20th century, the area east of I-70 was developed with more consideration given to motorists after construction of the highway.

Recreational infrastructure has been added in the last five years to allow for greater access and mobility to non-automobile/truck users by providing separated facilities and designated pedestrian and bicycling lanes. In 1999 a regional organization, Trailnet, developed a master plan for a venue known as the Riverfront Trail, a portion of which is located within the NRBC area. The entire trail consists of a 12-mile paved recreational trail that runs along the Mississippi River between the Gateway Arch/Laclede's Landing area, and north to the Old Chain of Rocks Bridge. The Riverfront Trail is an integral part of the planned Confluence Greenway, a system of parks, and conservation and recreation areas with trails along 40 miles of the Illinois and Missouri-Mississippi riverfronts. The universal trail surface will allow for walking, biking, rollerblading, and skateboarding.

The portion of the Riverfront Trail located in the project area follows the floodwall and travels on top of the levee for much of its length. Current plans utilize Branch Street, 9th Street, St. Louis Avenue, Salisbury Street, Angelica Street, East Grand Avenue, Adelaide Street, and North Broadway to serve as connectors to access the trail from the various surrounding neighborhoods. These connectors will receive improvements as a result of the trail. Improvements may take the form of way-finding plans, pavement markings, and designated bicycle lanes. Branch and Angelica Streets are proposed to receive additional enhancements such as information kiosks, trash receptacles, bike racks/parking, landscaping, benches and picnic tables. The trail surface and preliminary signing and striping on ten miles of the Trail were completed in April 1999.

d. Emergency Management

The City of St. Louis Division of Public Safety (DPS) is managed by the Fire Marshall and is responsible for Emergency Management in the City of St. Louis. Current concerns include water supply access, floodgate conditions, and hazardous material storage. The City's Water Division is responsible for addressing water supply access concerns and needs. The City's water system is characterized by low pressure and high volume that the fire department compensates for with pumper trucks. At this time, the only alternative for facilitating the use of the system would be to construct a localized pumping system.

The DPS and the City's Street Department share concerns regarding the condition of the floodgates along the riverfront as well. The City of St. Louis spends about $100,000 per year maintaining these gates. This is necessary because the gates have become difficult to close over time. The solution offered by the City is replacement for each of the over 30 gates that serve the area. Twenty gates fall within the project limits, but if any of the other ten nearby gates were to fail, a significant portion of the area would be flooded.

The DPS also noted that proper hazardous material storage for certain businesses is of concern in the event of another 500-year (catastrophic) flood like that which was experienced in St. Louis in 1993.

Additional safety features of the NRBC area include lighting and fire hydrants. The availability of these features is included in Tables H.1-H.2 in the Appendix for informational purposes only.

IV.C. Recommendations

1. Transportation

a. General

The transportation segment of infrastructure is a key factor in retaining businesses and attracting new development. An effective system should consider efficient vehicular movement, movement of people, distribution of goods, and provisions for essential services. Accommodations for safe and joint use of transportation corridors by trucks, passenger cars, pedestrians, employees, cyclists, the disabled, and public transit vehicles should also be implemented within the system.

Consideration of these elements together should be used to create a sense of "user expectancy" within the corridor. User expectancy would provide a safe and consistent transportation system, such that motorists would gain confidence in traveling through the area. The overall effect will be to reduce costly delays and increase the number of consumers choosing to do business with the companies located in the corridor.

To this end, there are a number of general transportation improvements that should be made within the NRBC area. Such improvements include: additional signage or "way-finding" aids to guide new users, direct traffic to preferred routes, and emphasize major points of interest, pavement striping and island additions to control traffic movements and resurfacing of deteriorating streets. Also, although a difficult and potentially expensive task, the under-utilized rail lines should be identified and consolidated. Such rail consolidation may lend itself to reducing roadway conflicts that currently exist with multiple at-grade crossings.

More specific transportation recommendations have been identified to compliment the master plan and are enumerated below.

b. I-70

In the analysis section, it was noted that Branch Street, the preferred southern access point for the NRBC area, does not currently allow for full interstate access. MoDOT's current plans call for the elimination of this existing slip ramp and the establishment of a new diamond interchange at St. Louis Avenue.

Changes in interstate access as a result of the proposed Mississippi River Bridge must also be addressed. The current bridge plans direct motorists traveling westbound from Illinois into the center lane on I-70. This center lane does not allow motorists to access the Produce Row area via St. Louis Avenue due to a proposed concrete median barrier that will extend approximately from Cass Avenue to just south of St. Louis Avenue. This median is planned to protect motorists entering the highway from the proposed Mississippi River Bridge Parkway. The Parkway currently brings motorists from the existing business park area near 20th Street and Martin Luther King Blvd. onto the outer lanes of the interstate. There are no simple solutions to improve this access problem. Current Federal highway standards require that motorists going from interstate highway to interstate highway not be forced to merge with traffic. No changes to the current project or its subprojects would alleviate this requirement. The only solution to this access problem is to receive a waiver of the highway standards from the Federal Highway Administration

In addition, upgrades to the type and frequency of I-70 interchanges falling within the NRBC should be strongly considered. Given the extremely urban character of the area and the need to provide the best possible access to aid redevelopment, the standard minimum distance between interchanges may require a waiver from MODOT.

c. Proposed Street Network (Figure IV.10)

The proposed street network is centered on the development of three business campuses: the Produce Row Business Campus, the Adelaide Business Campus, and a smaller Tyler Street

Campus. Existing block sizes will need to be reconfigured and expanded to meet the requirements of current business campus standards. Several local streets and two collector streets within the existing NRBC area, therefore, will require complete or partial vacation.

The Produce Row Business Campus, with its food distribution focus, will be geared toward commercial users requiring smaller lots (Figure III.5). Consequently, the Produce Row plan will vacate such streets as Benton, Warren, Montgomery and a portion of 9th Street within this proposed business campus (Figure III.4). The Adelaide Business Campus, with its logistics transportation focus, will accommodate commercial and light industrial tenants requiring larger lot sizes (Figure III.8). As a result, the campus plan calls for the vacation of some of the local streets such as Pope, Holly and Red Bud between North Broadway and Bulwer Avenue (Figure III.7). It should be noted that street vacations may entail the relocation of underground utilities, or the establishment of easements so that new construction does not block utility access. This could add to development costs.

Additional enhancements, such as streetscaping, will also benefit the new street network. Details on such treatments can be found in Chapter VI, "Urban Design." General infrastructure improvements are required along with these streetscape enhancements. For this project, they are defined as curb-to-curb improvements such as roadway surfacing, cul-de-sac construction, new storm sewers and miscellaneous utilities.

d. Remedies for Local Transportation Concerns

The following recommendations for the East Grand/North Broadway intersection and the I-70/Salisbury/Mallinckrodt Street exit are critical to the master plan, although not directly associated with either of the three distinct proposed business campuses.

(1) Realignment of North Broadway at East Grand Avenue

As discussed above, the conflicts and congestion at the intersection of East Grand Avenue with North Broadway are compounded by the interstate ramps that feed directly to this intersection. An alternative would be the realignment of a segment of North Broadway beginning at approximately May Street and extending to John Street. The new alignment has the same roadway cross-section as the current alignment. See Figure IV.10 for the new alignment. This realignment will allow trucks to exit at East Grand Avenue with greater ease from the I-70 ramp as well as facilitate entry onto the I-70 ramp from East Grand Avenue thus reducing backup problems on both ramps. Also, the new alignment will create greater potential turning radii onto East Grand Avenue, to comply with modern MoDOT standards. Signalization of the new intersection at East Grand Avenue and the new North Broadway alignment will be considered as part of a future analysis.

(2) Salisbury/Mallinckrodt Streets Exit (Figure IV.7)

Because of the inadequate turning radii at the intersection of North Broadway and Mallinckrodt Street, measures should be taken to minimize the volume of trucks and maximize mobility for other motorists. The recommendation is to install a traffic barrier in the west lane of 9th Street beginning south of Destrehan that extends to the mouth of the exit ramp to allow motorists to exit into their own lane. A "no trucks" sign should be placed to prevent trucks from traveling on Mallinckrodt Street and parking should be removed on Mallinckrodt Street to provide greater mobility for other motorists. Salisbury Street would then be designated as a truck route and the turning radii at 9th Street and along North Broadway would be modified to accommodate the increase in truck usage.

2. Recommendations on Campus Specific Infrastructure

a. Produce Row Campus (Figure III.4)

The primary transportation routes serving the Produce Row Business Campus are I-70 and North Broadway on the west, Angelrodt Street on the north, the former Hall Street corridor on the east and Madison Avenue on the south. To enhance access throughout the Produce Row Business Campus, these streets will be utilized to create a transportation network that will compliment the produce distribution needs of this campus.

(1) Phase I

Construct New South Hall Street (Tyler – North Market Streets) -- In Phase I, construction of a new north-south local street will be completed. This segment will be located between Tyler Street and North Market Street to the east of the existing Terminal Railroad Association tracks as shown in Figure IV.11. This new street will follow the path of the original Hall Street right-of-way. This extension compensates for the current limitations of Hall Street, as discussed in the analysis section, by enhancing mobility for the Produce Row Business Campus. In addition, the North Market and Madison intersections with this new South Hall construction shall be blocked to reroute levee traffic along new South Hall Street to Tyler Street. This will separate traffic coming from the Beelman Municipal Terminal and reduce particulate matter which is currently contaminating produce. This may, however, create a conflict with trains delivering grain to Bulk Service's facility at Tyler Street and the floodwall.

Vacations -- Vacate Palm, Branch, Dock and Buchanan Streets between Hall Street and Broadway. Vacate 2nd Street from North Market to Branch.

(2) Phase II

Vacations -- Vacate 10th Street between Madison and Angelrodt. Vacate 9th Street from Montgomery to Angelrodt Streets and create a loop connection at Montgomery and 9th Street. Vacate 11th Street between Wright and Dock Streets. Vacate Buchanan, Dock and Wright Streets west of 9th Street and close with cul-de-sacs.

(3) Phase III

Construct New South Hall Street (North Market – Angelrodt Streets) -- Phase III entails the construction of a second segment of the original Hall Street. This segment will be located between North Market and Angelrodt Streets as shown in Figure IV.12.

Create a cul-de-sac at the eastern end of Adelaide Avenue.

b. Adelaide Campus (Figure III.7)

The primary transportation routes serving the Adelaide Business Campus are I-70 and North Broadway on the west, Carrie Avenue on the north, Hall Street on the east and Adelaide Avenue on the south. Each of these routes presents a unique challenge for motorists attempting to access the Adelaide Business Campus. The following section describes the phases of development that will enhance traffic access within the proposed Adelaide Business Campus while complementing its transportation logistics focus.

(1) Phase I

Rehabilitation of Adelaide Bridge -- The most critical need of the Adelaide Business Campus is rehabilitation of the Adelaide Bridge. The repairs, including replacing the roadway surface (epoxy overlay without full depth concrete repairs), should be made under staged construction to provide continuous use of the bridge. It has been determined through the review process‡ that other items such as full depth patching, seismic retrofits, and replacement of the ornamental parapet wall will be performed by others, such as possibly MoDOT, and will not be included as a part of this project's cost estimate. Continued maintenance should be of high priority, considering its existing importance and its major role in the Adelaide Business Campus development. This bridge's primary function is to prevent traffic conflicts with the rail lines.

Reconstruction of Bulwer Avenue from Adelaide Avenue to Carrie Avenue -- Another high priority involves rehabilitating the existing segment of Bulwer Avenue near the underpass

‡ Public funds were identified for items that could be funded regardless of implementation of the NRBC Master Plan. These sources included funding potential from MoDOT, the US Army Corps of Engineers and the City of St. Louis. Those items that would be funded by monies generated under the direct development of the NRBC Master Plan were identified and assigned private funds.

at Adelaide Avenue. This improved segment of Bulwer Avenue would also be extended approximately 2,180 ft to the north to Carrie Avenue (Figure IV.13). Certain rail lines will require removal to accomplish this task. This improvement will provide a continuous north-south route within the Adelaide Business Campus.

I-70 Ramp to North Broadway at Adelaide Avenue -- Currently the I-70 Adelaide exit ramp provides access to the Adelaide Avenue overpass. For the Phase I development, additional access from the exit ramp should be provided to North Broadway. This would entail the construction of an additional access ramp without affecting any of the surrounding properties (Figure IV.14).

Vacations – Vacate Pope, Holly and Red Bud Avenue between North Broadway and Bulwer Avenue. Vacate Athlone Avenue between North Broadway and Prescott Avenue and create cul-de-sac at western end. Vacate Ouida and Prescott Avenues between Carrie and Harris Avenues.

(2) Phase II

No recommended infrastructure improvements.

(3) Phase III

Construct new Carrie Avenue Overpass and Ramp at Bulwer Avenue -- Phase III of the Adelaide Business Campus development includes regional access improvement to Hall Street with a new 2,200-ft overpass above the Terminal Railroad Association and Norfolk Southern tracks along Carrie Avenue. This project will necessitate the reconfiguration of the Bulwer Avenue/Carrie Avenue intersection to accommodate access to and from the newly constructed Carrie Bridge via a two lane bi-directional ramp. These improvements increase internal campus access and provide another alternative to at-grade rail crossings.

I-70 Ramp to North Broadway at Carrie -- The Carrie Avenue interchange at I-70 will be revised by improving the existing northbound I-70 Carrie Avenue exit ramp. This ramp will be reconfigured and lengthen to provide intersection access at Carrie Avenue.

Improve Access between Adelaide Overpass and the Adelaide Underpass -- Earlier sections introduced the challenge that exists at the Adelaide overpass and underpass intersection at Hall Street. Considering this in addition to the significant transportation link that Adelaide overpass offers, a new alignment between the Adelaide underpass to Hall Street would prove beneficial. Figure IV.6 illustrates the location of this new alignment. The new alignment will create easy access between local streets, Hall Street, I-70, and both levels of Adelaide Avenue

Extend Adelaide Avenue East of Hall Street -- This phase of development will also be facilitated by the extension of Adelaide Avenue approximately 1,000 ft to the east from Hall Street (Figure IV.6). This extension would provide an additional access to the properties located east of Hall Street. Currently, East Prairie Avenue is the only route that provides such access

b. Tyler Campus

Proposed as a single phase, the Tyler Business Campus will be used in part to relocate businesses displaced from other areas. Existing City property will be utilized for relocated businesses from the Produce Row and Adelaide Business Campuses. Plans for these relocated properties have not yet been finalized and, therefore, no new infrastructure is being recommended at this time.

3. Drainage / Wastewater

As discussed in the analysis, there are no existing drainage problems and there is no reported evidence of backups or sewer failures in the area. However, as development for the Produce Row Business Campus and Adelaide Business Campus begins, there are basic drainage and wastewater improvements that should also be made. For example, prior to any street improvement project, such as resurfacing or new construction, simultaneous plans should be made to address the future adequacy of the associated curbs, curb and area inlets, storm pipes and sewers. Street repairs and their associated drainage and sewer repairs go hand-in-hand. The following standards are suggested in the event that such improvements are required to the drainage/wastewater system.

To properly evaluate the sewers supporting the proposed street network, each sewer line should be videotaped (televised). Depending on the size and age of the pipe, the videotape investigation will need to be accompanied by light to heavy cleaning. Such cleaning may amass significant amounts of hazardous waste in certain areas, which may require special disposal. Due to the age of the sewers in this historic part of the City, rehabilitation of the lines is expected to vary from minor repairs for leaks, to major repairs for spot failures, to complete reconstruction. Costs for this are not included in the project cost estimate.

4. Utilities and Service Amenities

a. Water

Increasing water pressure for the NRBC project area to enhance emergency service capabilities is the primary concern regarding public utilities.

b. Service Routes

The continuation of public transportation and snow routes and accessibility for emergency service providers are important factors in maintaining existing industry and attracting new businesses. In

the future, the City should also consider additional snow routes, along North Market for the benefit of Produce Row Business Campus and along Tyler Street and the new Hall Street Extension for the Municipal Terminal. Angelica Street should be added to the snow route schedule for the benefit of the areas outside the campuses, as should Carrie Avenue for the Adelaide Business Campus.

c. Floodgates

The floodgates serving the project area should be placed on a replacement schedule to insure the safety of the business community. The U.S. Army Corps of Engineers is currently assessing this need and will likely fund any necessary improvements.

d. Bus Stops

New bus stops and route connections may be needed to accommodate a new training center planned for the Produce Row Business Campus. Pedestrian mobility needs to be improved in certain areas with strategically located sidewalks, crosswalks, traffic control features, curb cuts and American Disabilities Act (ADA[§]) ramps.

e. Recreational Facilities

Although not quite as critical, the availability of recreational facilities is a beneficial feature for the development of business interests with large workforces. Additional accommodations may need to be made such as designated biking lanes and walking/jogging paths to safely and efficiently connect pedestrians and cyclists to the Riverfront Trail. Chapter VI, Urban Design, addresses proposed new trails and access points for the area.

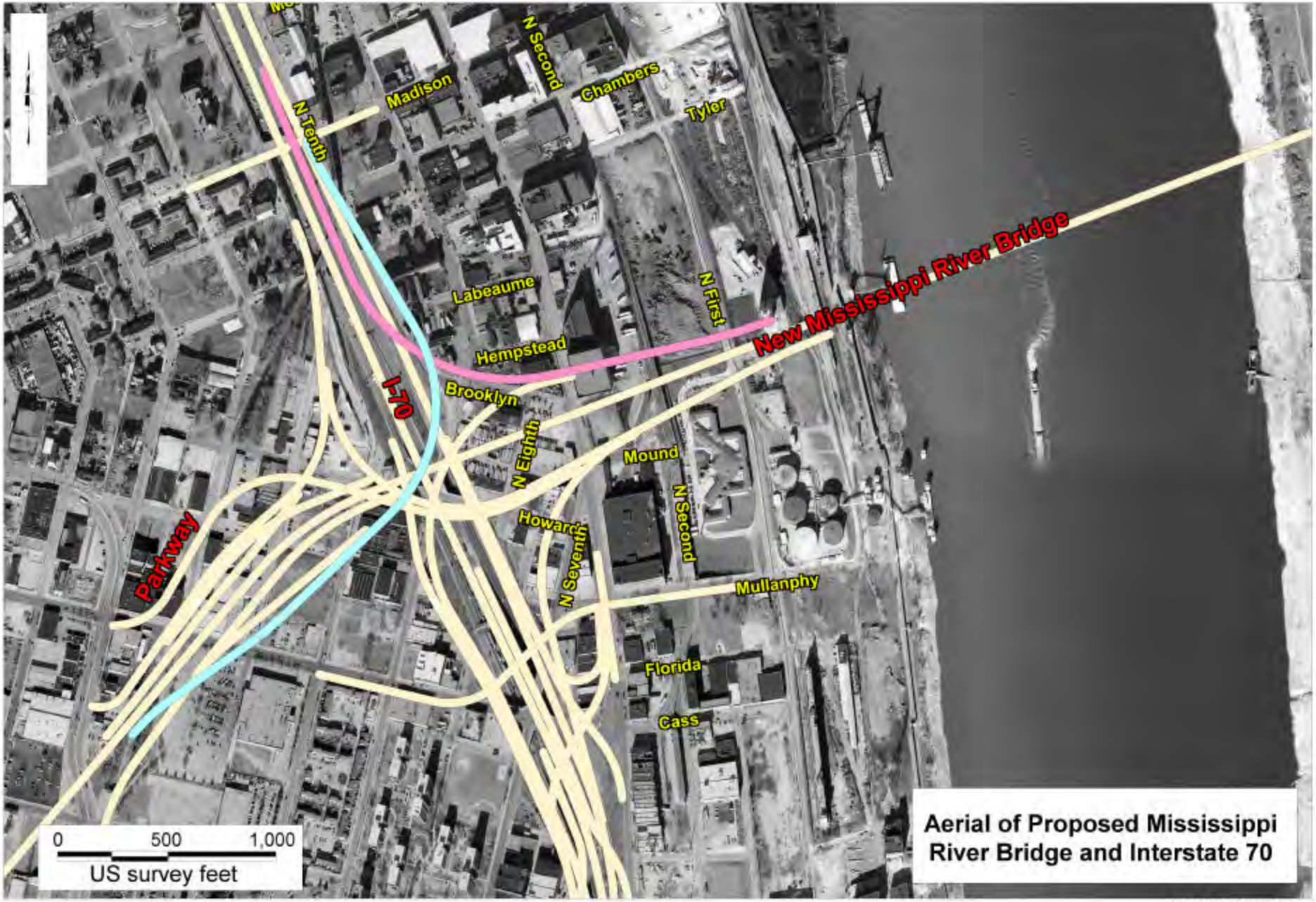
5. Financial Impacts

The 2003 estimated costs of the recommendations described herein are summarized in Table I of the Appendix.

[§] American Disability Act - This act gives civil rights protections to individuals with disabilities similar to those provided to individuals on the basis of race, color, sex, national origin, age, and religion. An individual is considered to have a "disability" if s/he has a physical or mental impairment that substantially limits one or more major life activities, has a record of such an impairment, or is regarded as having such an impairment. Under this act, individuals with such disabilities are guaranteed equal opportunity in public accommodations, employment, transportation, State and local government services, and telecommunications.

Figure IV.1

ABNA Engineering, Inc.



Aerial of Proposed Mississippi River Bridge and Interstate 70

Figure IV.2

ABNA Engineering, Inc.

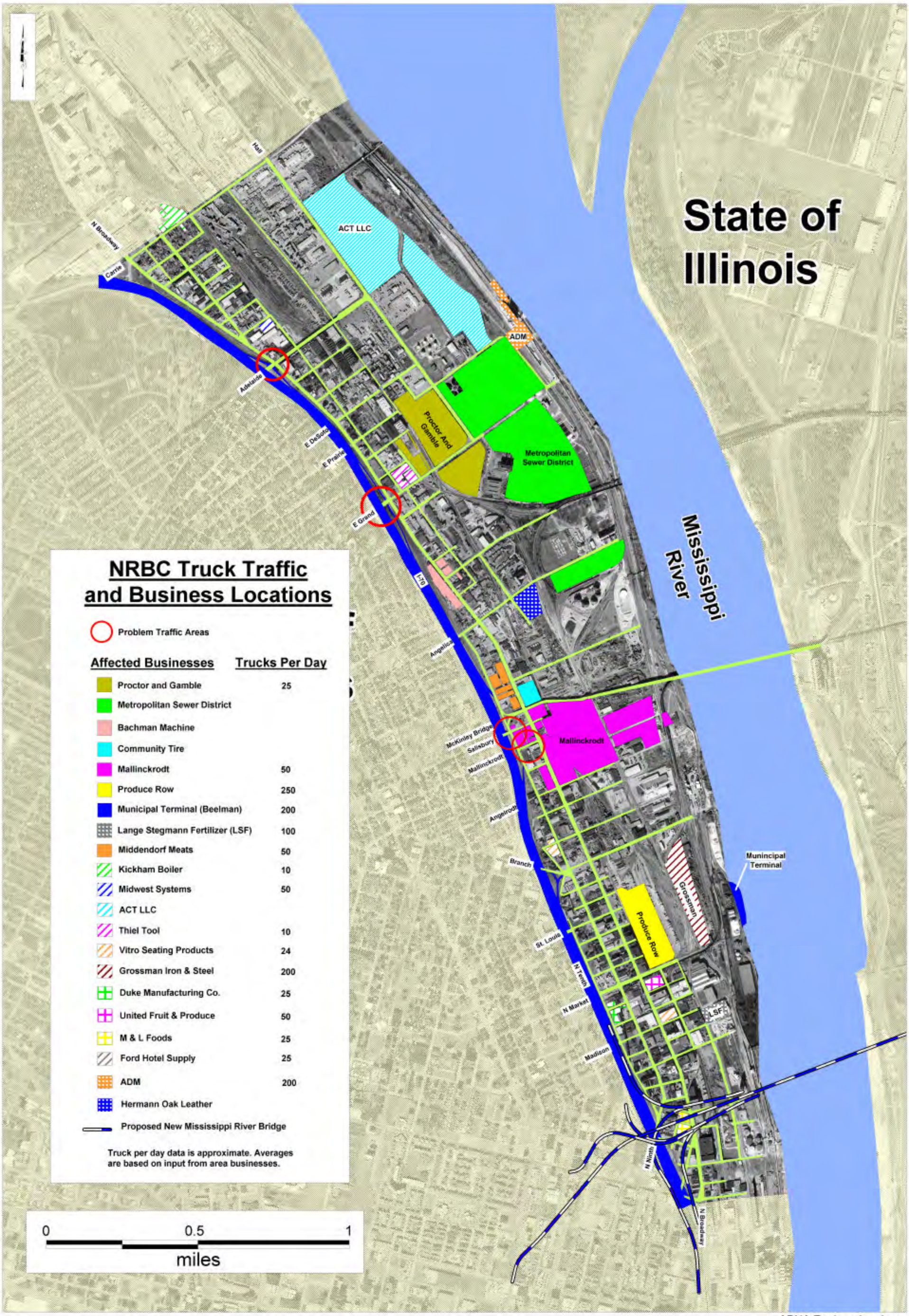


Figure IV.3

ABNA Engineering, Inc.

Figure IV.4

ABNA Engineering, Inc.

Figure IV.5

ABNA Engineering, Inc.

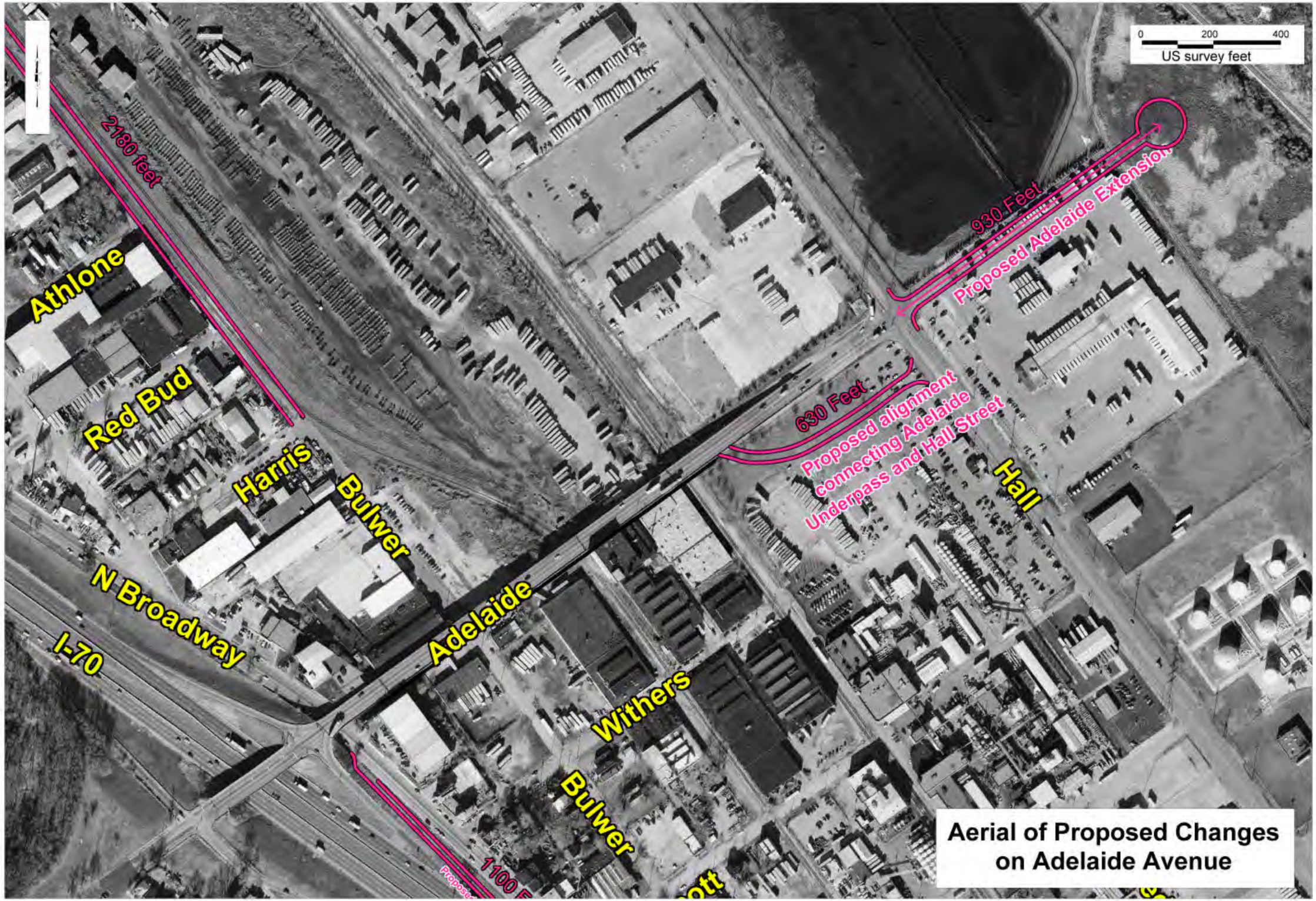
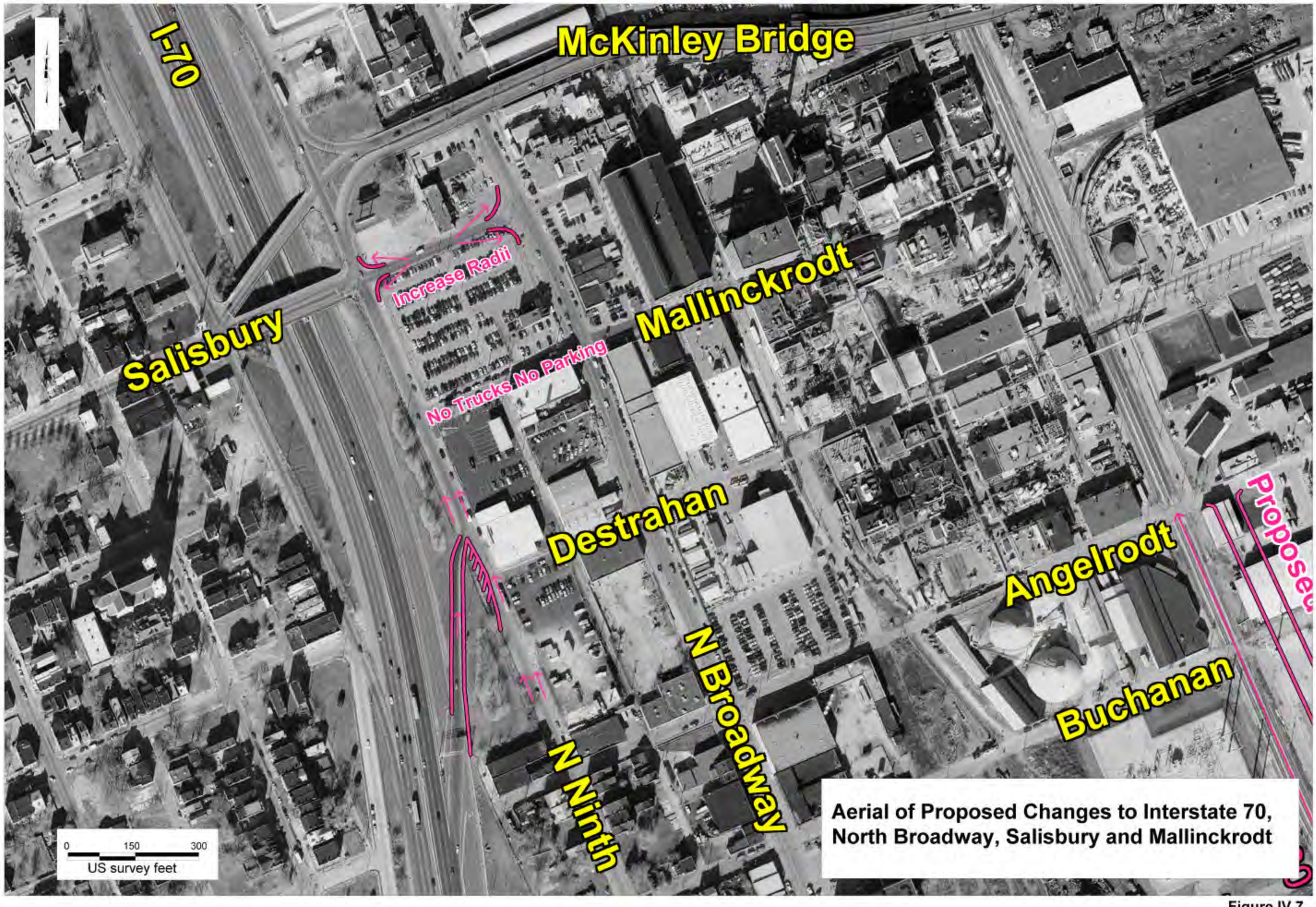

0
200
400
US survey feet
ABNA Engineering, Inc.
2180 feet
Athlone
Red Bud
Harris
Bulwer
N Broadway
I-70
Adelaide
930 Feet
Proposed Adelaide Extension
630 Feet
Proposed alignment
connecting Adelaide
Underpass and Hall Street
Hall
Withers
Bulwer
1100 F
Aerial of Proposed Changes
on Adelaide Avenue

Figure IV.6



Aerial of Proposed Changes to Interstate 70, North Broadway, Salisbury and Mallinckrodt

Figure IV.7

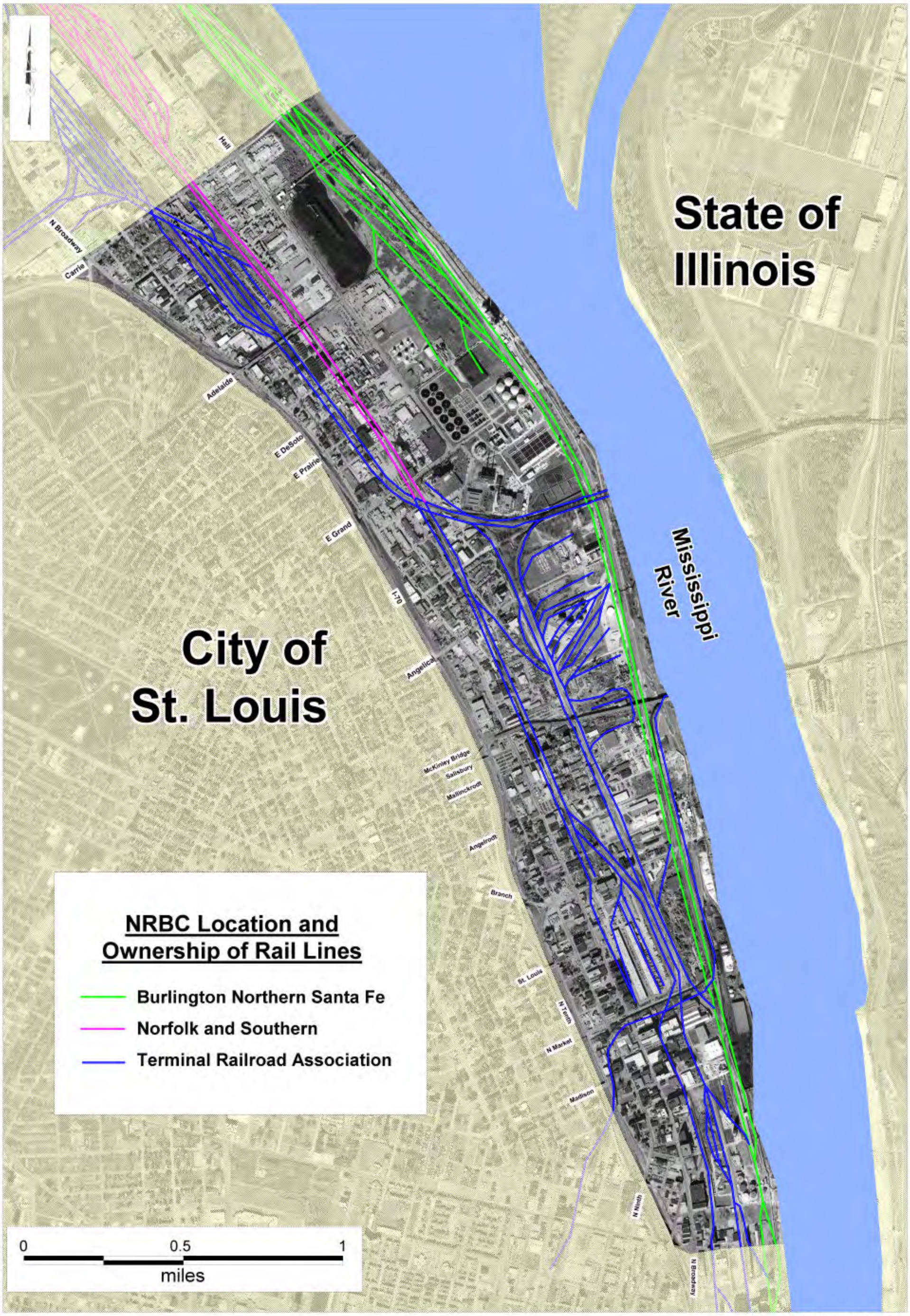


Figure IV.8

ABNA Engineering, Inc.

Figure IV.9

ABNA Engineering, Inc.

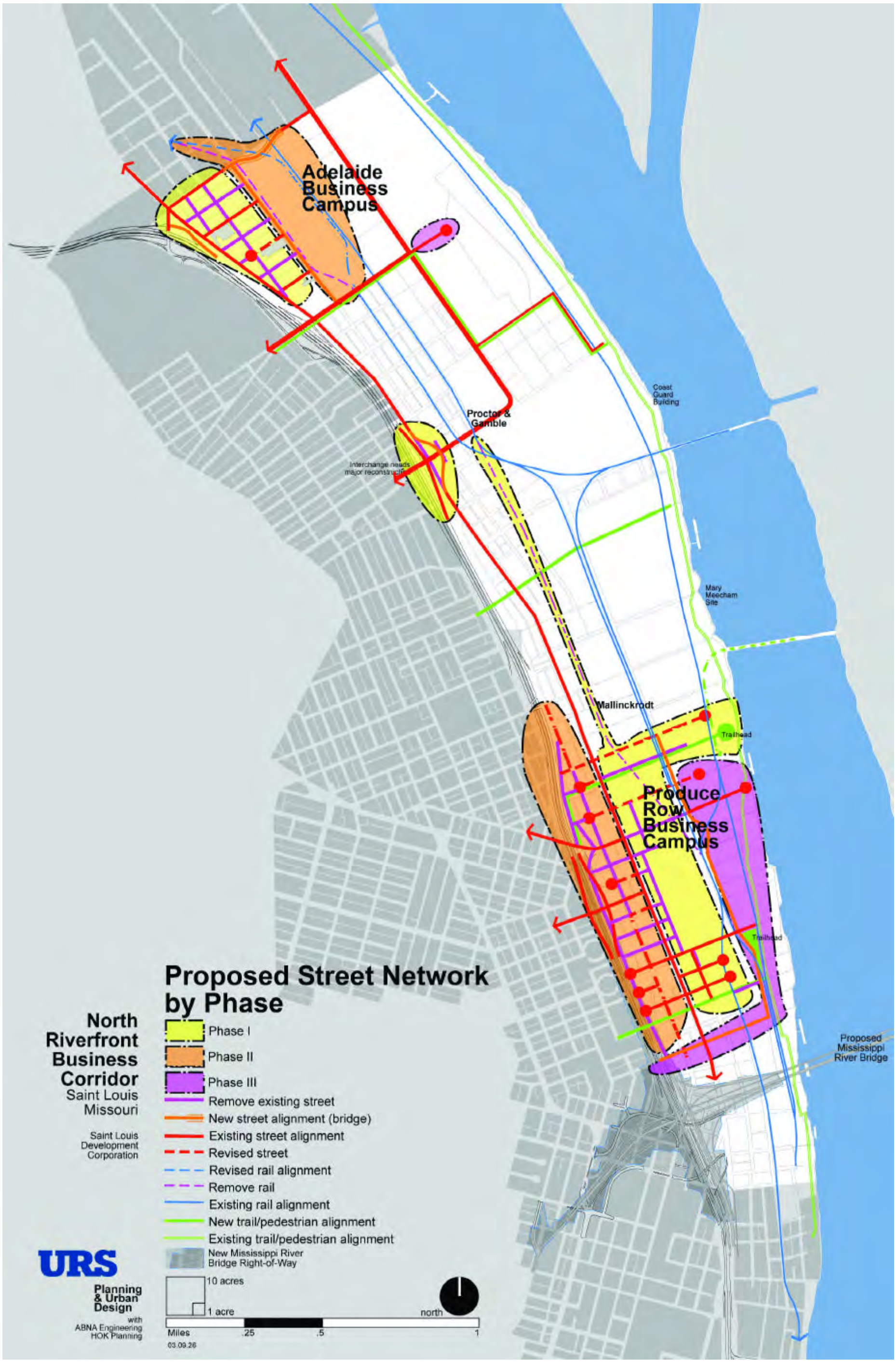
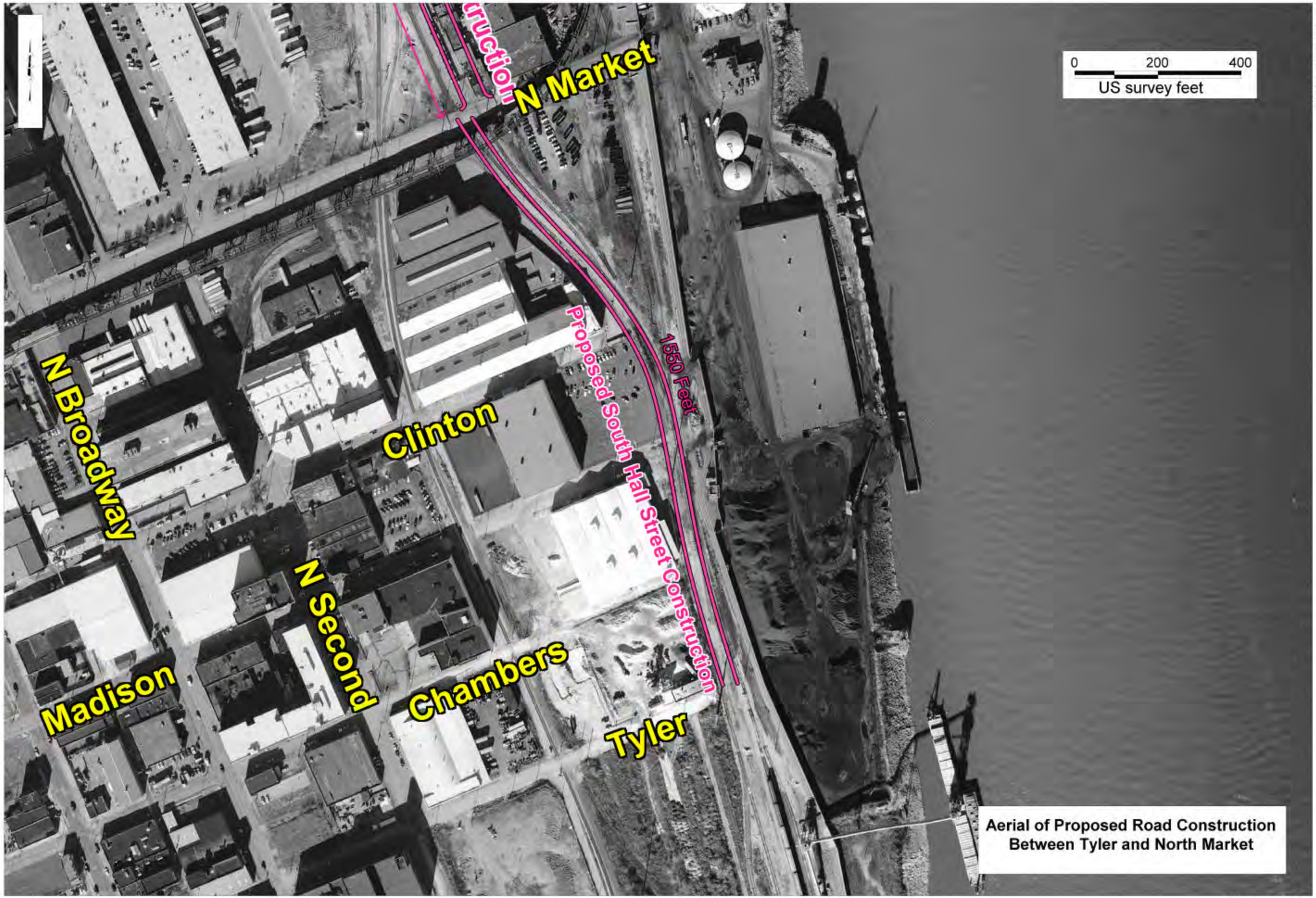


Figure IV.10 NRBC Proposed Street Network by Phase



Aerial of Proposed Road Construction
Between Tyler and North Market

Figure IV.11

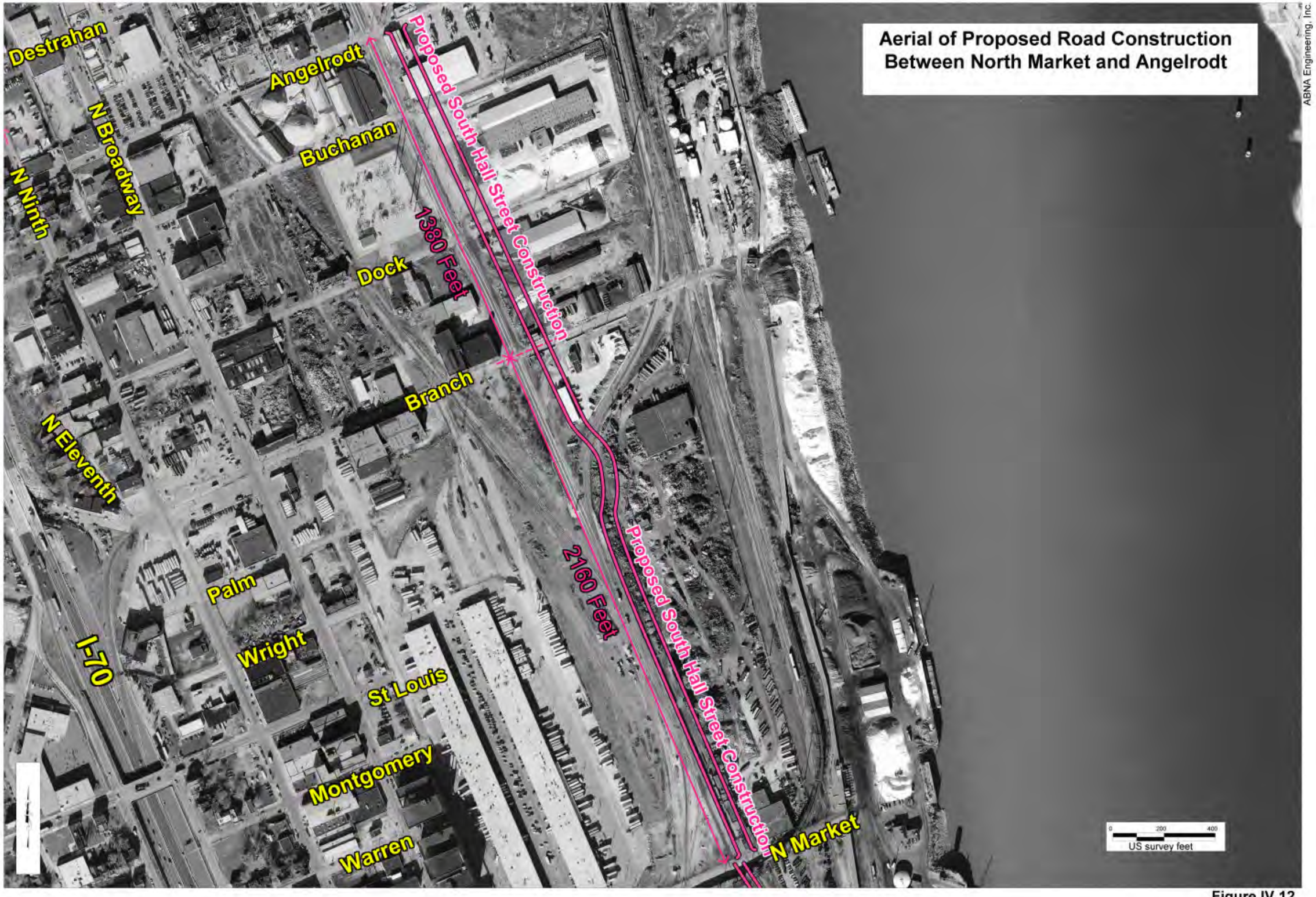

Aerial of Proposed Road Construction
Between North Market and Angelrodt
ABNA Engineering, Inc.
Destrahan
Angelrodt
N Broadway
Buchanan
N Ninth
Proposed South Hall Street Construction
1380 Feet
Dock
Branch
N Eleventh
Palm
Wright
I-70
St Louis
Montgomery
Warren
2160 Feet
Proposed South Hall Street Construction
N Market
0
200
400
US survey feet

Figure IV.12

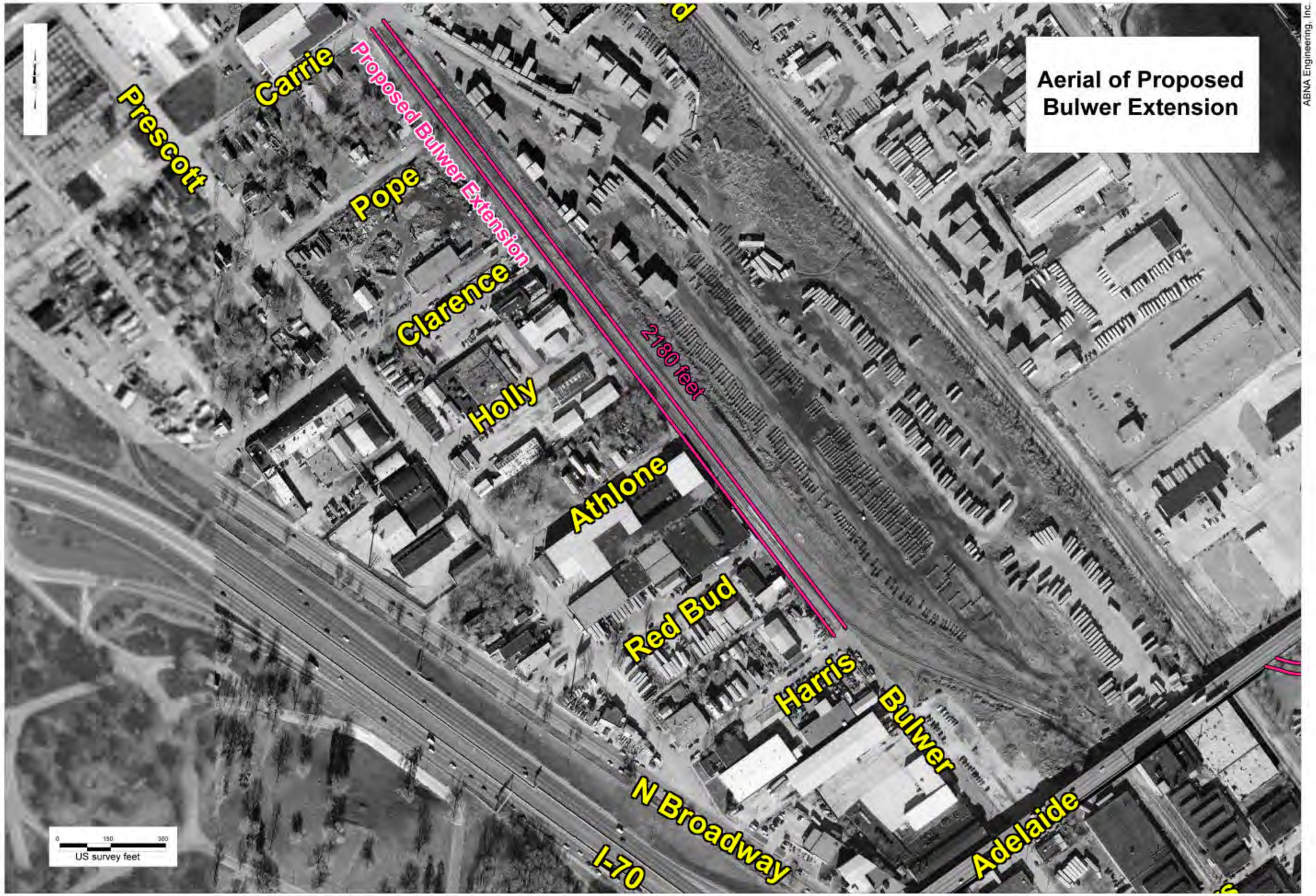

Aerial of Proposed
Bulwer Extension
ABNA Engineering, Inc.
Proposed Bulwer Extension
2180 feet
Prescott
Carrie
Pope
Clarence
Holly
Athlone
Red Bud
Harris
Bulwer
N Broadway
Adelaide
I-70
0
150
300
US survey feet

Figure IV.13

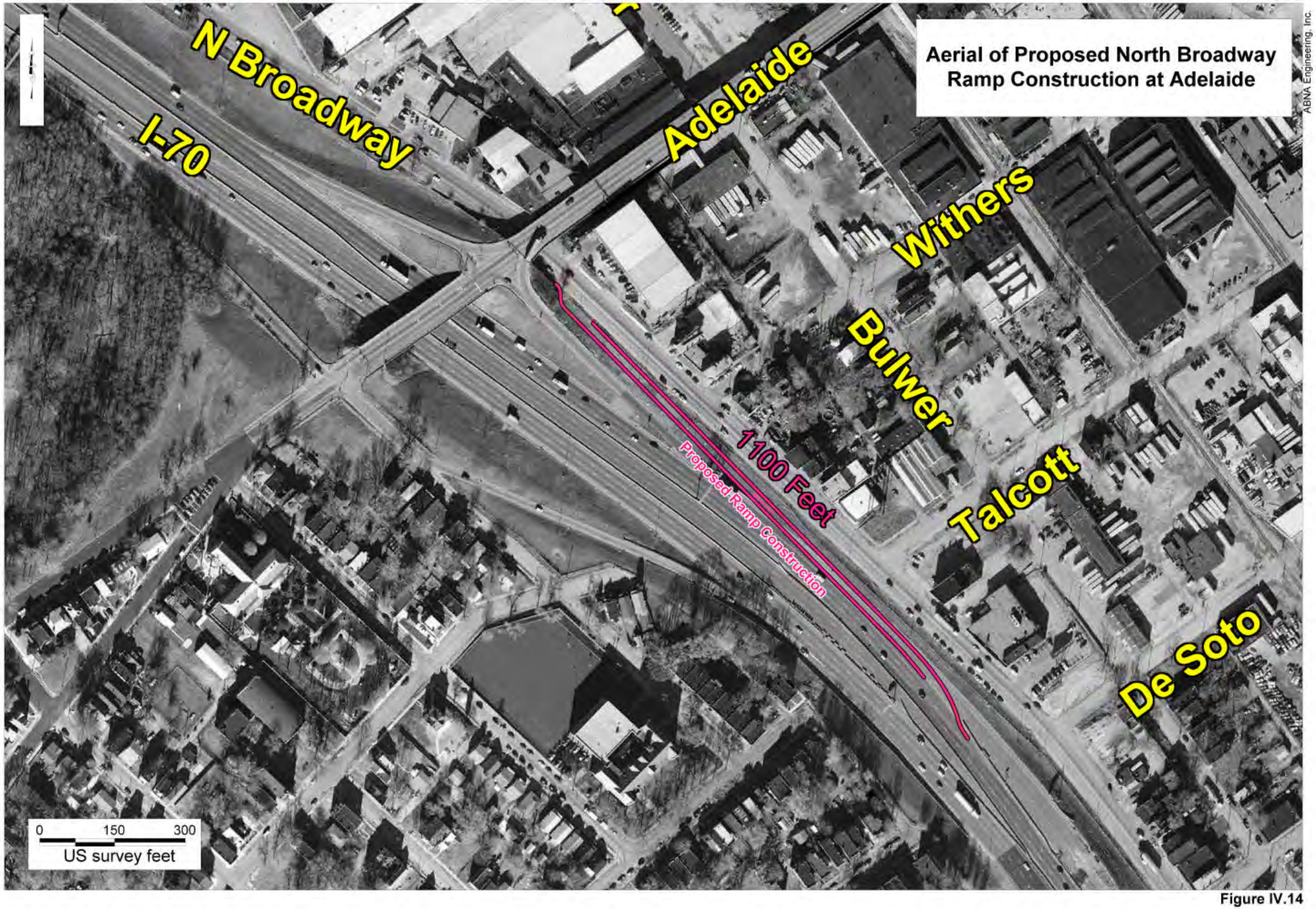

Aerial of Proposed North Broadway Ramp Construction at Adelaide
ABNA Engineering, Inc.
N Broadway
I-70
Adelaide
Withers
Bulwer
Talcott
De Soto
1100 Feet
Proposed Ramp Construction
0
150
300
US survey feet

Figure IV.14

CHAPTER V Environmental Concerns

V.A. Summary

The environmental review of the property within the NRBC included an area-wide Initial Site Characterization (ISC) and a review of current and future air quality issues, which would impact the proposed development.

The ISC included a review of general information sources for the property (aerial photographs, fire insurance maps, environmental databases) followed by a general site reconnaissance. Based upon the results of this review, an associated environmental potential risk scoring system was used to assign a score to each city block within the NRBC. The scores ranged from 1 to 3, indicating the need for future environmental investigation as, (1) "low", (2) "moderate", and (3) "high". Approximately 45% of the blocks within the NRBC were classified as "moderate" and approximately 34% were classified as "high".

The air quality regulatory review included requirements under current and future air quality standards as well as the St. Louis City Air Quality Control Ordinance. Redevelopment plans for the NRBC area fall within the structure of these regulations.

The major air quality issues are the federal EPA ozone standards (1 Hour and 8 Hour) and the particulate matter standards (PM10 and PM2.5). General regulations for the control of particulate matter or dust are also contained in the St. Louis City Air Quality Control Ordinance. The EPA certified the St. Louis area as being in attainment for the 1-Hour Ozone Standard in 2003 which will allow for new development within the NRBC under the approved air quality maintenance plan. The new 8-Hour Ozone Standard promulgated by the EPA will impact all major metropolitan areas within the United States and compliance plans are being prepared by Missouri DNR Air Pollution Control Program. Current and future issues with particulate matter from individual properties and businesses will need to be addressed as part of the NRBC redevelopment.

V.B. Area-Wide Assessment Of Environmental Concerns

1. Introduction

URS performed an area-wide Initial Site Characterization (ISC) of the NRBC Master Plan Project Area. The project area consists of approximately 1,100 acres containing multiple ownerships on 239 city blocks. The project area contains industrial/commercial businesses, residences, vacant buildings and undeveloped properties. The site has historically been used for mixed industrial/commercial/residential use and is presently underutilized. The project area has been selected by the U.S. Environmental Protection Agency (USEPA) as a Supplemental Brownfields Assessment Demonstration Pilot Project.

2. Objectives

The objective of the ISC is to identify potential environmental concerns and provide recommendations for further environmental investigations that may be necessary to further assess the potential for adverse environmental conditions or to define the extent of environmental impact in the project area.

The ISC should not be considered a Phase I Environmental Site Assessment. It can be used to gauge the relative potential for environmental concerns throughout the project area for the purpose of prioritizing further investigation and mitigation action.

3. Methodologies

The ISC consisted of a historical review and a regulatory database review. Once the historical and regulatory reviews were completed, a general site reconnaissance of the project area was performed.

The following describes the procedures performed in completing the area-wide ISC.

a. Historical Review

URS reviewed historical sources related to the subject property and immediate surrounding area. The purpose of the historical review is to identify obvious past uses and to evaluate the potential for adverse environmental conditions related to the past use of the properties.

- Aerial Photographs

  Historical aerial photographs dating back to the late 1950s were reviewed to identify obvious evidence of the site development, both on individual parcels and on a city block basis. URS reviewed aerial photographs dated 1958, 1971, 1986, and 1994.

- Fire Insurance Maps

  Historical fire insurance maps dating back to the early 1900s were reviewed. URS reviewed Sanborn fire insurance maps dated 1908, 1909, 1931, 1932, 1950, 1951, 1982, 1989, 1992, and 1995.

- Street Directories

  It was determined that the historical street directories could not be reviewed within the time and available budget. Historical street directories are available for: 1930, 1935, 1939, 1944, 1948, 1955, 1960, 1965, 1970, 1975, 1980, 1986, 1992, and 2001.

b. Regulatory Review

The purpose of the regulatory review was to assist in identifying potential adverse environmental conditions on the property. The standard sources of information listed below were reviewed.

An environmental database report generated by Environmental Data Resources, Inc. (EDR) consisting of the search of standard, reasonably ascertainable regulatory record sources pertaining to the subject property and the surrounding area (EDR Report) was obtained. The database search included the following regulatory listings:

- National Priority Listing (NPL)
- CERCLIS Superfund sites
- NFRAP Superfund sites
- ERNS sites
- RCRA Hazardous Waste Generators
- RCRA TSDF sites
- RCRA CORRACTS sites
- Underground Storage Tanks (USTs) facilities
- Leaking UST (LUST) facilities
- Landfills.

c. General Site Reconnaissance

A general site reconnaissance was performed from September 10 to 13, 2002 in an effort to identify any obvious evidence of potential adverse environmental conditions. The majority of the properties are privately owned and, therefore, site access was not available during this phase of the project. The site reconnaissance was restricted to general observations made from public right-of-ways.

Observations were made to identify the apparent present use of the individual parcels and to identify potential activities that could contribute to adverse environmental conditions including the following:

- Industrial/manufacturing activities
- Gasoline service station/auto repair activities
- Dry cleaning activities

- Salvage operations/junkyards
- Transportation facilities
- USTs
- ASTs
- Hazardous materials, hazardous waste or petroleum product storage
- PCB-containing equipment.

d. Data Analysis

Based on the results of the historical review, regulatory review and general site reconnaissance, an associated environmental potential risk scoring system (as developed by others) was used. The scoring system ranked the need for additional environmental investigation as low, moderate or high along with a corresponding recommended action as follows:

1 = "Low"	No further assessment appears to be needed
2 = "Moderate"	Phase I Environmental Site Assessment (ESA) or additional limited research and possibly Phase II ESA recommended
3 = "High"	Phase I or additional limited research, and Phase II ESA recommended

In determining the individual scores during the site reconnaissance, undeveloped parcels, prisons, grain elevators, grocery stores, nurseries, parking lots, roadways, and residential structures were assigned an individual score of (1) indicating a low need for further investigation. Properties that appeared to be developed with commercial/light industrial businesses, small vehicle maintenance repair facilities, distribution facilities, solid waste transfer point stations, sewage treatment facilities, transportation related businesses, and rail lines were assigned an individual score of (2) indicating a moderate need for further investigation. Properties that appeared to be developed with industrial operations, storage tanks, gas stations, large automotive repair facilities, electrical substations, large transportation related facilities, scrap yards, were assigned an individual score of (3) indicating a high need for further investigation. In addition, properties that appeared to be associated with the U.S. Department of Energy Formerly Utilized Sites Remedial Action Program (FUSRAP) were assigned an individual score of (3) indicating a high need for further investigation.

During the regulatory review the following were assigned an individual score of (1) indicating a low need for additional investigation: sites where closure appears to have been granted by a regulatory agency, sites where certificates of completion have been issued by a regulatory agency, and sites identified on databases where soil and water should not be impacted. The following

were issued an individual score of (2) indicating a moderate need for additional investigations: generators of hazardous waste, active CERCLIS sites, and sites that formerly had USTs, including sites that are not identified as being active UST sites. The following were issued an individual score of (3) indicating a high need for additional investigations: active CERCLIS sites with known contamination, potentially responsible parties, and litigation activities identified; active leaking UST sites; and sites with USTs.

In determining the overall score (Recommended Action Score), a numeric value was assigned to the General Site Reconnaissance Score, the Historical Review Score, and the Regulatory Review Score. The individual scores range from 1 to 3, with (1) indicating "low" need for further investigation, (2) indicating "moderate" need for further investigation, and (3) indicating "high" need for further investigation as shown above. Generally, the Recommended Action Score was determined by taking the highest of the three individual Risk Scores. However, the Recommended Action Score could be assigned a value higher than any one of the individual scores, based on evaluation of the three scores taken together. Finally, as the overall score is based on a city block basis, the highest score within the block elevated the entire block to that score. It was not assessed as to whether a block with a lower score located immediately adjacent to a block with a higher score should be elevated solely based on this proximity.

e. Limitations

- The historical review of the past property use was limited to select sources of information intended to provide the greatest potential for identifying past property use and associated environmental concerns as identified previously. In some cases, additional historical review may be necessary to further assess a potential adverse environmental condition.
- The regulatory review was limited to review of reasonably ascertainable database records. The conclusions made herein are based solely on the limited information provided in the database records noted. No additional inquiry was made to applicable regulatory agencies. For instance, the corresponding files were not reviewed nor were any interviews with regulatory officials performed. In some cases, additional review of regulatory records may be necessary to further define a potential adverse environmental condition.
- An on-site inspection of the individual parcels was not within the scope of this work. No on-site investigations were performed. The site reconnaissance was limited to observations made from public right-of-ways. A thorough inspection of the buildings and property grounds would be necessary to more completely identify potential adverse environmental conditions presently existing on the properties.

- The purpose of this evaluation is to identify need for further environmental investigation for each individual parcel. No representations are made regarding the specific nature of contaminants or the extent of impact.
- No interviews were performed with property owners, occupants, tenants or other persons knowledgeable with the site activities.
- The evaluation of potential environmental impacts originating from off-site sources was not within the scope of this work.

4. Summary of Findings

The ISC research has indicated that the NRBC project area has been utilized for mixed-use purposes over the years including commercial, industrial and residential purposes. The environmental concerns identified generally correspond with site use. Industrial properties and select commercial and light industrial properties such as gasoline service stations, auto repair shops, dry cleaners, and salvage/junkyards typically resulted in a high-risk score that requires additional investigation including the potential for ASTM #E1527-00 Phase I and II ESAs. Other miscellaneous commercial use identified generally results in a moderate-risk score that would require at least some additional research and possibly additional Phase I and II ESA investigations. Residential and undeveloped properties generally result in a low-risk score and are not believed to require any additional investigation unless they are impacted by uses on adjacent properties.

The needs for further environmental investigation throughout the project area are depicted in Figures V.1 through V.10 at the end of this chapter.

Common use clusters were typically found on a city block basis. Parcels that have a low need for further investigation make up approximately 2% of the 239 city blocks. Approximately 45% of the city blocks have a moderate need for further investigation. Approximately 34% of the city blocks have a high need for further investigation. Approximately 18% of the city blocks are classified as a combination of both moderate need and high need sites. Approximately 1% of the city blocks were classified as a combination of both low risk parcels and moderate need sites.

5. Recommendations

The area-wide ISC has identified various land uses of present conditions that may require further environmental investigation during the redevelopment of the site. Based on the findings of this initial assessment, URS offers the following recommendations.

a. High and Moderate Need Parcels

The high and moderate need parcels should be further evaluated on a parcel level basis using the ASTM #E1527-00 protocol. Based on the potential environmental conditions identified during this ISC, a determination should be made with regard to the degree of due diligence required to adequately characterize the environmental issues at the site. The degree of due diligence required for each individual parcel will vary and depend on the nature of the environmental condition and the amount of information collected as part of the ISC.

URS recommends that a Work Plan be developed that addresses the necessary steps to continue the environmental characterization of the project site. The Work Plan should include the following sequence of events and should also address the following issues:

- Identify the parcels that would require a full ASTM #E1527-00 Phase I ESA.
- Identify the parcels that would require only specific supplemental research information to adequately complete the initial assessment of individual parcels.
- Group clusters of parcels or city blocks that would require a Phase I ESA.
- Perform the additional supplemental research and Phase I ESAs.
- Perform appropriate Phase II ESA work concurrently with the Phase I ESAs such as asbestos-inspections and other miscellaneous sampling/identification of regulated materials that would require action during redevelopment of the property.
- Based on the results of the research and Phase I ESAs, design and implement appropriate subsurface investigations and site characterizations.

b. Low Need Parcels

While this ISC has not identified any obvious evidence of adverse environmental conditions on low need parcels, some environmental issues may exist that would require action during the redevelopment of the site. Miscellaneous environmental conditions are likely associated with all parcels that are normally encountered during property redevelopment projects. These might include miscellaneous PCB-containing materials (light ballasts, elevator systems), miscellaneous hazardous materials, mercury-containing equipment (fluorescent lamps, thermostat switches) and buried fill material. These potential issues could be encountered during redevelopment of almost any urban property and should be recognized during redevelopment activities.

V.C. Air Quality Issues

1. Basic Air Quality Issues Facing St. Louis

The Clean Air Act requires the EPA to set National Ambient Air Quality Standards (NAAQS) for pollutants considered harmful to public health and the environment. The EPA Office of Air Quality Planning and Standards has set NAAQS for six criteria pollutants. Ozone and particulate matter are two of the six criteria pollutants and represent a compliance issue for the St. Louis area and the NRBC.

a. **Ozone** – Regulated as a NAAQS, ozone is a gas composed of three oxygen atoms and is usually created by a chemical reaction between oxides of nitrogen and volatile organic compounds in the presence of heat and sunlight. Motor vehicle exhaust and industrial emissions, gasoline vapors, and chemical solvents are some of the major sources of oxides of nitrogen and volatile organic compounds that form ozone. Ozone is regulated under a 1- hour standard of 0.12 PPM (parts per million by volume) and an 8- hour standard of 0.08 PPM.

- **Ozone, 1-Hour Standard -** The St. Louis region has exceeded EPA's health related ambient air quality standard for ozone (0.12 parts/million) since it was established. The Clean Air Act Amendments of 1990 set 1996 as the deadline for meeting this standard. St. Louis did not achieve the standard by that deadline. During the summer of 2002, however, St. Louis did attain that standard for the first time. As a result, the state has requested the EPA to redesignate the area as attaining the standard. Due to legal action initiated by the Sierra Club, and a subsequent court decision, EPA has concurrently proposed to "bump up" the region to serious non-attainment of the ozone standard, even in the face of air quality data showing that the area meets the standard. EPA recently found the St. Louis area in attainment for the 1-hour ozone standard. This action ended a long process that St. Louis has been involved with to attain the standard. The issue will then be to continue meeting the standard. This is the subject of on-going planning and discussions.

- **Ozone, 8-Hour Standard -** It appears that the St. Louis region does not meet a new 8-hour ozone standard (0.08 parts/million). Planning for measures needed to attain the standard will begin shortly. This planning process will be very important to St. Louis since it will determine, among other things, the level of additional control that will be needed in St. Louis and the adjacent counties, as well as the level of control that will be put in place in out-state areas. This will affect St. Louis' ability to attract new industry.

b. **Particulate Matter** – Regulated by EPA under NAAQS, particulate matter consists of the solid particles and liquid droplets found in the air. Particulate matter is regulated under two

standards, particles with diameters of 10 micrometers or less (PM10) and particles with diameters of 2.5 micrometers of less (PM2.5).

- **PM10 Air Quality Standard** – the PM10 standard is currently set at 50 ug/m3 (micrograms per cubic meter of air) as the annual arithmetic mean and 150 ub/m3 24-hour average. The St. Louis area is presently listed as meeting this standard, but there have been indications, from localized monitors, that the standard is not being met in certain areas of the City including the NRBC. There is further discussion on this issue below.

- **PM2.5 Air Quality Standard** – The PM2.5 standard was first proposed in 1996 but will not become effective until 2004 at the earliest. Particulate matter less than 2.5 Microns in diameter is referred to as "fine" particulate and is being regulated because health studies indicate that significant respiratory and cardiovascular-related problems are associated with exposure to fine particulates. The PM2.5 standard is set at 15 ug/m3 annual arithmetic mean and 65 ug/m3 24-hour average. Based upon current air monitoring data, the St. Louis region is not likely to meet this standard. Compliance planning by the MDNR Air Pollution Control Program to address the PM2.5 standard will begin in 2003.

2. Air Quality Issues in the NRBC Area

The NRBC area is affected by the regional scale air quality issues (ozone and PM2.5), in a manner similar to the rest of St. Louis and the region. The issue here will be the degree to which new air quality plans promote Brownfield development relative to greenfield development.

The PM10 monitor located at 3 North Market Street in the NRBC area has recorded exceedances of the PM10 air quality standard. Continued high-level measurement of particulate matter at this monitoring location will trigger the need for additional reductions from area businesses.

The PM 2.5 monitor at Blair Street in the Hyde Park neighborhood immediately west of the NRBC area has recorded levels of particulates close to the limits of PM2.5 air quality standard. These levels appear to be the highest monitored across the state. The residential community is now becoming aware of these high particulate levels and is sensitive to their potential relationship to neighborhood health concerns. This interest will be reflected by the community's request for public hearings during permit reviews for any new facility or permit modifications. It should be noted, however, that elevated levels of PM2.5 might not necessarily be related to activities in the adjacent area. PM2.5 is a pollutant that is in part transported over long distances.

3. Air Monitoring Stations

The air monitoring station located at 3 North Market Street does not provide a true indication of the level of PM10 to which the public might be exposed. Sample results are potentially affected by elevated structures in the area such as fences and rail trestles. Also, there are areas surrounding the monitor that do not have any ground cover allowing dust to be blown to the monitor intake. The monitoring station was placed at this location by the City of St. Louis Air Pollution Control (SLAPC) to address a dust issue from adjacent businesses and the data does not reflect a large area of public exposure. The dust, however, is a nuisance to other businesses within the immediate area resulting in product quality concerns and additional operating expenses for these businesses as well as detracting from the area's image.

Based on the high particulate readings, the SLAPC is working with local businesses to control dust emissions from their operations.

To the extent that there is fugitive dust issue in the area around North Market Street, it may not be necessary to place monitoring stations in the area. There are other means that are available to identify the source of dust, such as visual observations of local emissions, passive monitoring using "sticky papers" and portable temporary high volume samplers.

Data from other PM10 monitoring stations; just outside the boundaries of the NRBC area do not appear to show exceedances of the PM10 standard. These sites have been accepted as part of the state air-monitoring network, so it may be assumed that they are properly sited; the existence of publicly available detailed analysis of these sites or of the 3 North Market Street site is not known, though.

The siting of any monitoring station that is in question can be assessed relative to the EPA's air monitoring siting guidelines. The EPA has specific guidance on monitor location. This monitor could be evaluated relative to that guidance. If an evaluation of this type suggests that the monitor could be sited more appropriately, the process to move the monitor can be initiated. The City could also evaluate its particulate monitoring network in light of new particulate standards and to see that on-going monitoring is cost-effective. Other particulate monitors in this part of the City provide a better representation of the public exposure to particulate levels. It is possible that the MDNR or the EPA could object to discontinuing monitoring at the 3 North market Street site; however, a reasoned evaluation of the City's entire network and the goals that the network should address should be sufficient to gain approval of a redeployment of particulate monitoring resources. This would not be easy and it is not a sure thing, but it is not impossible.

4. Air Issues Unique to the NRBC Area

The potential exceedances of the PM10 standard within the NRBC area appear to be unique to the area. There are no other issues known to be unique to the area.

5. Air Issues as They Relate to Redevelopment

The City has in place an air pollution control ordinance that should allow for addressing, proactively, potential air quality issues associated with any new development in the NRBC area or elsewhere in the City. Use of this existing capacity should be sufficient to address most air quality issues without the need for land use controls.

Specifically, St. Louis City Ordinance 65645 provides the City with tools to address local dust issues including:

> "SECTION THIRTEEN: Air Pollution Nuisance Prohibited.
>
> The emission or escape into the ambient (outside) air within the City from any source or sources whatsoever of smoke, ashes, dust, soot, cinders, dirt, grime, acids, fumes, gases, vapors, odors, or any other substances or elements in such amounts as are detrimental to, or endanger the health, comfort, safety, welfare, property, or the normal conduct of business, or cause severe annoyance or discomfort to, or is offensive and objectionable to a significant number of citizens as determined by the Commissioner, shall constitute a public nuisance, and it is considered unlawful for any person to cause, permit, or maintain any such public nuisance."
>
> And
>
> "SECTION SEVENTEEN: Preventing Particulate Matter from Becoming Airborne at Any Industrial and Commercial Facility.
>
> A. No person shall cause or permit the handling, transporting, or storage of any material in exterior or interior locations, in manner, which allows or may allow reasonably preventable amounts of particulate matter to be emitted to the ambient air. Any direct or fugitive emission of visually detectable particulates to the ambient air from any interior or exterior operations at any industrial or commercial facility, may be considered unreasonable and a violation of this Ordinance if our investigation determines that the emission was preventable.
>
> B. No person shall cause or permit a building or its appurtenance, or a road, driveway, or an open area to be constructed, used, repaired or demolished, without applying all such reasonable measures as may be required to prevent particulate matter from becoming airborne.

Except for areas whereon motor vehicles are routinely driven, parked or stored, all such reasonable measures shall included, but not be limited to, the application of dust free surfaces; application of effective dust suppressant materials; application of water; planting and maintaining vegetative ground cover, or any other procedure designed for an effective in reducing the airborne particulate matter.

From roadways, driveways, and any area upon which motor vehicles are routinely driven, parked or stored, these measures shall be limited to either:

1. Having the surface paved with concrete, bituminous, or other hard surface which can be swept or flushed clean and free of loose material that can become airborne or,
2. Having the surface treated with a solution containing at least 40 percent emulsifiable asphalt and water, or an equally efficient dust suppressant and repeating such treatment as required to maintain reasonable dust control."

6. Air Quality Recommendations

a. Dust (large particulate – PM10) is primarily a local business issue. Reducing the dust level would improve street side aesthetics, reduce employees' complaints and resolve quality concerns of companies handling consumer products. Therefore:

- Greater emphasis must be placed on controlling the use of dust producing surfaces, such as gravel drives and parking lots
- All areas having vehicles drive, park or stored on them should be paved
- All areas that do not have vehicles or consistent pedestrian traffic should be grassed and/or landscaped.

b. The residential community has tied some of there health concerns to high levels of small particulate – PM2.5. Community activists are now more likely to be involved in public hearings for air permits for new construction or expansions. Any increase in truck traffic will be a concern as diesel particulate is one of the air pollutants being monitored. Therefore:

- Each Business Campus should consider a diesel exhaust reduction program for on-site vehicles. Significant reductions in diesel exhaust emissions containing PM2.5 particulate matter can be achieved by (1) creating and implementing an anti-idling program, (2) keeping engines tuned and maintained, and (3) purchasing new technology low emission vehicles as current vehicles are retired.

V.D. Environmental Framework

An area-wide environmental framework should be developed. This framework would be negotiated between the City and MoDNR (preferably with URS as a facilitator) so that specific site remediation criteria for the project area can be identified through the Voluntary Cleanup Program (VCP). This framework would also create a forum in which air quality concerns and how they relate to the area could be discussed and addressed. Developing such a framework will increase the comfort level of all developers and provide all parties with consistent criteria for industrial redevelopment.

V.E. Conclusions – Environmental Concerns

URS performed an area-wide Initial Site Characterization (ISC) of the property in the NRBC project area as well as evaluated the air quality issues associated with the proposed development. The results of this work has been instrumental in identifying redevelopment options, phasing, and order of magnitude costs for the business campuses. The work has also reinforced the team perspective that environmental issues, both at the site and area-wide level, have a direct impact on the potential for success of these redevelopments.

A summary of the environmental recommendations are as follows:

1. Initial Site Characterization Property Recommendations

a. High and Moderate Need Parcels

- Further evaluation using ASTM #E1527-00 protocol
- Group clusters of parcels or city blocks that would require a Phase I Environmental Site Assessment (ESA)
- Perform additional site research and Phase I ESAs
- Implement appropriate subsurface investigation and site characterization

b. Low Need Parcels

- Review environmental conditions during site clearing and redevelopment

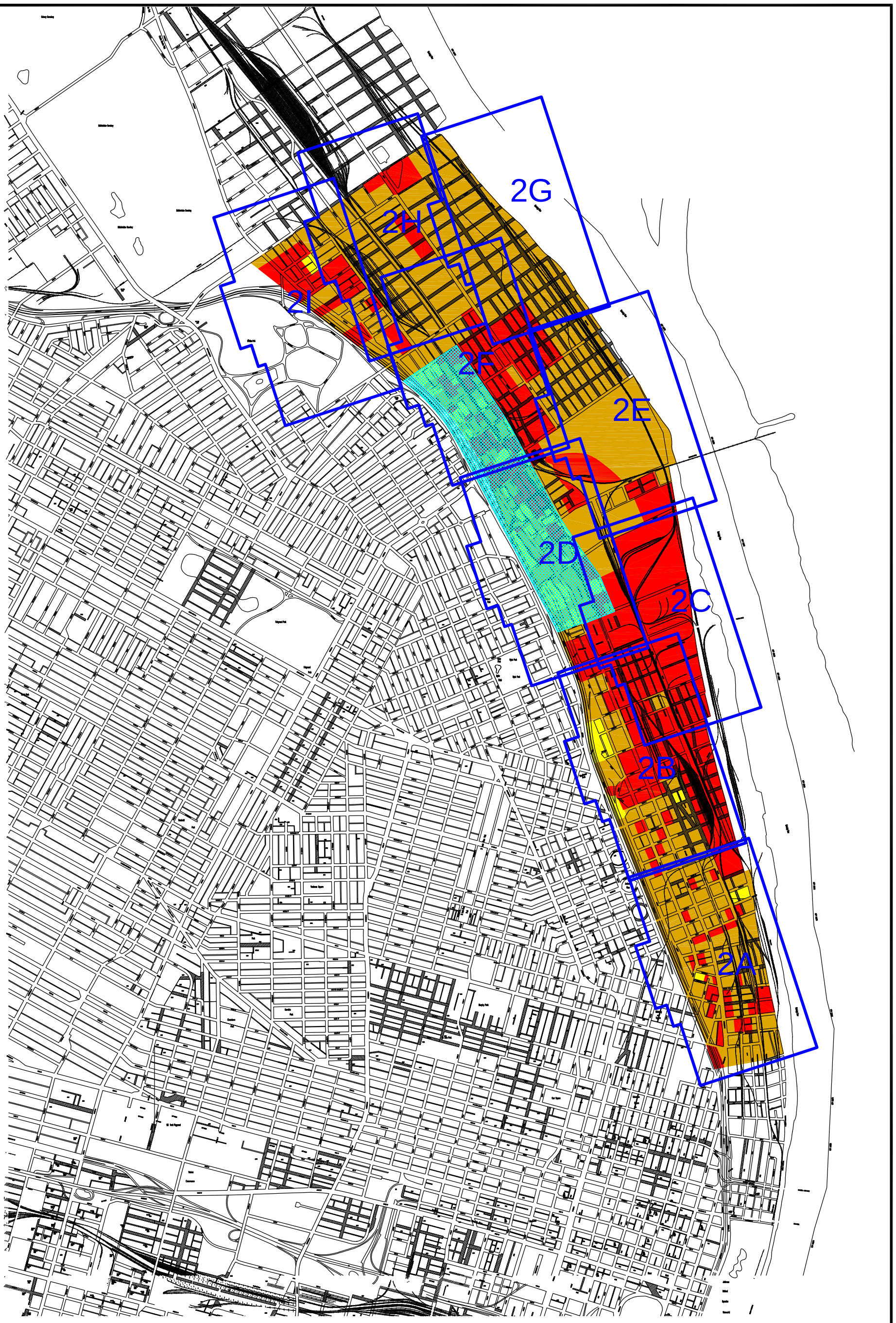
2. Air Quality Recommendations

- Greater emphasis must be placed on controlling the use of dust producing surfaces, such as gravel drives and parking lots
- All areas having vehicles drive, park or stored on them should be paved

- All areas that do not have vehicles or consistent pedestrian traffic should be grassed and/or landscaped.
- Each Business Campus should consider a diesel exhaust reduction program for on-site vehicles. Significant reductions in diesel exhaust emissions containing PM2.5 particulate matter can be achieved by (1) creating and implementing an anti-idling program, (2) keeping engines tuned and maintained, and (3) purchasing new technology low emission vehicles as current vehicles are retired.

3. Environmental Framework Recommendation

- An area-wide environmental framework should be developed. This framework would be negotiated between the City and MoDNR (preferably with URS as a facilitator) so that specific site remediation criteria for the project area can be identified through the Voluntary Cleanup Program (VCP). This framework would also create a forum in which air quality concerns as they relate to the area could be discussed and addressed.



LEGEND

- LOW NEED FOR FURTHER INVESTIGATION
- MEDIUM NEED FOR FURTHER INVESTIGATION
- HIGH NEED FOR FURTHER INVESTIGATION
- AREA COVERED BY PREVIOUS STUDY
- VACATED STREET
- 2A KEY MAP (FIGURES 2A–2I)

Ø 1000

SCALE FEET

N

ST. LOUIS RIVERFRONT
BUSINESS CORRIDOR NORTH
COMPREHENSIVE MASTERPLAN PROJECT

PROJECT NO.
21561097.00000

URS

DRN. BY:djd 12/13/02
DSGN. BY:gj
CHKD. BY:

NRBC Site MAp

FIG. NO.
V–1

Mississippi River

Burlington Railroad

CHAMBERS ST

MADISON ST

S 1ST ST

N 2ND ST

S 2ND ST

MONROE ST

CLINTON ST

S BROADWAY

N BROADWAY ST

MOUND ST

MULLANPHY ST

FLORIDA ST

CASS AV

Terminal Railroad

N 2ND ST

N MARKET ST

TYLER ST

LABEAUME ST

HEMPSTEAD ST

BROOKLYN ST

HOWARD ST

N 9TH ST

N 10TH ST

N 11TH ST

11TH ST

MONROE ST

N MARKET ST

TYLER ST

HOWARD ST

N 11TH ST

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NOT NAMED

INTERSTATE 70

INTERSTATE 70

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LEGEND

- LOW NEED FOR FURTHER INVESTIGATION
- MEDIUM NEED FOR FURTHER INVESTIGATION
- HIGH NEED FOR FURTHER INVESTIGATION
- VACATED STREET

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SCALE FEET

ST. LOUIS RIVERFRONT BUSINESS CORRIDOR NORTH COMPREHENSIVE MASTERPLAN PROJECT	PROJECT NO. 21561097.00000
URS	
DRN. BY:djd 12/13/02 DSGN. BY:gj CHKD. BY:	Case Avenue North to North Market Street
	FIG. NO. V-2

HALL ST
N 20TH ST
N 19TH ST
N 18TH ST
N 17TH ST
N 16TH ST
N 15TH ST
N 11TH ST
N 9TH ST
N BROADWAY
N 2ND ST
INTERSTATE 70
MALLINCKRODT ST
DESTREHAN ST
ANGELROOT ST
BUCHANAN ST
DOCK ST
BRANCH ST
PALM ST
WRIGHT ST
ST LOUIS AV
MONTGOMERY ST
WARREN ST
BENTON ST
CAHOKIA CREEK
Terminal Railroad
NOT NAMED
KLEIN ST
Stodtman Park
2536
2540
2542
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2543
2545
2546
2547
2144
2143
1208
1213
1206
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667E
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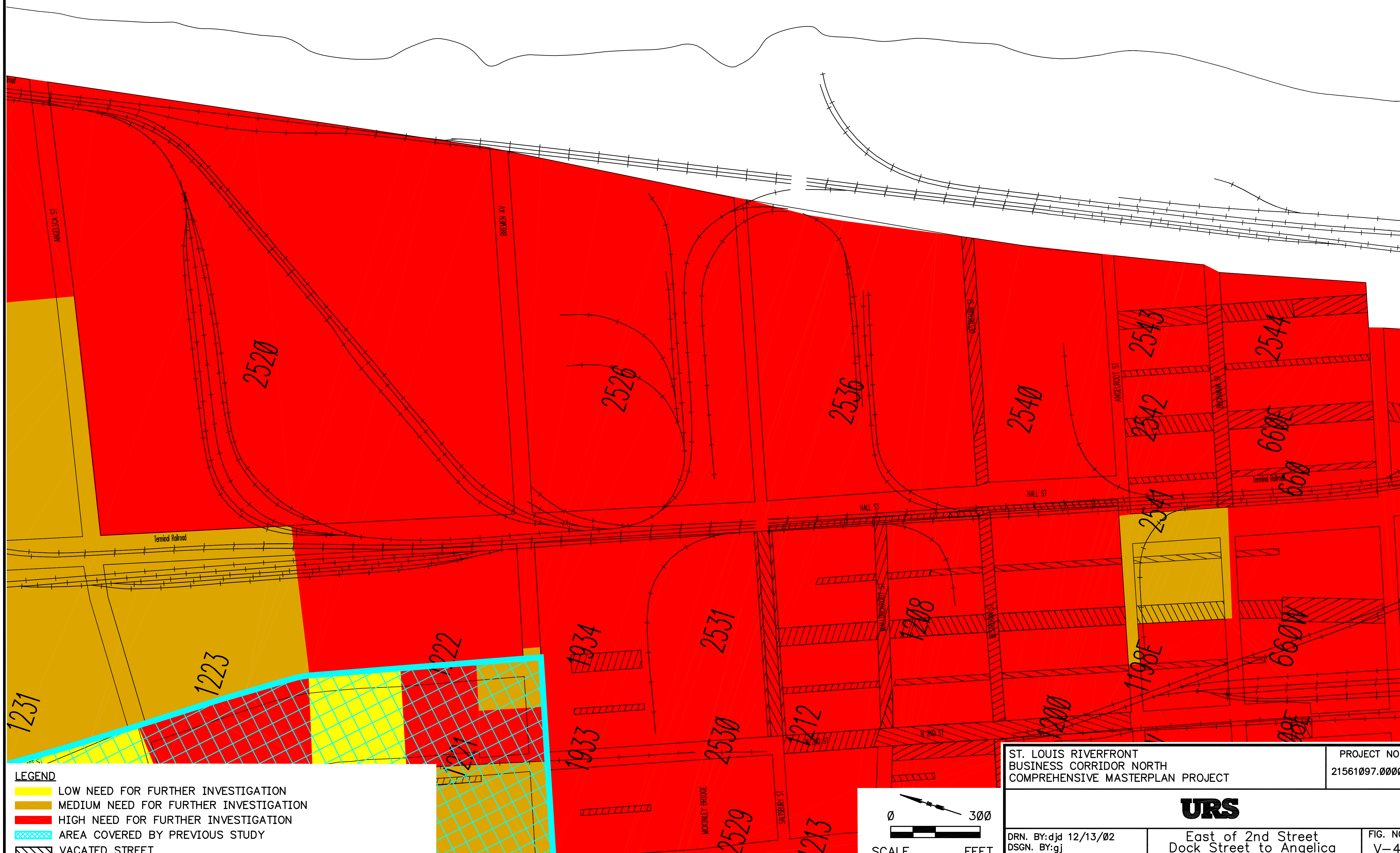
LEGEND
- LOW NEED FOR FURTHER INVESTIGATION
- MEDIUM NEED FOR FURTHER INVESTIGATION
- HIGH NEED FOR FURTHER INVESTIGATION
- VACATED STREET

0 300 SCALE FEET

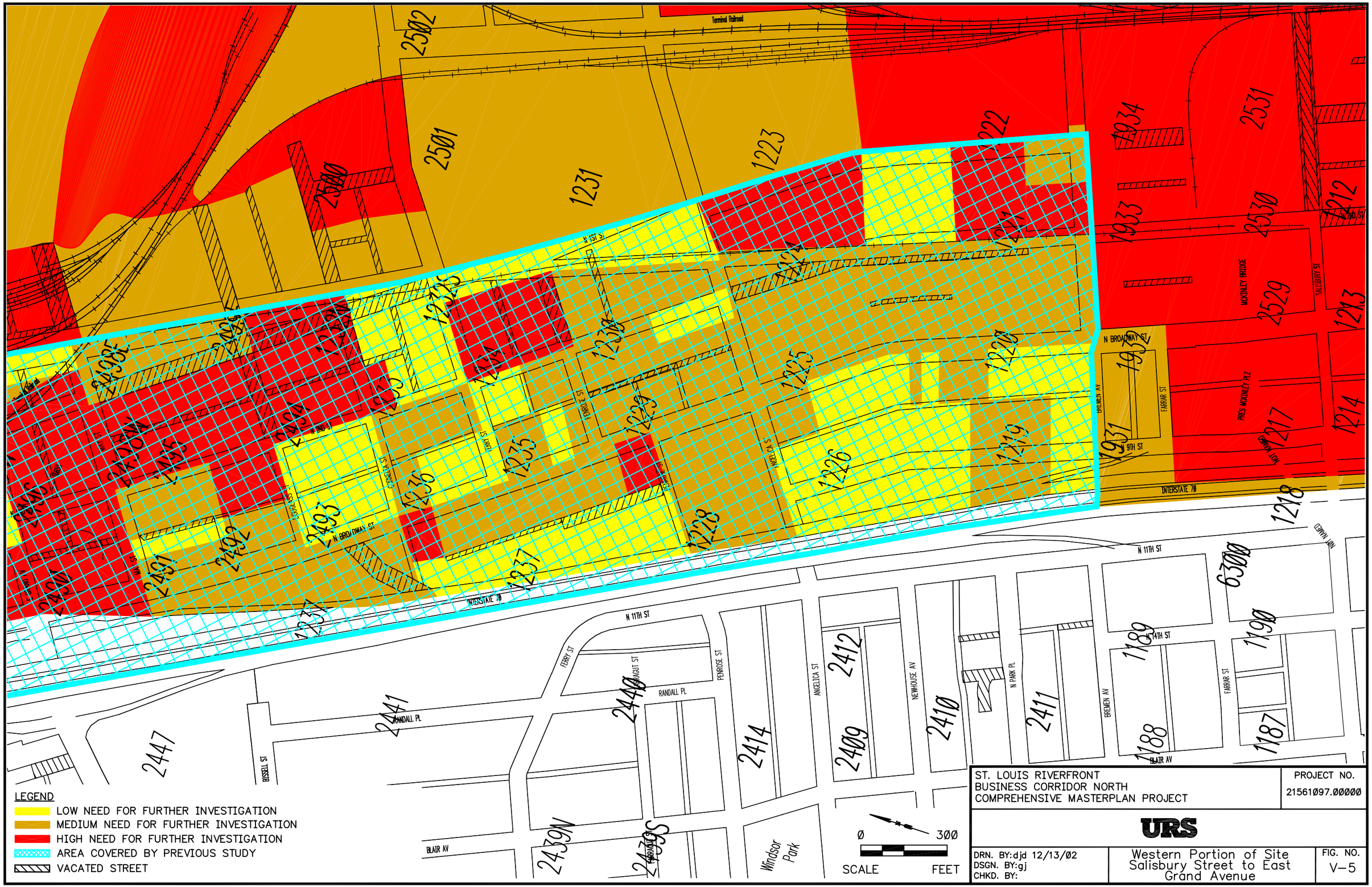
ST. LOUIS RIVERFRONT BUSINESS CORRIDOR NORTH COMPREHENSIVE MASTERPLAN PROJECT		PROJECT NO. 21561097.00000
URS		
DRN. BY:djd 12/13/02 DSGN. BY:gj CHKD. BY:	North Market Street to Mallinckrodt Street	FIG. NO. V-3



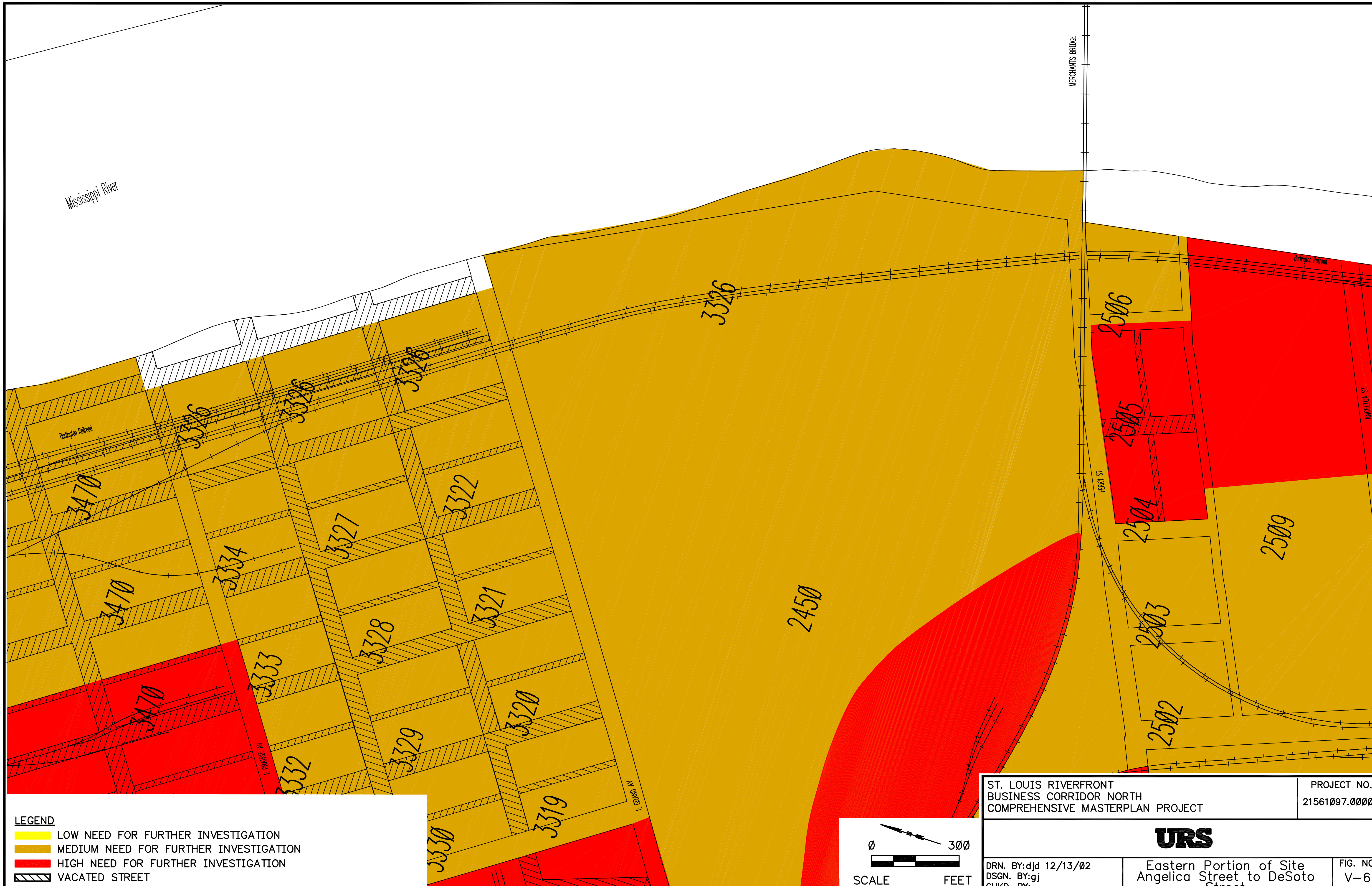
LEGEND
- LOW NEED FOR FURTHER INVESTIGATION
- MEDIUM NEED FOR FURTHER INVESTIGATION
- HIGH NEED FOR FURTHER INVESTIGATION
- AREA COVERED BY PREVIOUS STUDY
- VACATED STREET

0 300
SCALE FEET

ST. LOUIS RIVERFRONT BUSINESS CORRIDOR NORTH COMPREHENSIVE MASTERPLAN PROJECT	PROJECT NO. 21561Ø97.ØØØØØ
URS	
DRN. BY:djd 12/13/Ø2 DSGN. BY:gj CHKD. BY:	East of 2nd Street Dock Street to Angelica Street
FIG. NO.	V-4



ST. LOUIS RIVERFRONT BUSINESS CORRIDOR NORTH COMPREHENSIVE MASTERPLAN PROJECT		PROJECT NO. 21561097.00000
URS		
DRN. BY:djd 12/13/02 DSGN. BY:gj CHKD. BY:	Western Portion of Site Salisbury Street to East Grand Avenue	FIG. NO. V–5



ST. LOUIS RIVERFRONT
BUSINESS CORRIDOR NORTH
COMPREHENSIVE MASTERPLAN PROJECT

PROJECT NO. 21561097.00000

URS

DRN. BY: djd 12/13/02
DSGN. BY: gj
CHKD. BY:

Eastern Portion of Site
Angelica Street to DeSoto Street

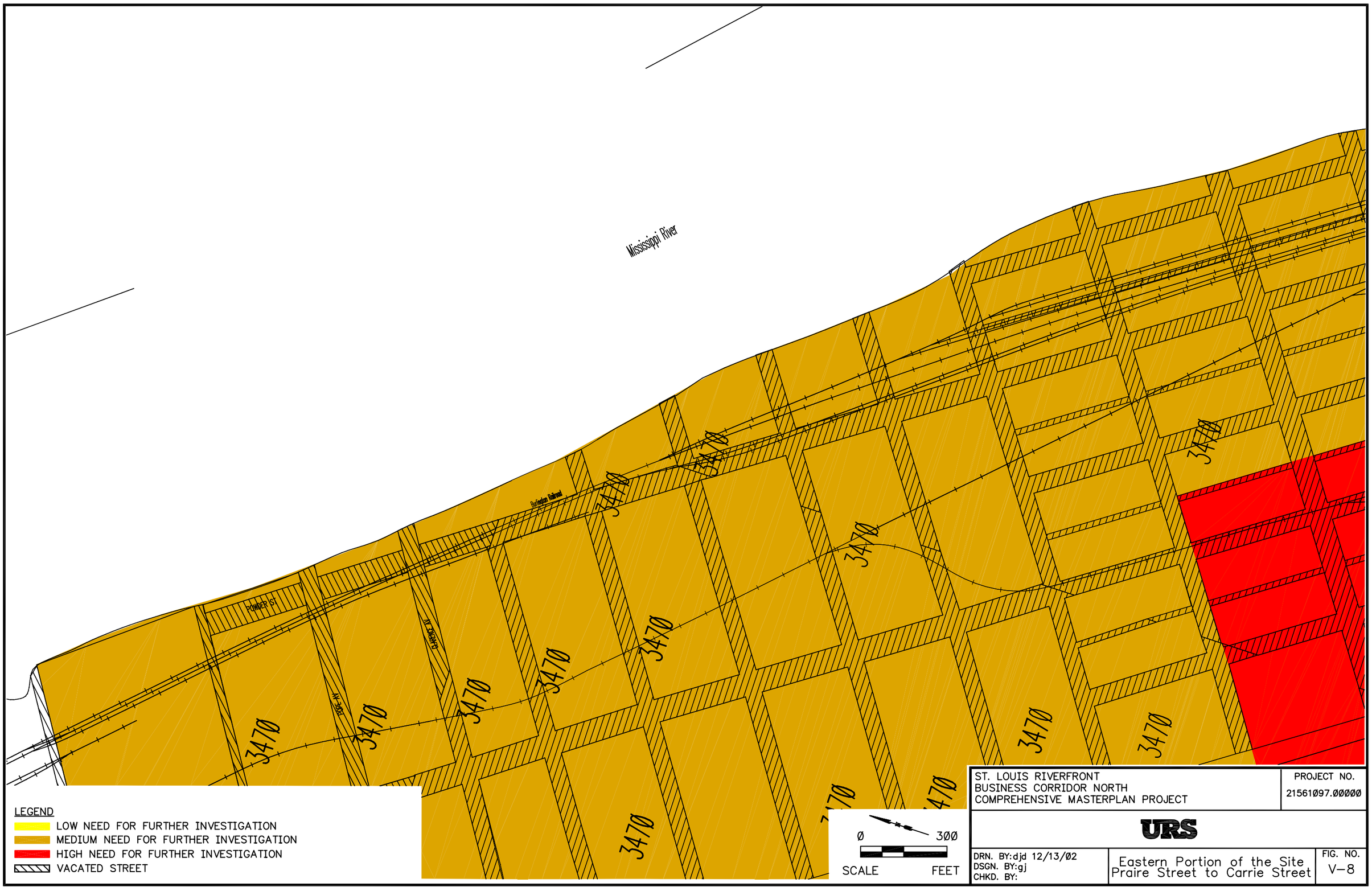
FIG. NO. V-6

LEGEND

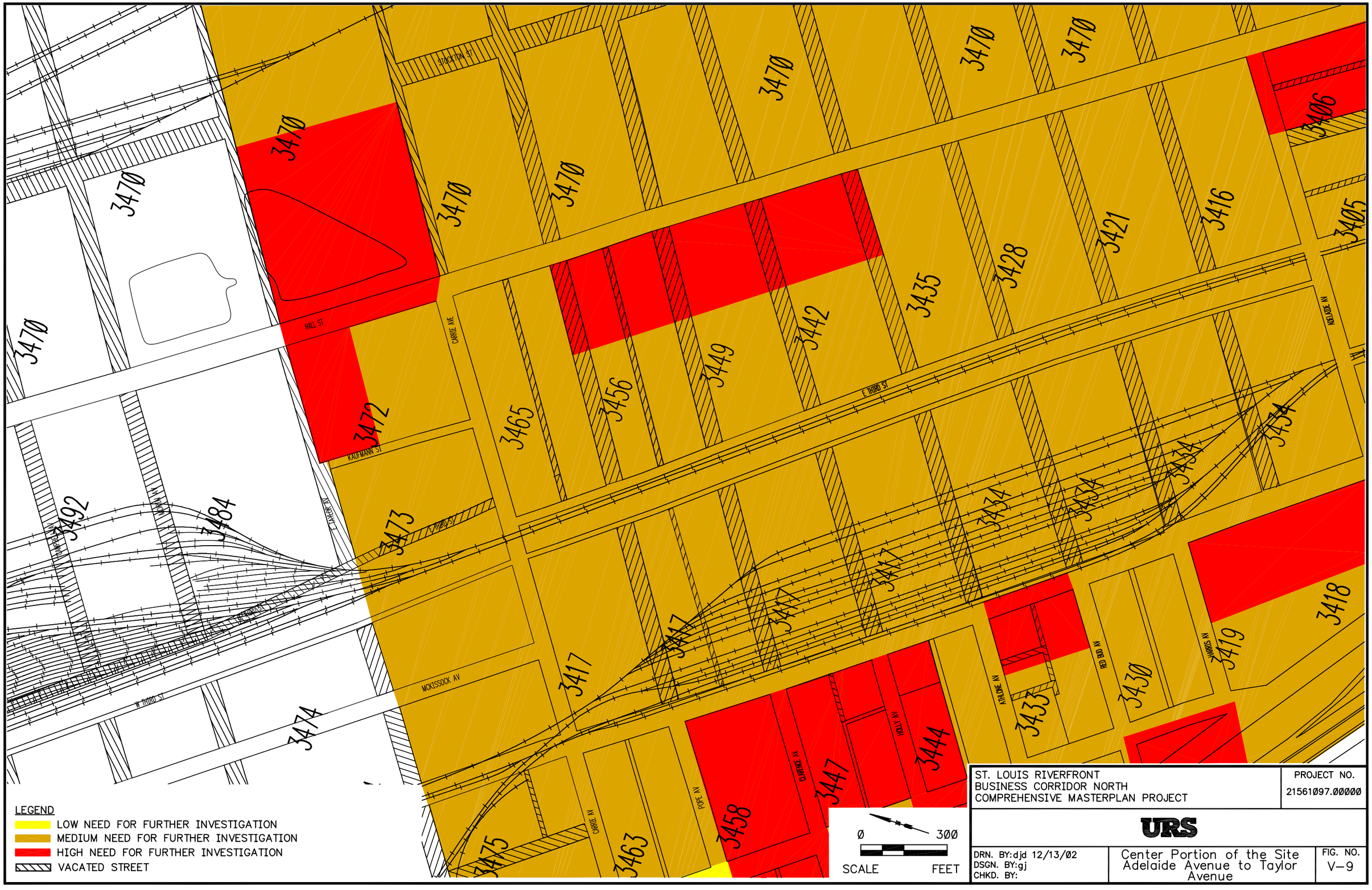
- LOW NEED FOR FURTHER INVESTIGATION
- MEDIUM NEED FOR FURTHER INVESTIGATION
- HIGH NEED FOR FURTHER INVESTIGATION
- AREA COVERED BY PREVIOUS STUDY
- VACATED STREET

Ø 300 SCALE FEET

ST. LOUIS RIVERFRONT BUSINESS CORRIDOR NORTH COMPREHENSIVE MASTERPLAN PROJECT	PROJECT NO. 21561097.00000
URS	
DRN. BY:djd 12/13/02 DSGN. BY:gj CHKD. BY:	Western Portion of Site Grand Avenue to Holly Street
	FIG. NO. V-7



ST. LOUIS RIVERFRONT BUSINESS CORRIDOR NORTH COMPREHENSIVE MASTERPLAN PROJECT	PROJECT NO. 21561097.00000
URS	
DRN. BY:djd 12/13/02 DSGN. BY:gj CHKD. BY:	Eastern Portion of the Site Praire Street to Carrie Street
	FIG. NO. V-8



ST. LOUIS RIVERFRONT BUSINESS CORRIDOR NORTH COMPREHENSIVE MASTERPLAN PROJECT	PROJECT NO. 21561097.00000
URS	
DRN. BY:djd 12/13/02 DSGN. BY:gj CHKD. BY:	Center Portion of the Site Adelaide Avenue to Taylor Avenue
	FIG. NO. V-9

ST. LOUIS RIVERFRONT BUSINESS CORRIDOR NORTH COMPREHENSIVE MASTERPLAN PROJECT	PROJECT NO. 21561097.00000
URS	
DRN. BY:djd 12/13/02 DSGN. BY:gj CHKD. BY:	Western Portion of the Site Harris Street to Taylor Avenue
	FIG. NO. V-10

CHAPTER VI Urban Design

VI.A. Summary

The physical character and functional requirements of the NRBC form the foundation of the streetscape concepts and treatments presented here. A successful redevelopment effort will be strongly tied to the attractiveness and the perception of the area. A dedicated effort to weave positive urban design tenets into the redevelopment process, therefore, is integral to the NRBC's success.

This chapter provides a general urban design concept for the NRBC. The external appearance and needs of each site, as well as the identity of the business campuses as a whole, are addressed here. Recommended streetscaping types and strategies are discussed. Further detailed incorporation of urban design principles within the proposed street network plan is recommended, as it will help to establish a comprehensive and successful redevelopment strategy for the entire NRBC.

VI.B. Streetscaping

1. Existing Development Characteristics

The existing overall development pattern of the NRBC area ranges from smaller typical urban blocks in the west and south to larger vacant parcels in the east and north. Re-development activity is most challenging in the southern and western areas, where the existing development pattern of numerous property owners and smaller parcels and structures makes land acquisition, consolidation and clearing difficult. Re-development activity is hindered to a lesser extent in the east and north where larger lot sizes are common and transportation-based uses are more efficient and economically competitive. Ironically, the southern and western areas have a more memorable and interesting environment from an urban design perspective, while the east and north areas have a less aesthetically pleasing environment.

2. Streetscape Structure

The existing street pattern for the study area reflects its historical land use patterns and circulation. The proposed street network offers a new approach to circulation in the area to accommodate new development, improved vehicular access, and stronger pedestrian and bicycle connections from the adjacent communities to the Mississippi Riverfront (Figure III.1). In addition to the existing and proposed expanded access to the Riverfront Trail, greenways, parks and new trails planned by Great Rivers Greenway (GRG), stronger, friendlier and more direct connections from the adjacent communities are also recommended. Taken together, the proposed plan can dramatically improve circulation in the area.

a. Major Circulation Corridors

Currently seven thoroughfares function as major vehicular circulation corridors for the study area: North Broadway, 9th Street, Carrie Avenue, East Grand Avenue, Adelaide Avenue, Cass Street and Hall Street. North Broadway has traditionally created the strongest urban image for the study area and is expected to continue to play this role. Hall Street has been dominated by rail transportation in the south and in the north serves primarily as a major truck circulator to and within the study area.

b. Neighborhood and Riverfront Connections

Upon development of I-70, a strong distinction and limited access between the adjacent residential communities and the Area and riverfront began to evolve. With the construction of the proposed Mississippi River bridge, possible improvements to I-70 such as rebuilt and enhanced highway overpass structures offer the opportunity to reconnect the adjacent communities to the recreational opportunities along the riverfront and the emerging greenway, park and trail network.

c. Local Streets

Currently, local streets are a vital part of circulation within the NRBC area. Realization of the proposed street network in the study area, however, will cause some streets to play a less significant role in circulation patterns. A unified physical vocabulary for all streets in the study area, nevertheless, will strengthen and enhance the identity and integrity of the proposed business campuses and the Area as a whole and help to stimulate reinvestment.

d. Business Campus Edges

The streetscape system also recognizes the importance of addressing security, identity and visibility concerns. These concerns can be addressed through the introduction of walls or fences for the business campuses and are important for the successful redevelopment and functioning of the Area. These matters should be more fully addressed through the creation of Development Standards and Design Guidelines for the Area. Introducing consistent treatments would create a predictable framework that will enhance the marketability of sites in the study area. These guidelines would also define appropriate buffers between desirable and undesirable uses and minimize negative existing impacts. Existing redevelopment plans have design guidelines that should be reviewed and updated.

e. Identity

The Area currently lacks a strong and unique identity as an economic and employment center. Creating a strong, identifiable image based on its advantages of proximity to the river, downtown, bi-state activities, and the proposed Mississippi River Bridge will help the area compete within the greater regional community. This can be achieved both through the implementation of a comprehensive signing and way-finding strategy as well as the provision of entry icons or gateways to the Area. Both will help to attract new companies to the area. These concepts should be expanded upon in the next phase of this plan.

3. Streetscape Typology

Streetscape typology of the NRBC should support the proposed circulation improvements identified in the proposed street network in the Land Use Planning Chapter. The typology chosen for thoroughfares throughout the NRBC should reflect the respective functional classification of the thoroughfare as well as the different surrounding existing and proposed urban and commercial land use patterns as it crosses from one Area or campus and to another. The result is variation in streetscape typology that reflects both the functional type, as well as the immediate surrounding environment, of the thoroughfare. Below, some of these potential variations appropriate to the study area are described (Figure VI.1).

a. Urban Arterial

This street section is for commercial streets located throughout the corridor with a mixture of business Area uses. An example of this street type is North Broadway in the southern portion of the study area. This section calls for a street width of 42 ft. This provides for two 12-ft traffic lanes and two 9-ft on-street parking lanes. The 22-ft sidewalk dimension is the remainder of R.O.W. existing on streets such as North Broadway near North Market Street (Figure VI.2).

b. Urban Local

This street section is for local urban streets within the study area. This situation occurs primarily in the southern and western areas of the Area. This section leaves the existing lanes in place. Minor patching and repairs may need to be done and should be evaluated on a street-by-street basis. The section is 62 ft with 6-ft planting areas and a 10-ft sidewalk on each side to the building line.

c. Urban Local Trail

This is another street section for the more urban corridors based on existing conditions within the study area. This section also leaves the existing lanes in place. Minor patching and repairs may

need to be done and should be evaluated on a street-by-street basis. This section is 66 ft with 6-ft planting areas and a 12-ft sidewalk on one side and a more generous pedestrian circulation area on the other side. This streetscape type is more pedestrian-oriented and serves as major greenway and trail connectors in and through the study area. The asymmetrical orientation provides protection to pedestrians and cyclists in a predominately truck service area. The lane width is 12 ft to allow for truck access and delivery (Figure VI.3).

d. Urban Collector

The Urban Collector section is for corridors such as Tyler Street in the southern section. It primarily serves to move traffic within the Area and provide access from local streets to the major arterials. It provides a 14-ft lane or existing widths each way for trucks with the remainder as tree lined sidewalk to the building line (Figure VI.4).

e. Service Arterial

The Service Arterial provides for heavy truck traffic and should be the major corridors used for truck access. Carrie and Adelaide Avenues in the northern reaches of the study area are good examples of this corridor type. This section provides two 14-ft lanes each way for trucks with a 10-ft shoulder. With the amount of land and the zoning of the area in the northern section it is suggested that a large setback be accommodated as part of the R.O.W. A 30-ft landscaped setback, therefore, is shown for screening of uses in the Area (Figure VI.5).

f. Service Local

The Service Local streetscape type provides for truck access to sites and service collector streets. It is located primarily in the northern areas of the Area. This section provides one 14-ft lane each way for trucks. It is suggested that a 10-ft setback be accommodated as part of the R.O.W.; therefore, a 10-ft landscaped setback is shown.

g. Service Arterial Trail

The Service Arterial Trail provides for heavy truck traffic and should be the major corridors used for truck access. This section provides two 14-ft lanes each way for trucks with a 10-ft shoulder. With the amount of land and the zoning of the area in the northern section it is suggested that a large setback be accommodated as part of the R.O.W., therefore, a 30-ft landscaped setback is shown. As part of this setback more pedestrian-oriented provisions are made and serve as major greenway and trail connectors in and through the study area.

h. Service Collector

The Service Collector provides for truck traffic and truck access to sites and local service streets. It primarily serves to move traffic within the Area and provides access from local streets to the major arterials. This section provides one 14-ft lane each way for trucks with a 10-ft shoulder. It is suggested that a 10-ft setback be accommodated as part of the R.O.W.; therefore, a 10-ft landscaped setback is shown (Figure VI.6).

i. Boulevard Arterial

The Boulevard Arterial is based on the premise that these corridors provide a green street for new development and provide space for gateway monuments at designated locations. This situation occurs primarily in the northern section. This boulevard also helps to minimize truck traffic visual impacts, while the large green setback fits a less dense less urban character. The median is 10 ft in width to allow tree plantings and a left turn lane. Two 12-ft lanes are positioned on either side with another 5-ft planting strip, a 6-ft sidewalk and an 18-ft setback to the building providing a total section of approximately 120 ft.

VI.C. Riverfront Trail Access

The development of secure campuses has necessitated a few minor alterations to the City-adopted Riverfront Trail Enhancements Plan. Numerous "connectors" that facilitate community access to the Riverfront Trail were identified in the Enhancements Plan. Six of these connections are within the project limits, two of which will require alteration.

1. North Market Street - This connector could be relocated to Madison Street with a "reconnection", paralleling yet separated from Hall Street, from Madison to the North Market Street floodgate.

2. Branch Street - The proposed trail is still envisioned to use the remaining Branch Street I-70 underpass, connecting with 9th Street as per the adopted plan. The section along Branch between 9th Street and Branch Street Trailhead may be moved north to Angelrodt Street with a connection from Angelrodt to the Branch Street Trailhead. The rest of the Branch Street Trail Connector "system" would remain.

3. Angelica Street remains a connector as per adopted plan.

4. Prairie Avenue remains a connector as per adopted plan.

5. East Grand Avenue remains a connector as per adopted plan.

6. Adelaide Avenue remains a connector as per adopted plan.

Figure VI.1 Proposed Street Types Key

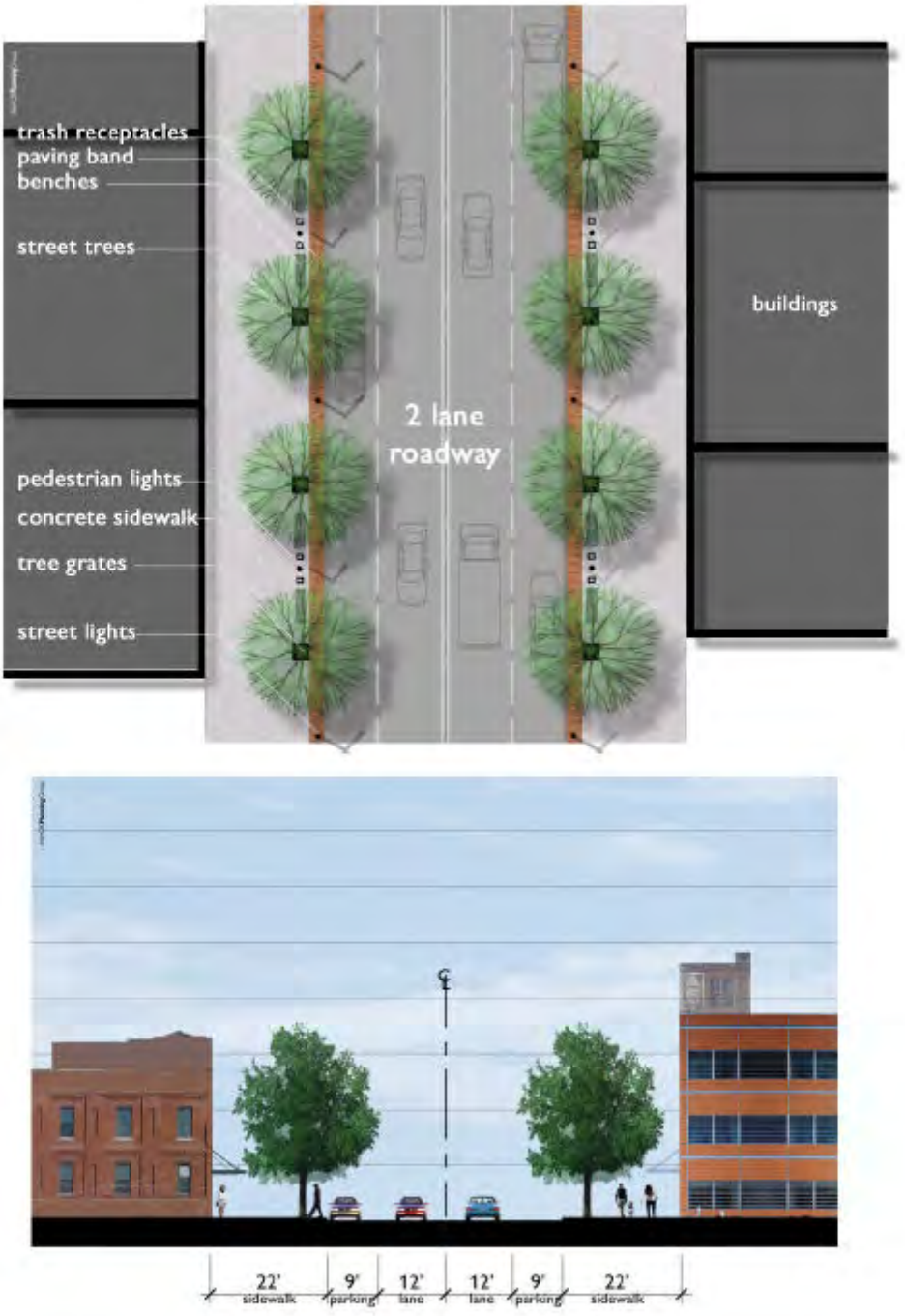


Figure VI.2 Street Type A: Urban Arterial

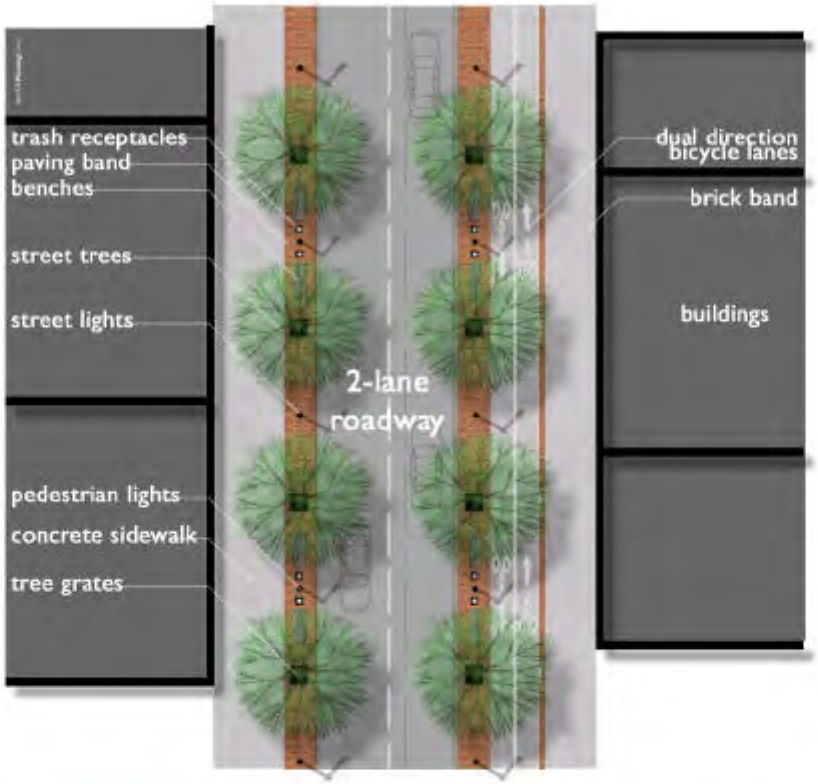
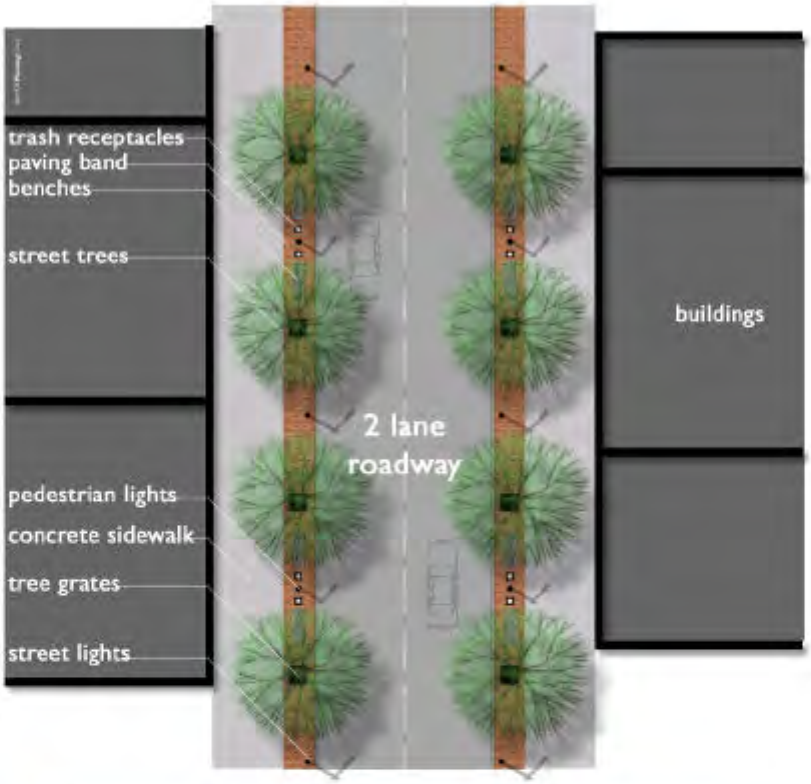


Figure VI.3 Street Type B: Urban Local Trail



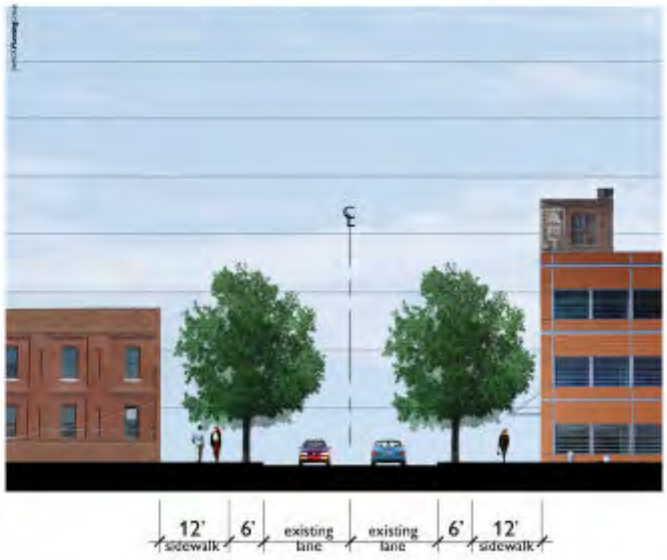


Figure VI.4 Street Type C: Urban Collector

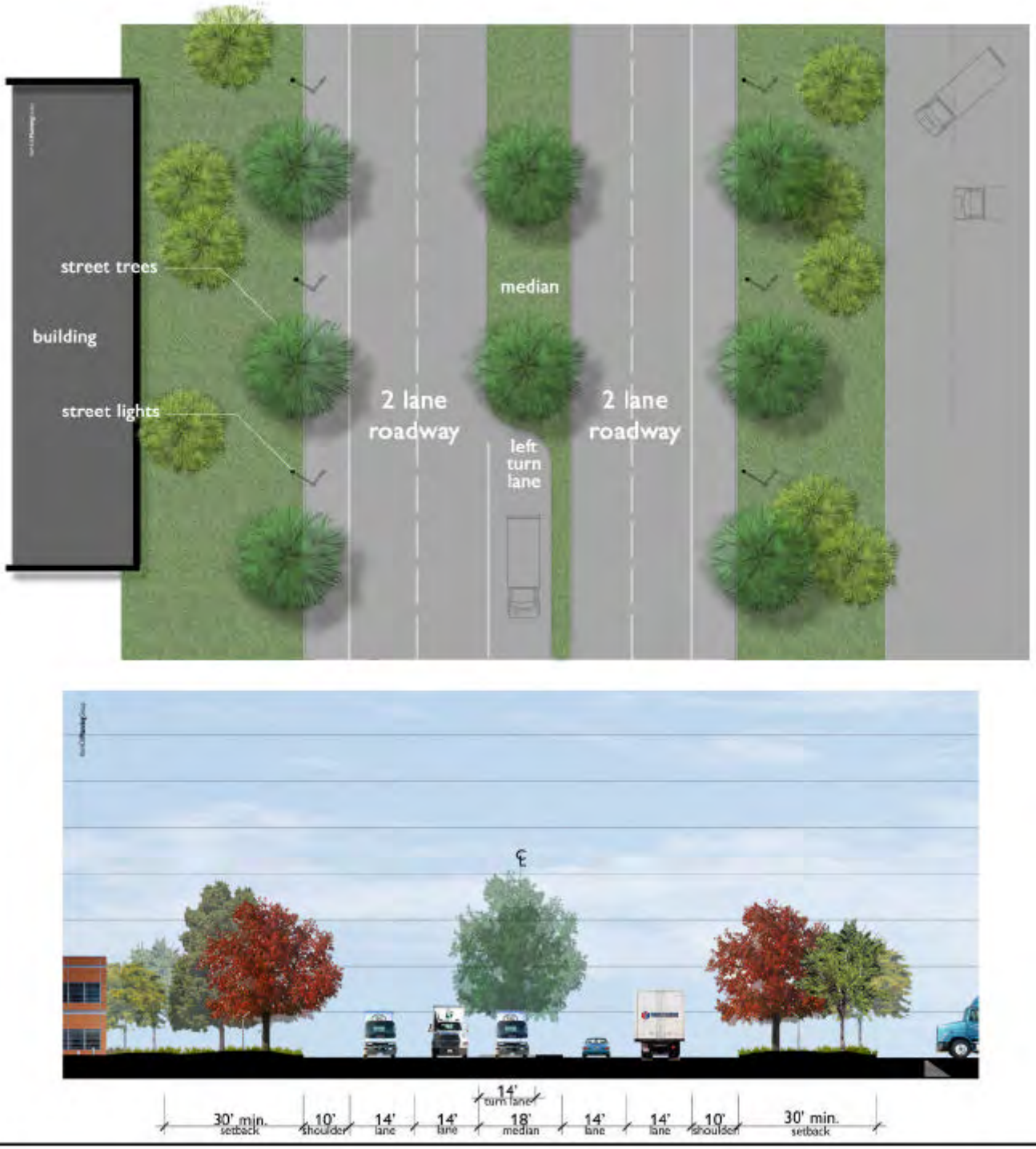


Figure VI.5 Street Type D: Service Arterial

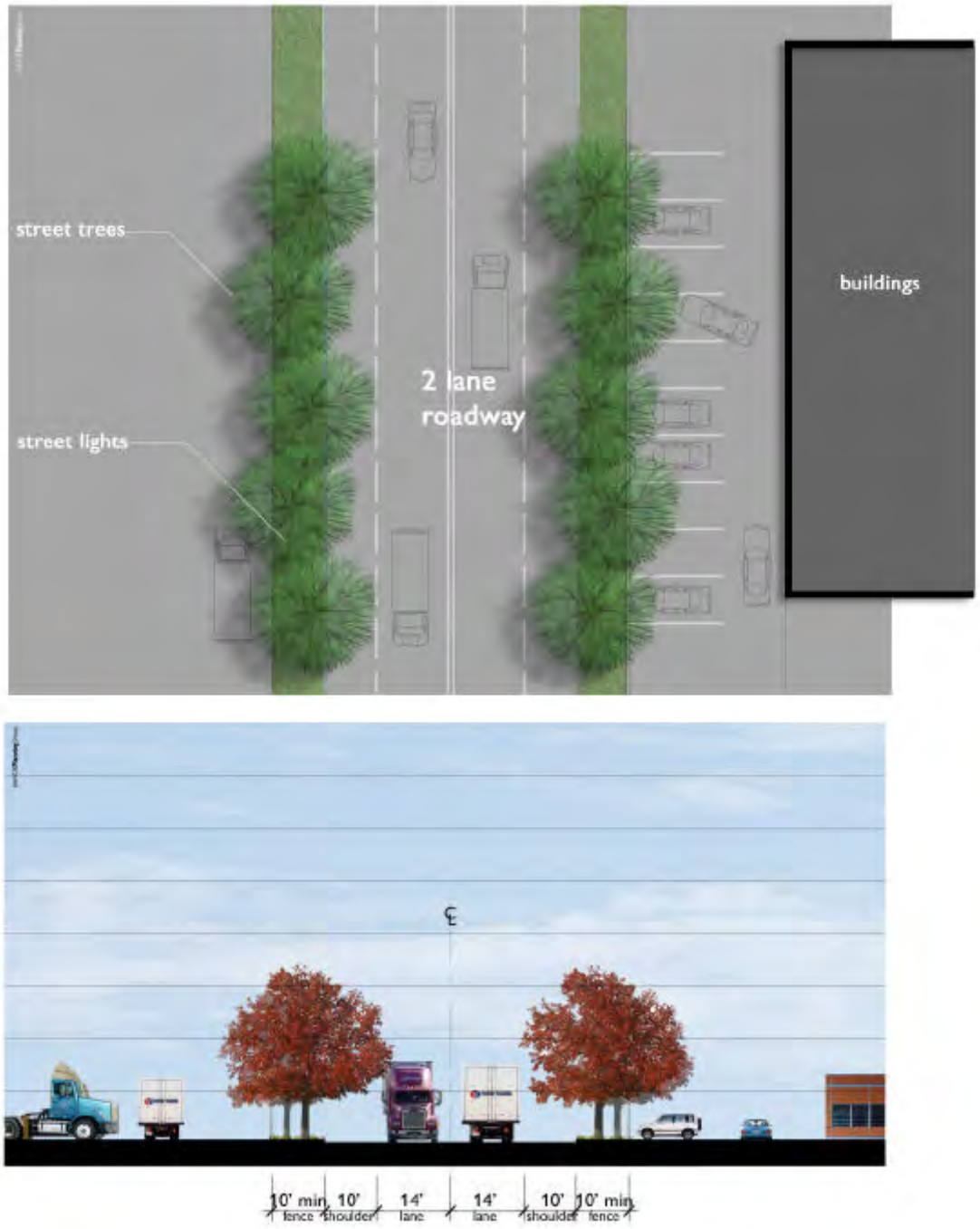


Figure VI.6 Street Type E: Service Collector

CHAPTER VII Implementation

VII.A. Summary

The NRBC Master Plan will be implemented under a proposed 16-year redevelopment schedule. The first year is scheduled as a framework and financial planning year, focusing on such tasks as the creation of a TIF Area and the establishment of an environmental remediation framework. The concurrent development of the Produce Row and Adelaide Business Campuses would begin in the first year as well. The redevelopment schedule allows for three to seven years per phase in each campus, with the start of redevelopment of each new phase immediately following the completion of the previous phase. Produce Row and Adelaide Campuses are scheduled for three phases of development each to proceed concurrently, whereas Tyler Campus is scheduled for only one 3-year redevelopment phase beginning in the last year of development of Adelaide Business Campus, or upon completion of the New Mississippi River Bridge. The 16th and final year of scheduled development is planned as a time to begin prioritized work on any remaining areas. Redevelopment of these areas of the NRBC should be accomplished as funds allow, either after completion of the Produce Row, Adelaide, and Tyler Business Campuses or in conjunction with an existing business expansion or relocation.

VII.B. Key Implementation Tasks

Successful implementation of the NRBC Master Plan will require a coordinated step-by-step program involving the various public and private participants. This process will apply to all of the proposed business campuses and should be developed as a first step in the redevelopment process. The major tasks of the redevelopment process are described below and a visual schedule highlighting major implementation tasks is included as Figure VII.1 at the end of this chapter.

Assess all businesses to determine which might desire to be a part of the redevelopment. Contained within the Market Analysis Chapter is a brief overview of the current attitude among existing NRBC businesses regarding expansion and retention desires in the NRBC. A more thorough investigation of this attitude and collaboration between the City and existing NRBC businesses is essential to stimulate vital support for the redevelopment of the area.

Revise the zoning code. Existing zoning and recommended zoning changes to assist in the effective redevelopment of the NRBC have been discussed in the Land Use Planning Chapter. These should be reviewed and revised if necessary upon implementation of this master plan.

Create an overarching environmental framework for remediation of the NRBC area. Work on creating an environmental remediation framework should begin as soon as possible to facilitate and coordinate current activities in the NRBC area. As discussed in the Environmental Concerns Chapter, an area-wide environmental framework for the NRBC area should be prioritized to provide

consistent criteria for property remediation prior to redevelopment. The framework would be a negotiated site-specific agreement between the City of St. Louis and the Missouri Department of Natural Resources which identifies site remediation standards for implementation under the Voluntary Cleanup Program (VCP).

Create a TIF Areas(s). Similar to the above task, creating a TIF Area(s) strategy should begin as soon as possible. It is our understanding that Middendorf (PFG) is about to undergo an additional expansion and that a developer is interested in helping Procter & Gamble expand. Other similar projects may be in the planning stage and creating the TIF Area(s) now would ensure that these developments become part of the increment, rather than the base, to help the implementation of the business campuses.

There are two primary options for establishing the TIF Area(s). The first option is to establish a single TIF Area for the entire 1,100-acre area. Designating one area as compared to multiple sites allows for comprehensive strategies, allows for the capture of "spin-off" development, and gives the long-term plan the ability to respond to changing market conditions. As mentioned in Chapter II, this option could allow affected properties between and around the target areas to be incorporated and offer some funds for their redevelopment.

A second option is to create a series of separate TIF Areas, one for each proposed business campus. This option lessens the timeframe constraints of TIF legislation, allowing development to be phased over a longer period of time. Additionally, creating several TIF Areas would allow the Tyler Business Campus and the remaining area outside the campuses to be designated as TIF Areas at a later date if desired. TIF, as it relates to the NRBC redevelopment, is described in more detail later in this chapter.

Establish methods and procedures for ensuring proper capture of all forms of incremental revenue. This task is related to the creation of the TIF Area(s) and highlights the necessity of careful planning

Begin assembling financing tools and applying for grants. This is an obvious and essential task; before physical improvements begin, the overall strategy for financing the redevelopment of the NRBC should be well developed.

Evaluate and prioritize financing options. Funding sources have been identified in the Pro Forma of this master plan. Each of these sources should be evaluated more closely, other potential financing options should be explored, and the alternatives should be ranked.

Site assembly. The NRBC Master Plan is dependent upon a broad based site assembly program to secure the necessary properties for each sequential campus phase. Land assembly is a critical

element of implementing a planned business campus strategy. The City, through SLDC, should be the initiator of the site assembly effort. The effort should involve several phases:

- Assembly of Phase I land for the proposed Produce Row and Adelaide Business Campuses.
- Continued assembly of additional land within the proposed campus areas for future phases of development.
- Targeted site assembly for key existing industrial users, on an as-needed basis.

The following tools can be used to assemble sites:

- Municipal Environmental Liens – For property where the municipality has found there to be environmental contamination, the City can place a lien on the property for the estimated cost of testing and remediation. The City can gain control of the property by foreclosing on the lien. This tool has been used by the City of Chicago mainly as an instrument of warning to negligent property owners. St. Louis does not currently have such an ordinance; to be a viable tool, the feasibility of and political will supporting such an ordinance would need to be determined.
- Garbage or Debris Removal Liens – Similar to environmental liens, the City can place a lean on property for the cost of removing garbage and debris from the property. The City can gain control of the property by foreclosing on the lien. The City of St. Louis, through its Problem Properties Task Force, has begun to utilize these liens to improve problem properties, though it has not yet foreclosed on any properties
- Tax Foreclosure – Property with back-taxes unpaid can typically be foreclosed upon. Other cities, such as Cleveland, have been successful in creating land banks through tax-foreclosed properties. The City of St. Louis has an active tax foreclosure program in place, though it takes three to four years after initiating the process before foreclosure can take place.
- Eminent Domain – A final method is for the City's redevelopment agency to use eminent domain to acquire property that it intends to benefit the public. This method can be costly and time-consuming.

Land acquisition can be funded through Tax Increment Financing (TIF). Other cities have had successful land acquisition programs using the HUD Section 108 loan guarantee, where block grant monies and other program incomes are used to guarantee bonds floated against future TIF revenues. This funding technique can provide upfront funding for land acquisition.

Identify and select a developer(s). Once most of the financial work is done, a developer(s) for the NRBC redevelopment site(s) will need to be chosen through an RFP process. This developer(s) should become involved in the project after the majority of site control is complete, but early enough to ensure that previous redevelopment efforts are not misguided or counterproductive to market demand and future uses.

Create a Neighborhood-based Business Retention and Expansion Organization (NBO). The NRBC would benefit from the establishment of a business assistance center specific to the area, or NBO. The existing North Riverfront Business Association (NBBA) serves as a facilitator for business interaction and platform for business advocacy with the City. The NBBA does not, however, have the capacity to assist businesses with regulatory and business support services associated with governmental programs. The Business Assistance Center (BAC), a city-government agency housed within SLDC, does assist businesses with regulatory and business support services, but it operates on a citywide basis. Additionally, the BAC is located in downtown St. Louis. These factors constrain the services the BAC can provide to new and existing NRBC businesses, limiting the amount of detail and customized attention for which more locally based NBOs are known to be successful.

A Chicago Example

In Chicago, the Local Industrial Retention Initiative (LIRI) groups are neighborhood-specific, city-funded non-profit organizations that assist industry in doing business in the City. These groups have been very successful in maintaining close contact with local industry, providing information about expansion needs and retention risks to the City, coordinating workforce development initiatives and assisting both the businesses and the City in arranging expansion and retention packages.

The groups extend City staff capability, providing a level of interaction with business beyond what the City can provide. Also, these groups provide a single point of contact and facilitator for navigating the City bureaucracy. These organizations have played a crucial role in retaining manufacturing jobs in the City of Chicago.

A new, locally sited organization is proposed to assist businesses in interfacing with the City in a productive manner. The organization would have a full-time staff and would have possible funding sources of both the City and the business community. It could be an outgrowth of the existing business association or a stand-alone group. The staff of this NBO would be located in a facility that would be identified somewhere in the NRBC area. Unlike the city-government based BAC, this NBO would be perceived as fundamentally separate from city government (even though it would be funded at least in part by government), thus it would appear to be more of a true intermediary between NRBC businesses and city government. The resulting NBO would therefore build upon and leverage the NBBA and SLDC to provide business advocacy and governmental support at a local level to local business.

This agency, or other ancillary organizations, could also extend its services by adding customizing workforce training and development programs in the area, as described in Chapter II.

A business retention organization is proposed in the North Riverfront area to be the implementing body of the NRBC redevelopment plan. The organization would have the following purposes:

- To maintain close contact will all business owners in the neighborhood, to monitor and keep the City apprised of expansion needs and retention risks.

- To serve as an advocate for the business community at City Hall and assist businesses in obtaining permits and City assistance.

- To work with the business community to organize and facilitate the provision of workforce development programs to employees of businesses in the area.

One of the significant aspects of competitive business parks in the St. Louis Metropolitan Region as noted in the Market Analysis Chapter is the personalized service and ability to provide assistance in navigating governmental programs. Given the complexity of doing business in large cities, especially when compared to small jurisdictions, an organization of this type is critical to maintain contact between the municipality and its industrial base. Using the Chicago example as a model, SLDC could fund the NRBC NBO as a delegate agency with its own board. Other possible funding sources for the NRBC NBO include business membership contributions, state as well as city aid, and revenue from the creation of a TIF Area in the NRBC.

VII.C. Major Implementation Tasks by Campus and Phase

Below are descriptions by campus and phase of those major tasks deemed necessary to the successful redevelopment of the NRBC area as outlined in this master plan. To aid successful implementation of this master plan, these tasks should be performed by the City in conjunction with the selected developer(s) per each campus and/or phase as scheduled. See the development and opportunities by phase figures at the end of Chapter III for the visual overlay of these major implementation tasks.

1. Produce Row Business Campus

Phase I:

- Provide new connection between Terminal Railroad Association tracks in the 2nd Street corridor and tracks in the Hall Street corridor near the intersection of 2nd and May Streets.

Remove existing tracks in the 2nd Street corridor from approximately Angelica Street south to North Market Street.

- Create a new section of Hall Street between Tyler and North Market Streets.

- Vacate Benton, Warren, Montgomery, St. Louis Avenue, Wright, Palm and Buchanan east of Broadway. Vacate Branch and Dock Streets between Broadway and new Hall Street.

- Create a new truck entrance for Produce Row at the intersection of St. Louis Avenue and North Broadway. Construct the new building expansion space to the north of the existing Produce Market buildings. Remove existing access from North Market Street.

- Create a secure development area between North Broadway and the Terminal Railroad Association tracks in the Hall Street corridor, from North Market Street to the northern project area limit at Angelrodt Street. Create three gateway entries to the redevelopment area at North Market and 2nd Streets, St. Louis Avenue, and Buchanan and 2nd Streets.

- Close North Market at the western side of the Terminal Railroad Association tracks and create a cul-de-sac at the eastern end.

- Assist existing businesses North of Market Street.

- Streetscaping on Madison from Tenth to First.

Phase II:

- Remove off-ramp connection from I-70 at Branch Street and replace with new on and off-ramps at St. Louis Avenue to provide a full-diamond interchange configuration at St. Louis Avenue. The Branch Street exit work is part of the Mississippi River bridgework, so there is a possibility that this work may be performed during some other phase in the overall project. Vacate 11th Street from Palm to Dock.

- Vacate 10th Street from Madison Avenue to its northern terminus at St. Louis Avenue. Vacate 9th Street from Montgomery Street north to Angelrodt Street. Vacate 11th between Wright and Dock Streets.

- Vacate Benton, Warren, and Palm Streets from North Broadway west to I-70. Vacate Montgomery Street, Wright Street, Dock Street, and Buchanan Street from 9th Street west to I-70. Create cul-de-sacs at western ends of Wright, Dock and Buchanan Streets.

- Vacate 9th Street from Montgomery north to Angelrodt. Create a loop connection heading south on 9th Street at Montgomery.

- Create lots ranging in size from 1 to 4 acres in size utilizing local streets exclusive of St. Louis Avenue and North Broadway for access to developments.

- Create memorable campus entranceways at key Produce Row Campus "entranceways". Recommended is landscaping to beautify the area and signs to announce the change in campus/location.

- Streetscaping on Broadway from Madison to Angelrodt, St. Louis Avenue from Tenth to Broadway, Ninth from Madison to Montgomery, Buchanan and Dock from Ninth to Broadway, and Wright and Montgomery from Ninth to Broadway.

Phase III:

- To the east of the existing Terminal Railroad Association tracks, construct a new north-south local street (a new Hall Street) in the Hall Street corridor from North Market Street to Angelrodt Street.

- Improve local street connections to the existing levee floodgates at Branch Street and North Market Street.

- Redevelop area between the new Hall Street and the Burlington Northern tracks extending from North Market Street on the south to Angelrodt Street on the north.

- Streetscaping on Branch from Hall to floodwall, Buchanan and Dock from Ninth to Broadway, and Dock from Hall to floodwall.

For an artistic rendering of the potential implementation of these tasks and development of Produce Row, see Figure VII.2 at the end of this chapter.

2. Adelaide Business Campus

Phase I:

- Relocate westbound I-70 off-ramp from slip-ramp connection with North Broadway to typical diamond configuration at Carrie Avenue overpass. Include any related improvements at the west approach of Carrie Avenue to North Broadway based on this change in traffic flow.

- Construct and improve Bulwer Avenue from below the viaduct at Adelaide Avenue north to Carrie Avenue in order to provide a continuous local access collector street.

- Vacate Ouida Avenue from Carrie to Clarence Avenues. Vacate Prescott Avenue between North Broadway at its south end and Carrie Avenue at its north end. Vacate Pope, Holly, and Red Bud Avenues between North Broadway and Bulwer Avenues. Vacate Athlone Avenue between Prescott and North Broadway; create a cul-de-sac street at the new western end.

- Redevelop the area between North Broadway and Bulwer Avenue from Adelaide to Carrie Avenues. Maintain commercial uses along the North Broadway frontage to the north of Clarence Avenue.

- Create two secure enclosures for the area bounded by North Broadway, Carrie, Bulwer, and Harris Avenues, using Clarence Avenue to separate the two. The first one loosely bounded by North Broadway, Carrie, Bulwer and Clarence Avenues. The second loosely bounded by North Broadway, Clarence, Bulwer and Harris Avenues. Create gateway entries at Prescott and Clarence Avenues, and along Athlone Avenue.

- Streetscaping on Adelaide from Broadway to Hall, Clarence from Broadway to Bulwer, Bulwer from Adelaide to Carrie, Harris from Broadway to Bulwer, and Athlone from Prescott to Bulwer.

Phase II:

- Relocate the Terminal Railroad Association trackage to the east to parallel and adjoin the Norfolk Southern rail corridor.

- Redevelop the area to the east of Bulwer Avenue between Adelaide and Carrie Avenues. If smaller lots are needed in Phase II, one of the intersecting streets may be extended to the east of Bulwer Avenue to create a cul-de-sac street that would provide access to these smaller lots.

- Create memorable campus entranceways at key Adelaide Campus "entranceways". Recommended is landscaping to beautify the area and signs to announce the change in campus/location.

Phase III:

- Extend Adelaide Avenue as a cul-de-sac street to the east from Hall Street to provide a second access point (along with East Prairie Avenue) for relocation of displaced scrap and recycling operations.

- Improve regional access to Hall Street by grade separating rail crossings of the Terminal Railroad Association and Norfolk Southern tracks along Carrie Avenue. At the same time, reconfigure the intersection of McKissock Avenue with Carrie Avenue in the elevated section between the two rail crossings.

- Redevelop parcels west of Hall Street between Hall Street and the Norfolk Southern Railroad tracks. Start redevelopment at either the north or south and develop lots in sequence in the opposite direction to maintain lot size flexibility as development proceeds. Create secured gateways as needed.

- Redevelop parcels east of Hall Street between Hall Street and the Burlington Northern Railroad tracks, again proceeding from one end to the other to maintain flexibility. Create secured gateways as needed.

- Streetscaping on new portion of Adelaide from Hall to new east end.

3. Tyler Business Campus

- Work with MoDOT under mandatory federal guidelines to secure the land below the elevated portions of the proposed Mississippi River Bridge to allow for continuous development.

- Assemble more land to build on several City-owned properties.

- Streetscaping on Broadway from Mound to Tyler, Tyler from Tenth to end, and Ninth from Brooklyn to Madison.

- Create memorable campus entranceways at general "entranceways" to the Tyler Campus. Recommended is landscaping to beautify the area and signs to announce the change in campus/location.

4. Remaining Area

For two general areas of the NRBC, no phases or specific vision has been developed. These areas are identified below and a basic concept for each is described.

a. Central Area

This is the central portion of the project area bounded on the north by the Adelaide Business Campus, on the south by the Produce Row Business Campus, on the west by I-70, and on the

east by the Mississippi River. This area has a number of major business interests (Mallinckrodt*, P&G*, Bachman, PD George and the MSD Bissell Point Plant). This area does not fit into a specific "theme" business campus; this area is, however, seen as suitable for:

- Existing business expansion
- Existing project area business relocation (such as from the proposed Mississippi River Bridge and those businesses that may need to be relocated from the Produce Row, Adelaide and Tyler Street Business Campuses)
- General industrial "infill" developments
- General industrial land assembly and redevelopment (example - some of the blocks between Angelica and Ferry could be assembled, roads vacated, and larger redevelopment accomplished).

Costs for infrastructure and streetscaping projects that connect the business campuses but are located in these remaining areas of the master plan have been included in the Cost Estimate and Pro Forma in order to track the overall vision of the master plan. Exactly how this work will be prioritized and funded, however, needs to be more fully defined in the near future.

b. Far South Area

This area is bounded by the project limits to the south, Produce Row Business Campus to the north, I-70 to the west and the Mississippi River to the east. This area has a significant change that will impact it with the construction of the proposed Mississippi River Bridge. Laclede's Landing is just a few blocks to the south and the area maintains a wealth of potentially significant historic buildings, not found in any other portion of the project area. Therefore, as this master plan has been geared towards industrial redevelopment and this area does not lend to such redevelopment, it would benefit most by becoming an extension of the Laclede's Landing area and should support a variety of commercial, residential, and business interests utilizing many of the existing structures. Such interests could include (but are not limited to):

- Phone center applications
- "Back office" operations

* There is the potential for the corporate areas of Mallinckrodt and P&G to be incorporated into Produce Row and Adelaide Business Campuses, respectively, if desired.

- New office space
- Commercial services (printing, office supply, perhaps a small grocery, etc.)
- Residential
- Expansion of those business types that are already prevalent in the Laclede's Landing area.

No specific "vision" has been developed for the area between the proposed new Mississippi River Bridge and Laclede's Landing.

VII.D. Cost Estimate

The Cost Estimate for NRBC development has been calculated based on all work and projects that could be conducted within the project limits. Costs are separated as hard or soft costs and by area, within one of the three campuses or in the area(s) outside of the designated campuses ("Remaining Area"). Hard costs include acquisition, infrastructure and remediation work costs, as well as a 10% contingency on acquisition and infrastructure costs. Soft costs include expenses for architecture and engineering, legal, marketing, brokerage, insurance, project management and permitting services, as well as interest on redevelopment loans and funds.

An additional amount has been added to the cost estimate to reflect the soil conditions of the project area. From the non-invasive surface site investigation performed by URS, parts of the study area are presumed to be non-sanitary landfill sites, primarily used for demolition and construction debris. As an environmental clean-up cost, the City or future developer(s) would most effectively choose the method of deep dynamic compaction (DDC) to compress the land to allow for one- or more storey building development. Once this exercise is completed, the soil conditions of the NRBC present no circumstances for redevelopment that are any different than that for land elsewhere in the City. To account for the DDC costs associated with these areas, an additional 15% against infrastructure site preparation costs has been added in Adelaide Phase III cost estimates.

Considering all of these expenses, the total cost for the redevelopment of the three campuses including the remaining areas comes to just over $215 million. While the cost shown is significant, this total places no prioritization on cost assignment by campus, phase or area. Less than half of the total cost (about $90 million) can be attributed to the redevelopment of the three campus areas; the balance (about $125 million) is made up by redevelopment costs associated with the remaining areas. It is anticipated that the work and costs directly associated with the three identified campuses will have the highest implementation priority, and that the priority of the work to be done in the remaining areas will be reviewed throughout the redevelopment process. Prioritized redevelopment costs, therefore, are significantly less than the total calculated in the cost estimate.

Tables VII.1-5 following this chapter are summaries of these estimated costs. Separate costs totals are shown for (1) the entire NRBC Master Plan area (including the remaining area), (2) the sum of the three campus areas only, and (3) both Produce Row Campus and Adelaide Campus. Extensive numbers of detailed background costs are included in the digital spreadsheets provided separately to SLDC. This product will allow the City to review or alter work done in any given phase.

VII.E. Pro Forma and Tax Increment Financing Analysis

A Pro Forma was developed to assess the project costs versus project funding sources. Costs and work projects were moved and prioritized among phases and campuses to make the project financially feasible. Redevelopment tasks pertaining to the three business campuses were given funding priority over those relating to the remaining area; a future step in the redevelopment process will be the re-evaluation of those work tasks grouped in the remaining area column. In addition to assessing costs, potential funding sources for redevelopment projects within the NRBC were also investigated and evaluated. Several key findings of this process were:

- Tax Increment Financing (TIF) plays an extremely significant role in funding this work.
- Targeted TIF Areas focused on the separate business campuses may be more effective than a single large TIF Area that includes the entire project area.
- The magnitude of cost for the redevelopment of the entire project area, including all three business campuses as well as streetscaping and infrastructure projects associated with other significant roads and streets in the overall project area, is significantly greater than the readily available funding sources.
- Grants and other sources of funding will be the primary method of funding the redevelopment work outside of the three distinct business campuses.
- The availability of financing will determine the rate of progress.

The total uses of funds, accounting for 2% inflation per year, for the development of the three campuses of Produce Row, Adelaide, and Tyler comes to almost $99 million. Through the exercise of identifying funding sources and amounts, over $132 million of applicable source funds for redevelopment work pertaining to the three campuses were identified. Financing summary tables for the entire NRBC study area and each individual campus redevelopment area are included as Pro Forma Appendix Tables PF.1-5. The comprehensive Pro Forma data has been provided to the client.

Sources of the identified funds include both traditional and other potential sources of funding for redevelopment projects. Due to the nature of the project as described in this master plan, TIF was identified as a major funding source. Some of the project costs were also identified as likely to be funded through other sources such as land sale revenue, Land Development Fund monies, Empowerment Zone benefits, EPA and EDA grants, Army Corps of Engineers and MoDOT aid, and brownfield credits and grants. An explanation of how and why these particular sources were applied to this project is include as Pro Forma Appendix Item PF.

From the results of the Pro Forma exercise, several statements can be made. First and most importantly, the Pro Forma reveals that redevelopment of the NRBC as outlined in this master plan is financially feasible. A total surplus of over $23 million after repayment is shown to occur and accumulate over multiple phases throughout the redevelopment process.

The Pro Forma also shows that work in the remaining area(s) accounts for the majority of overall redevelopment costs. As explained previously, these projects were given lower priority than those involving the development of the three campuses and thus excluded from the three campus TIF Redevelopment Areas. As a result, these projects have fewer sources of funding identified. An effort should be made to establish a process by which the surplus funds from the redevelopment of the campus areas can be applied to a prioritized list of redevelopment projects lying in the ancillary remaining area(s). This is noted in Table VII.6 below, as well as in the color graphic schedule following this section. Three options appear feasible to address this concern:

(1) Make the entire NRBC one TIF Redevelopment Area.

(2) Include appropriate portions and redevelopment projects of the Remaining Area(s) as parts of the three campus Redevelopment Areas.

(3) Induce a change in state TIF legislation to allow TIF revenue to be shared among adjacent or proximate TIF Areas. Identify each of the campus areas as well as each project in the remaining area(s) as a TIF Area.

Lastly, the Pro Forma shows that the inclusion of existing businesses and additional independent redevelopment agreements or projects within the designated TIF Area(s) could be beneficial. The opportunity to include Mallinckrodt in the Produce Row TIF Area arose as a sensible option late in the project discussion. Also, recent discussions of independent development arrangements regarding the area to the north of the NRBC develop suggest additional redevelopment and funding possibilities. Incorporation of these and other similar prospects throughout the NRBC redevelopment process will be carefully considered.

VII.F. Schedule

After developing the cost estimate and analyzing the ability of the project to fund these costs, an understanding of the project implementation timeline was achieved and a schedule was developed. Projects of this size and magnitude require as aggressive a timeline as is feasible; surrounding this project, however, is the concern of financial feasibility. With this in mind, a schedule for redevelopment has been developed that allows three to seven years per phase in the Produce Row and Adelaide campuses, with the start of each phase immediately following the completion of the previous phase within each respective campus. The Tyler Campus is allotted three years total for implementation. The first year of redevelopment is scheduled as a framework and financial planning year. The last scheduled year of development is planned as a time to begin prioritized work on any remaining areas, but what these needs are should be considered and reviewed throughout the redevelopment process. Please refer to Figure VII.1 at the end of this chapter to see the recommended timing of the main implementation tasks.

The proposed timeline for the completion of Produce Row, Adelaide, and Tyler Business Campuses is derived from the projected absorption rates and from the parameters of TIF law. Missouri's TIF law allows designation of a TIF *Redevelopment Area*, which can contain one or more *Redevelopment Projects*, each of which must commence with 10 years of the designation of the TIF redevelopment area. The redevelopment projects have a maximum lifetime of 23 years from their commencement date. Per these regulations, URS recommends that each business campus be designated as a redevelopment area and each phase of each campus be a separate redevelopment project. This maximizes the life of the redevelopment projects and thus maximizes the TIF revenues.

An alternative to this plan would be to designate the entire project area as a single TIF redevelopment area, and designate each phase of each campus as a separate redevelopment project. This would provide the remaining area(s) a source of financing for redevelopment, currently a potentially significant obstacle.

In summary, the recommended schedule by campus, phase, and year is as shown in the following table, Table VII.6.

Table VII.6 Redevelopment Project Timeline

Target Redevelopment Area by Phase	Starting Year	Period of Redevelopment	Final Project Year per TIF Law	Redeveloped Acres**
Produce Row				
Phase 1	2004	2004 to 2008	2027	47
Phase 2	2008	2008 to 2012	2031	51
Phase 3	2012	2012 to 2014	2035	24
			SUBTOTAL	122
Adelaide				
Phase 1	2004	2004 to 2008	2027	32
Phase 2	2007	2007 to 2011	2030	27
Phase 3	2011	2011 to 2017	2034	82
			SUBTOTAL	141
Tyler Campus	2017	2017 to 2019	2040	21
Remaining Area*	(ongoing prioritization evaluation; area redeveloped as funds allow)			
Grand Total Redeveloped Acres				547

**Area outside campus areas.*
***Total net acreage to be redeveloped.*

A graphic representation of this schedule inclusive of key implementation activities can be seen in Figure VII.1 at the end of this Chapter. In words, a conceptual schedule would be anticipated to progress in the following manner:

Year 1

- Review zoning
- Create area-wide Environmental Framework
- Develop Neighborhood Business Organization (NBO)
- Create overall financing strategy for the NRBC area
- Establish Produce Row and Adelaide TIF Redevelopment Areas
- Create Produce Row Phase 1 and Adelaide Phase 1 TIF Redevelopment Projects
- Prepare financing: City develops initial "seed" financing package for Produce Row and Adelaide (loans, grants, etc) and City and developer(s) identify financing requirements
- City develops selection process for and selects developer(s) for Produce Row and Adelaide Business Campuses

- City begins Produce Row and Adelaide Phase 1 non-developer implementation of infrastructure design and construction (road vacations and demolitions, etc)
- Developer begins Produce Row and Adelaide Phase 1 Redevelopment

Years 2 and 3

- City finishes Produce Row and Adelaide Phase 1 non-developer implementation of infrastructure design and construction (road vacations and demolitions, etc)
- Developer continues Produce Row and Adelaide Phase 1 Redevelopment
- City begins to develop Adelaide Phase 2 financing

Year 4

- City begins to develop Produce Row Phase 2 financing
- Create Adelaide Phase 2 TIF Redevelopment Project
- City begins Adelaide Phase 2 non-developer implementation of infrastructure design and construction (road vacations and demolitions, etc)
- Developer begins Adelaide Phase 2 Redevelopment

Year 5

- Developer finishes Produce Row and Adelaide Phase 1 Redevelopment
- Create Produce Row Phase 2 TIF Redevelopment Project
- City finishes Adelaide Phase 2 non-developer implementation of infrastructure design and construction (road vacations and demolitions, etc)
- City begins Produce Row Phase 2 non-developer infrastructure and implementation design and construction (road vacations and demolitions, etc)
- Developer continues Adelaide Phase 2 Redevelopment
- Developer begins Produce Row Phase 2 Redevelopment

Year 6

- City finishes Produce Row Phase 2 non-developer infrastructure and implementation design and construction (road vacations and demolitions, etc)
- Developer continues Adelaide and Produce Row Phase 2 Redevelopment

Year 7

- Developer continues Adelaide and Produce Row Phase 2 Redevelopment
- City begins to develop Adelaide Phase 3 financing

Year 8

- Developer finishes Adelaide Phase 2 Redevelopment
- Create Adelaide Phase 3 TIF Redevelopment Project
- City begins Adelaide Phase 3 non-developer implementation of infrastructure design and construction (road vacations and demolitions, etc)
- Developer begins Adelaide Phase 3 Redevelopment
- Developer continues Produce Row Phase 2 Redevelopment
- City begins to develop Produce Row Phase 3 financing

Year 9

- Developer finishes Produce Row Phase 2 Redevelopment
- Create Produce Row Phase 3 TIF Redevelopment Project
- City begins Produce Row Phase 3 non-developer implementation of infrastructure design and construction (road vacations and demolitions, etc)
- Developer begins Produce Row Phase 3 Redevelopment
- City finishes Adelaide Phase 3 non-developer implementation of infrastructure design and construction (road vacations and demolitions, etc)
- Developer continues Adelaide Phase 3 Redevelopment

Year 10

- City finishes Produce Row Phase 3 non-developer infrastructure and implementation design and construction (road vacations and demolitions, etc)
- Developer(s) continues Adelaide and Produce Row Phase 3 Redevelopment

Year 11

- Developer finishes Produce Row Phase 3 Redevelopment
- Developer continues Adelaide Phase 3 Redevelopment

Year 12

- Developer continues Adelaide Phase 3 Redevelopment

Year 13

- Developer continues Adelaide Phase 3 Redevelopment
- City begins to develop Tyler financing

Year 14

- Developer finishes Adelaide Phase 3 Redevelopment
- City creates Tyler TIF Redevelopment Area and Tyler TIF Redevelopment Project
- City begins Tyler non-developer implementation of infrastructure design and construction (road vacations and demolitions, etc)
- Developer begins Tyler Redevelopment

Year 15 and 16

- City finishes Tyler non-developer implementation of infrastructure design and construction (road vacations and demolitions, etc)
- Developer finishes Tyler Redevelopment

Years 17 through 33

- City annually reviews market potential and available funding for redevelopment of the remaining non-business campus area of the NRBC

Year 24
Produce Row and Adelaide Phase 1 TIF Redevelopment Projects are terminated.

Year 27
Adelaide Phase 2 TIF Redevelopment Project is terminated.

Year 28
Produce Row Phase 2 TIF Redevelopment Project is terminated.

Year 31
Adelaide TIF Redevelopment Area and Phase 3 Project area terminated.

Year 32
Produce Row TIF Redevelopment Area and Phase 3 Project are terminated.

Year 37
Tyler TIF Redevelopment Area and Tyler Redevelopment Project are terminated.

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No Appendix items.

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No Appendix items.

Appendix Item PF

EXPLANATION OF SOURCES AND ASSUMPTIONS USED IN PRO FORMA ANALYSIS

Background

URS Corporation has worked with the City of St. Louis to develop the master plan for the NRBC located northeast of the downtown on the Mississippi River and generally bounded by Cass Avenue on the south, Interstate 70 on the west, Carrie Avenue on the north and the Mississippi River on the east (the "Study Area"). This effort has included identifying expansion potentials in existing industries and new users for the area, as well as targeting key sites for redevelopment, designing and upgrading area infrastructure, and proposing a phasing and funding program to renew the area. A key component to the implementation of this plan is the establishment of one or more Tax Increment Financing (TIF) districts in the corridor, which will help provide the city with the necessary tools and financing to redevelop the area.

A critical step prior to implementation of the master plan is to identify estimates of the overall potential revenues and expenditures ("Sources" and "Uses" of funds, respectively) in order to understand the financial feasibility of the overall plan and its components. The estimated Uses have been discussed at length in the body of the master plan. This Appendix will focus on the Sources. The goal is to explain the assumptions used to calculate each of the estimated Sources of funds, with particular detail given to the assumptions used to generate the estimates of potential TIF incremental revenue (the "TIF Revenue Estimates") that may result from successful redevelopment of the Study Area.

This Appendix Item is divided into two parts:

I. Primary Source of Funds: TIF Incremental Revenue
II. All Other Sources of Funds

Throughout this Item, the following Pro Forma Appendix tables are referenced. These tables provide the overall Pro Forma analysis, the core redevelopment assumptions, and the TIF Revenue Estimates. They can be found in the Pro Forma Appendix following this Item.

Table PF.1	Redevelopment Assumptions
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Table PF.2B	Sources and Uses Summary--Produce Row and Adelaide
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PRO FORMA APPENDIX

Item PF

I. Primary Source of Funds: TIF Incremental Revenue

A. TIF Revenue Estimates and Summary of Findings

Defining the TIF Areas and Projects

The Study Area consists of more than 1,300 tax parcels with a total land area of over 1,100 acres. For purposes of this analysis and due to strategic land use considerations, the Study Area has been divided up into three targeted redevelopment campus areas (the "Campus Areas"), named Produce Row, Adelaide, and Tyler, and the remaining areas in between and around the Campus Areas ("Remaining Area" or "All Other Areas").

Missouri TIF law enables municipalities to designate TIF "Redevelopment Areas". Within each Redevelopment Area, one or more TIF "Redevelopment Projects" may be created, within 10 years of designation of the Redevelopment Area. Each Redevelopment Project then has its own unique lifetime of 23 years from its creation date.

As stated above there are three recommended Campus Areas. Redevelopment of the Produce Row and Adelaide Campus Areas has been scheduled into three sequential phases (each lasting 3-5 years), with an additional one 3-year phase for redevelopment of the Tyler Campus Area. To allow for maximum capture of incremental revenues, each phase will be designated as a separate Redevelopment Project. Therefore, the TIF Revenue Estimates are based upon the assumptions that

i) each campus area (Produce Row, Adelaide, Tyler) would be designated as a separate "Redevelopment Area",
ii) the Produce Row and Adelaide Campus Areas would each consist of 3 separate "Redevelopment Projects", and
iii) the Tyler Campus area would consist of one "Redevelopment Project".

Table PF.1 shows the different start and stop times assumed for each Redevelopment Area/Campus Area and for each phase/Redevelopment Project.

Types of TIF Revenue

There two general types of revenue that can be captured for use in a TIF district in Missouri. These two revenue types are payments in lieu of taxes ("PILOTS") and economic activity taxes ("EATS"). PILOTS refer to the incremental property tax revenue generated in a TIF above and beyond the base level of taxes existing at the time of TIF district creation. Personal property taxes are not eligible as PILOTS, and thus are not included in the TIF Revenue Estimates. EATS refer to any other type of allowable incremental tax generated in the TIF district above and beyond their existing base level at time of TIF district creation. Specifically, the EATS included in this analysis are local utility taxes, local net business profit taxes, local payroll taxes, and state payroll taxes (assuming special requirements are satisfied). Each of these taxes will be discussed in more detail in the explanation of assumptions.

Summary of TIF Revenue Estimate Findings

In the full Study Area, the TIF Revenue Estimates are based on a total estimated redevelopment scenario consisting of 4.9 million square feet of new industrial space developed over a period of 16 years and resulting in 1,665 new jobs. This scenario assumes phased development throughout the three Campus Areas, and combined with the assumptions described below, generates a total of $112.1 million in total TIF incremental revenues, in nominal dollars (see Table PF.4C). This figure simply represents the sum of the incremental revenues estimated to be generated over the full lifetimes of all three (Campus Area) Redevelopment Areas. Since most of the redevelopment costs are incurred in the first few years of each phase and the bulk of the incremental revenues are generated in the later years of each Redevelopment Project, it will be necessary to capitalize the TIF Revenue stream at the beginning of each Redevelopment Project/phase. For example, TIF revenue bonds may be issued that will be repaid with the annual incremental revenues.

The first Source line item listed in the pro forma analysis is "Capitalized TIF Revenue", which was calculated for each phase of each Campus Area (in the 1st year of each redevelopment phase) using an assumed debt service coverage ratio of 1.25, a discount rate of 7.0%, and a 3.0% cost of issuance.

The second Source line item listed in the pro forma analysis is "Remainder TIF Revenue, after bond payments." This line represents the incremental revenue remaining after each year's estimated bond payment is made. Since the debt service coverage ratio is assumed at 1.25, eighty percent of each year's TIF revenue is used for the bond repayment, and then twenty percent remains. Note that the remaining TIF Revenue cannot be capitalized and can only be used as it comes in each year.

Produce Row

As shown in Tables PF.4A through PF.4C, the total nominal TIF revenue generated by the Produce Row Campus Area, based on an estimated 2.1 million square feet of new industrial space and creation of 545 additional jobs, is $37.4 million. The sum of the "Capitalized TIF Revenue" and the "Remainder TIF Revenue, after bond payments" for all phases of the Produce Row Campus Area is $20.4 million.

Adelaide

The total nominal TIF revenue generated by the Adelaide Campus Area, based on an estimated 2.5 million square feet of new industrial space and creation of 940 additional jobs, is $53.1 million. The sum of the "Capitalized TIF Revenue" and the "Remainder TIF Revenue, after bond payments" for all phases of the Adelaide Campus Area is $28.9 million.

Tyler and Remaining Area

Finally, the Tyler Campus Area is estimated to generate $9.8 million of nominal TIF revenue, based on 360,000 square feet of new industrial space and the creation of 180 additional jobs. The sum of the "Capitalized TIF Revenue" and the "Remainder TIF Revenue, after bond payments" for the Tyler Campus Area is $5.6 million.

Finally, the Remaining Area is estimated to generate $11.8 million in nominal TIF revenue. The sum of the "Capitalized TIF Revenue" and the "Remainder TIF Revenue, after bond payments" for the

Remaining Area is $6.4 million. Incremental revenue in the Remaining Area is due to general inflation and to the eventual increases in taxable value of parcels currently receiving tax abatement.

B. Assumptions Used to Estimate TIF Incremental Revenue

Preface: Numerous assumptions were necessary in order to prepare estimates of the potential incremental revenue resulting from designation of the Study Area as a Tax Increment Financing Redevelopment Project Area ("TIF District"). It is important to note that in preparation of these estimates we have chosen a fairly conservative set of assumption values. This suggests that the actual incremental revenues resulting from successful redevelopment of the Study Area could exceed the estimates contained herein. It is also true, however, that failure to accomplish significant redevelopment of the Study Area within the assumed timelines, or other external factors such as significant industrial real estate market weakness, could result in actual incremental revenues below the estimated values.

The assumptions having the most significant impact on the overall TIF Revenue Estimates are explained below. Several of these assumptions are summarized in Table PF.1.

1. Assumptions That Affect Both PILOTS and EATS

The quantities of new industrial development and the general absorption schedule are shown in Table PF.1. Note that most of the redevelopment of the Campus Areas will require significant land clearance, assemblage, remediation, and re-configuration before a prepared site can be delivered to the new industrial user.

(a) Redevelopment Quantities

The estimated quantities of new industrial space to be developed were determined by 1) estimating the amount of developable land available in each Campus Area by subtracting the land area needed for new streets, widened streets and rights-of-way, etc., as well as areas not conducive to development due to topographical constraints, rail lines and other site conditions; and then 2) applying a 40% gross building coverage ratio to determine the net developable land area for each Campus Area. Note that no new development is assumed in the Remaining Area (outside of the three Campus Areas).

(b) Rate of Absorption of New Industrial Space

According to data provided by CB Richard Ellis, between April 1999 and July 2002, the inventory of industrial space on the Missouri side of the St. Louis Region increased from 189 million to an estimated 197 million square feet, a net increase of 8 million square feet, or 2.4 million square feet per year.

The Illinois side of the St. Louis Region continues to see significant new industrial construction as well.

While occupied space remained stable during this period of time (at 180 million square feet) and vacancy rates increased, the market will continue to see new space coming on-line, as obsolete space is replaced. This trend of replacement space will be particularly evident in the City of St. Louis, since so much of the 78 million square feet in the city is in need of replacement.

The City of St. Louis currently has a 39% market share of regional industrial space. This share has been declining in recent years.

Based on net new construction of 2.4 million square feet per year, our absorption estimates represent the following capture rates of total market growth for the NRBC.

- 15.4% capture rate
- 21 acres per year
- 370,000 square feet per year

(c) Tax Increment Calculations

The TIF Revenue Estimates assume that tax increment is calculated on an aggregate basis for all parcels within a TIF redevelopment area, instead of calculating increment on a parcel-by-parcel basis. This means that the aggregate total EAV of the TIF must exceed the base EAV of the TIF before any increment can be collected. This method slows down and reduces the accumulation of TIF revenues, but is the method anticipated to be used by the City of St. Louis.

(d) Lifetimes of the TIFs

The TIF Revenue Estimates assume that the first TIF Redevelopment Areas will be adopted in mid-year 2004 and terminated 23 years after the start date of each Redevelopment Project—see Table PF.1 for details for each phase/project. Since property taxes are not due until December 31st of each year, the incremental property taxes (PILOTS) for the last assessment year of each phase are assumed not be to captured at all. The EATS are assumed to be collected and distributed on an ongoing basis and therefore 50% of the EATS generated in the last year of each phase are assumed to be captured in that year.

2. Assumptions Utilized for Estimates of PILOTS

(a) Estimated Values of New Industrial Development

The St. Louis city assessor estimates the market value of newly constructed industrial developments by reviewing a) the actual components and specifications of the building improvements and b) applying those specifications to the *Marshall and Swift Building Cost Estimator Guide.* For such new development, the assessor does not use the developer's reported cost of construction or the owner/developer's pro forma of anticipated income. The assessor then adds the estimated building cost to the estimated value of the land to arrive at the total property value. For purposes of estimating future TIF incremental property taxes, URS has derived estimates of the value of new industrial developments using this same method.

Construction Cost
The estimated construction costs per square foot of new industrial development as derived from *Marshall and Swift* indicate that St. Louis-area construction cost estimates range from $25.00–$50.00 per square foot for the types of new industrial development most likely to be attracted to the Study Area. Conversations with local developers confirm that the final construction costs would most likely fall in the range of $30.00 to $35.00 per square feet for the more basic, but good quality developments, such as warehouse/storage/distribution facilities. Note that the most recent large-scale industrial development (490,000 sq. ft.) in the city, the St. Louis Commerce Center, cost $32.73 per gross building square foot (excluding land costs). URS assumes that all new development in the three Campus Areas will be valued at $30.00 per square foot of improvements by the assessor.

Land Value
Our survey of real estate brokers and comparable industrial parks conducted in July 2002 (summarized below) suggests an upper limit on land pricing in the NRBC of $3 per square foot, with a more likely market average of $2.50 per square foot for serviced city industrial land.

Our interviews with brokers and developers indicate the following land pricing comparables in the St. Louis market:

- City of St. Louis (St. Louis Commerce Center) – $2.25 - $2.50 per square foot (including cost of site preparation)
- City of St. Louis (Union 70) - $3.00 per square foot
- Illinois (Sauget and Gateway) - $1.00 - $1.25 per square foot
- St. Louis County - $3.00 per square foot
- Earth City - $4.50 per square foot

(b) Estimated Land Values after Redevelopment
URS assumes the city will sell improved industrial land to developers for $2.50 per square foot, and also assumed that the city assessor will assess the land for property tax purposes at $2.00 per square foot. We have assumed a lower assessed value since the city assessor may not deem the land price a true market price, if tax abatement or other incentives are offered.

(c) Tax Abatement
The complete set of tables of TIF Revenue Estimates and the pro-forma analysis incorporate an assumption of 50% tax abatement. This assumes that 100% of all new development will receive a 50% property tax abatement for ten-years. Since this assumption is essentially a policy decision, a range of values for this assumption were input in the model to demonstrate the sensitivity to this assumption. The results of this analysis, utilizing assumptions that 10-year tax abatement levels are set at 0%, 25%, 50%, 75%, and 100%, are shown in Table PF.5 - Sensitivity Analysis of Tax Abatement.

(d) Property Value Appreciation
The TIF Revenue Estimates assume a 1.0% annual rate of inflation in values of both redeveloped and existing property, in the entire TIF Study Area, throughout the assumed life of the TIF. Note that this assumption effectively represents a composite assumption of depreciation and general

industrial real estate inflation. This assumption is based on general real estate inflation trends as well as an assumption that the new industrial developments in the Study Area will be of a reasonably high quality. If, however, the new developments in the Study Area were assumed to be of poor quality, with rapid depreciation rates, then the depreciation would offset the real estate inflation rate and the overall property value inflation rate would be lower than 1.0%.

In the case of land sales, however, the "Land Sale Revenue" estimates reflect a 2.0% annual rate of inflation from the assumed current (2003) level of $2.50 per square foot of serviced land.

(e) Properties Currently Under Tax Abatement

The Saint Louis Development Corporation (SLDC) provided URS with a listing of the properties within the Study Area that are currently receiving tax abatement. All of these properties fall within the Remaining Area (i.e. none are in the Campus Areas).It was assumed that each of these properties is receiving a ten-year abatement and that they are all industrial properties. For purposes of estimating the taxable values after the abatements expire, more conservative property value assumptions of $15 to $25 per square foot were used (depending upon building age) since the properties could not be reviewed individually.

3. Assumptions Utilized for Estimates of EATS

Important Note on TIF Administration

A critical step (at the time of the TIF creation) to ensure capture of all allowable EATS revenue will be to establish the base level of each tax and to put in place procedures to track and gather any and all EATS incremental revenues.

Economic Activity Taxes ("EATS") Included

Note that for every type of economic activity tax, only 50% of the actual incremental EATS are allowed for allocation to the TIF Special Fund, with the other 50% going to the taxing bodies. Since no retail or restaurants are included in the assumptions of new developments, no sales taxes or restaurant taxes are included in the TIF Revenue Estimates. In addition, since the assumed number of new businesses and employees in the Study Area is modest, the Graduated Business License Tax is not expected to generate significant revenue and has not been included in the TIF Revenue Estimates. Therefore, the three categories of taxes included in the EATS portion of the TIF Revenue Estimates are the ***Earnings Taxes, Utilities Taxes, and Payroll Taxes***.

(a) Earnings Taxes

The City of St. Louis levies a 1.0% tax on Business Net Profits (profits after federal and state taxes). Business Net Profits were conservatively estimated at 6.0% of the assumed salaries for new businesses only, for the entire Study Area. This tax does not generate much incremental revenue, totaling less than $600,000 over the entire lifetime of the TIF (nominal dollars).

(b) Utility Taxes

Utility taxes are levied by the City of St. Louis at 10% of gross utility costs for commercial users. The TIF then captures 50% of these utility taxes. Utility taxes included in the estimates are electric, water, gas, and telephone.

Electric
The TIF Revenue Estimates assume an average electric usage of 1 kwH per square foot per month, with an average electric rate of 4.25 cents per kwH, based on data from St. Louis RCGA.

Water
The TIF Revenue Estimates assume average water usage of 85 gallons per employee per working day. Gross water rates are assumed to be 14 cents per 100 gallons.

Gas
The TIF Revenue Estimates assume gas usage of 0.02 therms per square foot per month, with an average gas rate of 80 cents per therm, based on data from St. Louis RCGA.

Telephone
The TIF Revenue Estimates conservatively assume average gross telephone bills of $5 per 1000 square feet per month (or $60 per year per 1000 sq. ft.). This estimate is conservative due to lack of phone usage data for industrial users.

All utility revenues are assumed to grow at 2.0% per year in 2004 and thereafter.

(c) Payroll Taxes

Payroll taxes included in the TIF Revenue Estimates are 50% of the following taxes:
- 1.0% of gross payroll (City of St. Louis tax, deducted from individual payroll)
- 0.5% of gross payroll (City of St. Louis tax, paid by employer)
- 3.0% of gross payroll (State of Missouri tax, deducted from individual payroll) (special qualifications apply)

Important Qualifier: Note that the 3.0% State of Missouri payroll tax will only be possible to capture if the TIF is adopted under the MDSA qualifications. There are several criteria needed to qualify an area under the MDSA rules, but it is assumed that this will not be problematic, since all of the necessary criteria appear likely to be present.

Thus TIF incremental payroll tax revenues are estimated at 2.25% of estimated gross incremental payrolls (i.e. 50% of 4.5% of gross payrolls).

Estimating Gross Payrolls: Gross payrolls are estimated using a conservative estimate of the average salary per incremental employee of $30,000 and estimates of incremental employees based on employment densities of 2000 square feet per employee. These statistics are explained in detail below. Average salaries are assumed to grow at 3.0% per year in 2004 and thereafter.

Average Annual Salaries

URS analyzed Bureau of Labor Statistics data on average annual pay in the City of St. Louis. As the table below shows, the average annual pay for the sectors expected to be included in the proposed business campuses is $43,543.

Average Annual Pay, North Riverfront Area, 2001

Sector	Employees	Average Wage
NAICS 31-33 Manufacturing	20%	$54,772
NAICS 42 Wholesale trade	40%	$45,585
Trade, Transportation, and Utilities	40%	$35,886
Average		$43,543

Source: Bureau of Labor Statistics and URS Corp.

Since the new positions created by the NRBC may have lower pay than existing industrial jobs in the City of St. Louis, we have assumed a 30% discount factor for wage rates and used an average annual wage of $30,000.

Construction Salaries

The TIF Revenue Estimates assume creation of 700 full-time equivalent construction jobs per 1 million square feet of industrial space constructed. The annual average wage for construction jobs is also assumed at $30,000, which is a very conservative assumption, but capturing the payroll tax increments for these jobs may prove difficult so a highly conservative assumption was deemed appropriate. These construction jobs also are assumed to last for exactly one year.

Employment Density

The table below shows sample employment densities for warehouse/distribution and manufacturing development in St. Louis and comparable markets. Based on the data in this table, we have used a conservative employment density of 2,000 square feet of building per employee.

PRO FORMA APPENDIX

Item PF

Sample Employment Densities
Square feet per Employee

Company/Owner	Type of Business	Building Sq. Ft.	Number of Employees	Employment Density
Warehousing/Distribution				
Chicago International Produce Market	Wholesale trade	436,224	428	1,019
Ford Hotel Supply	Wholesale trade	125,000	68	1,838
Ford Supplier Park/Chicago	Auto parts	1,600,000	800	2,000
Hershey Foods, Illinois	Distribution	1,100,000	200	5,500
M&L Foods	Wholesale trade	47,000	28	1,679
St. Louis Produce Market	Wholesale trade	196,000	1,200	163
United Fruit & Produce Co.	Wholesale trade	68,000	325	209
Wal-Mart	Grocery distribution	1,000,000	575	1,739
Wal-Mart	Regional distribution	1,000,000	1,200	833
Average - Warehousing				**1,665**
Manufacturing				
Duke Manufacturing Co.	Restaurant equipment	60,000	174	345
Middendorf Meat	Food processing	170,000	220	773
Thiel Tool	Metal stamping	100,000	60	1,667
Vitro Seating Products	Furniture	150,000	80	1,875
Average - Manufacturing				**1,165**

Source: URS Corporation

II. All Other Sources of Funds

This portion of the appendix will briefly present the key assumptions utilized to generate estimates of the non-TIF revenue sources.

A. Land Sale Revenue

The third Source line item listed in the pro forma analysis is "Land Sale Revenue". As explained in part I section B-2 (b) of this Appendix, URS assumes the city will sell improved industrial land to developers for an average price of $2.50 per square foot. These land sale prices are assumed to increase at 2.0% per year.

B. Land Development Fund, Empowerment Zone, and EDA Grants

The fourth, sixth, and eighth Source line items listed in the pro forma analysis are entitled "Land Development Fund (LDF)", "Empowerment Zone", and "EDA Grants", respectively. These line items represents estimates made by SLDC. Note that the amount and timing of the repayments made to the Land Development Fund and the Empowerment Zones were also received from SLDC and are shown at the bottom of each pro forma "page".

C. LDF Interest Costs

The fifth Source line item listed in the pro forma analysis is entitled "LDF Interest Costs". This line item represents the estimated interest costs incurred based on the annual outstanding balance, net of repayments, of the Land Development Fund, calculated at a 4.0% annual interest rate. Note that in Phase 2 of Produce Row Campus it is assumed that $2,000,000 of the Land Development will not be paid back out of these funds. This is based upon information received from SLDC.

D. Missouri Brownfields Credits/Grants

The seventh Source line item listed in the pro forma analysis is entitled "Missouri Brownfields Credits/Grants". This line item represents the estimated revenue that can be generated to pay for environmental remediation costs in the Study Area. The estimate is calculated at 87% of the estimated remediation costs in each year of each Campus Area redevelopment phase. The 87% figure is based on the most recent information available regarding brownfield tax credits, e.g. every dollar of these tax credits can be sold to investors at 87 cents.

E. Missouri DOT

The tenth Source line item listed in the pro forma analysis is entitled "Missouri DOT". This line item represents the estimated revenue expected to be received from the Missouri Department of Transportation ("MoDOT") to help pay for road project costs. The dollars were calculated on a

road-by-road analysis throughout the entire Study Area. The three basic assumptions utilized to estimate the MoDOT revenue for each road are as follows:

- Local roads were assumed not to be eligible for any MoDOT funding.
- Roads on which MoDOT is expected to begin to perform maintenance are presumed as 100% funded by MoDOT.
- All other roads that are eligible for MoDOT funding but that are not to be maintained by MoDOT have been presumed at 75% funded by MoDOT.

This source is presumed as potential because as the final portions of this master plan were being concluded, the discussion to place a number of major streets in the City of St. Louis under state control was beginning.

F. EPA Grants and Army Corps of Engineers

The ninth and eleventh Source line items listed in the pro forma analysis are entitled "EPA Grants" and "Army Corps of Engineers", respectively. No funding has been estimated on either of these two line items, but they are included in the pro forma presentation simply to maintain awareness that some funding may be available in the future from the state or federal Environmental Protection Agencies and/or from the U.S. Army Corps of Engineers.

Table PF.1 Redevelopment Assumptions
St. Louis NRBC

Campus Redevelopment Area and Phase (each phase is a "Redevelopment Project")	Redevelopment Project Timeline			Total Net Acres to be Redeveloped	Total Sq. Ft. of New Industrial Development	Estimated Existing Job Base	Estimated Total Post-Redevelopment Jobs	Estimated INCREMENTAL Jobs Created
	Starting Year	Period of Redevelopment	Final Project Year (per TIF law)					
Produce Row Campus								
PHASE 1	**2004**	**2004 to 2008**	**2027**	**47.0**	**820,000**	**296**	**410**	**114**
PHASE 2	**2008**	**2008 to 2012**	**2031**	**51.0**	**880,000**	**87**	**440**	**353**
PHASE 3	**2012**	**2012 to 2014**	**2035**	**24.0**	**420,000**	**132**	**210**	**78**
Produce Row subtotal				**122.0**	**2,120,000**	**515**	**1,060**	**545**
Adelaide Campus								
PHASE 1	**2004**	**2004 to 2008**	**2027**	**32.0**	**570,000**	**229**	**285**	**56**
PHASE 2	**2007**	**2007 to 2011**	**2030**	**27.0**	**470,000**	**0**	**235**	**235**
PHASE 3	**2011**	**2011 to 2017**	**2034**	**82.0**	**1,440,000**	**71**	**720**	**649**
Adelaide subtotal				**141.0**	**2,480,000**	**300**	**1,240**	**940**
Tyler Campus	**2017**	**2017 to 2019**	**2040**	**21.0**	**360,000**	**0**	**180**	**180**
Remaining Area-Outside Campus Areas	**as funds allow, ongoing evaluation necessary**				**0**			**0**
TOTALS				**284.0**	**4,960,000**	**815**	**2,480**	**1,665**

	Other Critical Assumptions:	
1	Percent of new development receiving 10-year tax abatement::	**50.0%**
2	Overall average construction cost per sq ft of industrial buildings:	**$30.00**
3	Land value of property with new industrial development:	**$2.00**
4	Average annual salary per additional worker in TIF Area:	**$30,000**
5	Assumes all "TIF Redevelopment Areas" (except Tyler) are designated in 2004, with "TIF Redevelopment Projects" beginning between 2004 and 2010. The Tyler campus is assumed to be a distinct, single Redevelopment Area designated in 2017.	

Estimated total market value of NEW development:

Land	$24,742,080
Improvements	$148,800,000
Total	**$173,542,080**

Table PF.2A Sources and Uses Summary -- Full Study Area
St. Louis NRBC

	Produce Row Campus				Adelaide Campus				Tyler Campus	Remaining Area	Total Costs
	Phase 1	Phase 2	Phase 3	Totals - All Phases	Phase 1	Phase 2	Phase 3	Totals - All Phases			
Sources											
Capitalized TIF Revenue, (7.0%, 1.25 DSC)	$3,676,937	$5,601,132	$1,769,570	$11,047,639	$2,288,781	$3,582,790	$9,778,944	$15,650,514	$3,117,534	$3,466,275	$33,281,962
Remainder TIF Revenue, after bond pymts	$3,199,834	$4,635,730	$1,519,810	$9,355,374	$2,011,503	$2,918,313	$8,341,796	$13,271,612	$2,447,903	$2,948,516	$28,023,404
Land Sale Revenue	$5,154,473	$6,040,304	$3,024,754	$14,219,531	$3,498,539	$3,154,676	$10,594,475	$17,247,690	$2,923,504	$0	$34,390,725
Land Development Fund (LDF)	$0	$4,900,000	$0	$4,900,000	$4,900,000	$0	$0	$4,900,000	$0	$0	$9,800,000
LDF Interest Costs	$0	($627,200)	$0	($627,200)	($588,000)	$0	$0	($588,000)	$0	$0	($1,215,200)
Empowerment Zone	$0	$2,000,000	$0	$2,000,000	$2,000,000	$0	$0	$2,000,000	$2,000,000	$0	$6,000,000
Missouri Brownfields Credits/Grants	$946,978	$1,894,538	$907,715	$3,749,230	$1,695,778	$784,810	$1,572,873	$4,053,461	$1,831,167	$0	$9,633,858
EDA Grants	$1,500,000	$1,500,000	$1,500,000	$4,500,000	$1,500,000	$1,500,000	$1,500,000	$4,500,000	$1,000,000	$0	$10,000,000
EPA Grants	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0
Missouri DOT	$503,748	$1,514,363	$0	$2,018,111	$4,365,934	$0	$495,938	$4,861,872	$1,814,175	$49,455,517	$58,149,675
Army Corps of Engineers	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0
TOTAL SOURCES	**$14,981,969**	**$27,458,867**	**$8,721,848**	**$51,162,685**	**$21,672,534**	**$11,940,589**	**$32,284,025**	**$65,897,148**	**$15,134,283**	**$55,870,308**	**$188,064,425**
Uses											
Acquisition											
ROW	$228,848	$164,486	$246,890	$640,224	$560,613	$0	$951,895	$1,512,508	$150,238	$1,126,563	$3,429,531
Parcel	$2,484,008	$6,641,308	$2,227,500	$11,352,815	$2,625,160	$1,621,875	$5,700,625	$9,947,660	$4,373,688	$0	$25,674,163
Building Demolition	$999,518	$1,752,535	$441,890	$3,193,943	$477,109	$9,647	$530,952	$1,017,708	$637,200	$0	$4,848,852
Relocations	$0	$0	$0	$0	$2,070,012	$150,000	$559,998	$2,780,010	$1,050,000	$0	$3,830,010
Infrastructure											
Streets / Sewers / Signals	$1,946,305	$5,850,908	$3,005,519	$10,802,732	$6,694,941	$0	$707,167	$7,402,108	$3,585,247	$80,547,110	$102,337,197
Railroad Demolition / Relocation	$313,863	$0	$0	$313,863	$0	$868,350	$0	$868,350	$0	$0	$1,182,213
Vacated Road Demolition	$444,432	$946,373	$0	$1,390,805	$507,976	$0	$220,050	$728,026	$0	$5,330,028	$7,448,860
Utilities / Site Prep	$389,261	$1,170,182	$601,104	$2,160,546	$1,338,988	$0	$247,508	$1,586,497	$717,049	$16,109,422	$20,573,514
Hard Costs Contingency	$680,623	$1,652,579	$652,290	$2,985,493	$1,427,480	$264,987	$891,820	$2,584,287	$1,051,342	$10,311,312	$16,932,434
Remediation	$1,088,480	$2,177,630	$1,043,350	$4,309,460	$1,949,170	$902,080	$1,807,900	$4,659,150	$2,104,790	$0	$11,073,400
Soft Costs	$668,927	$1,590,112	$648,621	$2,907,660	$1,382,917	$236,766	$665,797	$2,285,481	$953,574	$11,790,415	$17,937,130
TOTAL USES	**$9,244,265**	**$21,946,112**	**$8,867,164**	**$40,057,541**	**$19,034,366**	**$4,053,706**	**$12,283,712**	**$35,371,783**	**$14,623,127**	**$125,214,851**	**$215,267,302**
Infrastructure Task Adjustment (15%)	($291,946)	($877,636)	($450,828)	($1,620,410)	($1,004,241)	$0	($106,075)	($1,110,316)	($537,787)	($12,082,067)	($15,350,580)
Adjust for Inflation in Costs (2.0%/year)	$252,097	$2,378,914	$1,722,431	$4,353,443	$507,728	$369,259	$2,204,550	$3,081,537	$4,648,649	$13,222,003	$25,305,632
TOTAL USES, with inflation	**$9,204,417**	**$23,447,390**	**$10,138,767**	**$42,790,573**	**$18,537,853**	**$4,422,964**	**$14,382,187**	**$37,343,004**	**$18,733,990**	**$126,354,787**	**$225,222,354**
Balance											
Surplus (Deficit)	**$5,777,553**	**$4,011,477**	**($1,416,919)**	**$8,372,112**	**$3,134,682**	**$7,517,624**	**$17,901,839**	**$28,554,145**	**($3,599,706)**	**($70,484,479)**	**($37,157,929)**
Surplus (Deficit), net of repayments	**$5,777,553**	**$1,071,477**	**($1,416,919)**	**$5,432,112**	**($3,765,318)**	**$7,517,624**	**$17,901,839**	**$21,654,145**	**($3,599,706)**	**($70,484,479)**	**($46,997,929)**

Table PF.2B St. Louis NRBC Sources and Uses Summary -- Produce Row and Adelaide Campuses

	Produce Row Campus				Adelaide Campus				Total of Produce Row AND Adelaide Campuses
	Phase 1	Phase 2	Phase 3	Totals - All Phases	Phase 1	Phase 2	Phase 3	Totals - All Phases	
Sources									
Capitalized TIF Revenue, (7.0%, 1.25 DSC)	$3,676,937	$5,601,132	$1,769,570	$11,047,639	$2,288,781	$3,582,790	$9,778,944	$15,650,514	$26,698,153
Remainder TIF Revenue, after bond pymts	$3,199,834	$4,635,730	$1,519,810	$9,355,374	$2,011,503	$2,918,313	$8,341,796	$13,271,612	$22,626,985
Land Sale Revenue	$5,154,473	$6,040,304	$3,024,754	$14,219,531	$3,498,539	$3,154,676	$10,594,475	$17,247,690	$31,467,221
Land Development Fund (LDF)	$0	$4,900,000	$0	$4,900,000	$4,900,000	$0	$0	$4,900,000	$9,800,000
LDF Interest Costs	$0	($627,200)	$0	($627,200)	($588,000)	$0	$0	($588,000)	($1,215,200)
Empowerment Zone	$0	$2,000,000	$0	$2,000,000	$2,000,000	$0	$0	$2,000,000	$4,000,000
Missouri Brownfields Credits/Grants	$946,978	$1,894,538	$907,715	$3,749,230	$1,695,778	$784,810	$1,572,873	$4,053,461	$7,802,691
EDA Grants	$1,500,000	$1,500,000	$1,500,000	$4,500,000	$1,500,000	$1,500,000	$1,500,000	$4,500,000	$9,000,000
EPA Grants	$0	$0	$0	$0	$0	$0	$0	$0	$0
Missouri DOT	$503,748	$1,514,363	$0	$2,018,111	$4,365,934	$0	$495,938	$4,861,872	$6,879,983
Army Corps of Engineers	$0	$0	$0	$0	$0	$0	$0	$0	$0
TOTAL SOURCES	**$14,981,969**	**$27,458,867**	**$8,721,848**	**$51,162,685**	**$21,672,534**	**$11,940,589**	**$32,284,025**	**$65,897,148**	**$117,059,834**
Uses									
Acquisition									
ROW	$228,848	$164,486	$246,890	$640,224	$560,613	$0	$951,895	$1,512,508	$2,152,731
Parcel	$2,484,008	$6,641,308	$2,227,500	$11,352,815	$2,625,160	$1,621,875	$5,700,625	$9,947,660	$21,300,475
Building Demolition	$999,518	$1,752,535	$441,890	$3,193,943	$477,109	$9,647	$530,952	$1,017,708	$4,211,652
Relocations	$0	$0	$0	$0	$2,070,012	$150,000	$559,998	$2,780,010	$2,780,010
Infrastructure									
Streets / Sewers / Signals	$1,946,305	$5,850,908	$3,005,519	$10,802,732	$6,694,941	$0	$707,167	$7,402,108	$18,204,840
Railroad Demolition / Relocation	$313,863	$0	$0	$313,863	$0	$868,350	$0	$868,350	$1,182,213
Vacated Road Demolition	$444,432	$946,373	$0	$1,390,805	$507,976	$0	$220,050	$728,026	$2,118,831
Utilities / Site Prep	$389,261	$1,170,182	$601,104	$2,160,546	$1,338,988	$0	$247,508	$1,586,497	$3,747,043
Hard Costs Contingency	$680,623	$1,652,579	$652,290	$2,985,493	$1,427,480	$264,987	$891,820	$2,584,287	$5,569,779
Remediation	$1,088,480	$2,177,630	$1,043,350	$4,309,460	$1,949,170	$902,080	$1,807,900	$4,659,150	$8,968,610
Soft Costs	$668,927	$1,590,112	$648,621	$2,907,660	$1,382,917	$236,766	$665,797	$2,285,481	$5,193,141
TOTAL USES	**$9,244,265**	**$21,946,112**	**$8,867,164**	**$40,057,541**	**$19,034,366**	**$4,053,706**	**$12,283,712**	**$35,371,783**	**$75,429,324**
Infrastructure Task Adjustment (15%)	($291,946)	($877,636)	($450,828)	($1,620,410)	($1,004,241)	$0	($106,075)	($1,110,316)	($2,730,726)
Adjust for Inflation in Costs (2.0%/year)	$252,097	$2,378,914	$1,722,431	$4,353,443	$507,728	$369,259	$2,204,550	$3,081,537	$7,434,979
TOTAL USES, with inflation	**$9,204,417**	**$23,447,390**	**$10,138,767**	**$42,790,573**	**$18,537,853**	**$4,422,964**	**$14,382,187**	**$37,343,004**	**$80,133,577**
Balance									
Surplus (Deficit)	**$5,777,553**	**$4,011,477**	**($1,416,919)**	**$8,372,112**	**$3,134,682**	**$7,517,624**	**$17,901,839**	**$28,554,145**	**$36,926,256**
Surplus (Deficit), net of repayments	**$5,777,553**	**$1,071,477**	**($1,416,919)**	**$5,432,112**	**($3,765,318)**	**$7,517,624**	**$17,901,839**	**$21,654,145**	**$27,086,256**

Table PF.3A Pro Forma Financial Analysis for Full Study Area
St. Louis NRBC

	Total	Year 1 2004	Year 2 2005	Year 3 2006	Year 4 2007	Year 5 2008	Year 6 2009	Year 7 2010	Year 8 2011	Year 9 2012	Year 10 2013	Year 11 2014	Year 12 2015	Year 13 2016	Year 14 2017	Year 15 2018	Year 16 2019
Produce Row Business Campus (148 gross acres, 122 net developable acres)																	
TIF Revenue	$37,421,494	$0	$2,117	$4,277	$11,951	$175,709	$305,766	$497,312	$657,770	$742,515	$858,370	$1,067,763	$1,073,036	$1,260,937	$1,415,138	$1,550,735	$1,653,404
Sources																	
Capitalized TIF Revenue, (7.0%, 1.25 DSC)	$11,047,639	$3,676,937	$0	$0	$0	$5,601,132	$0	$0	$0	$1,769,570	$0	$0	$0	$0	$0	$0	$0
Remainder TIF Revenue, after bond pymts	$9,355,374	$0	$529	$1,069	$2,988	$43,927	$76,441	$124,328	$164,442	$185,629	$214,592	$266,941	$268,259	$315,234	$353,785	$387,684	$413,351
Land Sale Revenue	$14,219,531	$0	$1,278,019	$1,303,579	$1,329,651	$1,243,224	$1,613,930	$1,646,209	$1,679,133	$1,101,032	$1,497,403	$1,527,351	$0	$0	$0	$0	$0
Land Development Fund (LDF)	$4,900,000	$0	$0	$0	$0	$0	$4,900,000	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0
LDF Interest Costs	($627,200)	$0	$0	$0	$0	$0	($196,000)	($156,800)	($117,600)	($78,400)	($78,400)	$0	$0	$0	$0	$0	$0
Empowerment Zone	$2,000,000	$0	$0	$0	$0	$0	$2,000,000	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0
Missouri Brownfields Credits/Grants	$3,749,230	$568,187	$378,791	$0	$0	$1,136,723	$757,815	$0	$0	$544,629	$363,086	$0	$0	$0	$0	$0	$0
EDA Grants	$4,500,000	$750,000	$750,000	$0	$0	$1,500,000	$0	$0	$0	$1,500,000	$0	$0	$0	$0	$0	$0	$0
EPA Grants	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0
Missouri DOT	$2,018,111	$302,249	$201,499	$0	$0	$908,618	$605,745	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0
Army Corps of Engineers	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0
TOTAL SOURCES	$51,162,685	$5,297,372	$2,608,839	$1,304,649	$1,332,639	$10,433,624	$9,757,932	$1,613,737	$1,725,976	$5,022,459	$1,996,681	$1,794,292	$268,259	$315,234	$353,785	$387,684	$413,351
Uses																	
Acquisition																	
ROW	$640,224	$137,309	$91,539	$0	$0	$98,692	$65,794	$0	$0	$148,134	$98,756	$0	$0	$0	$0	$0	$0
Parcel	$11,352,815	$1,490,405	$993,603	$0	$0	$3,984,785	$2,656,523	$0	$0	$1,336,500	$891,000	$0	$0	$0	$0	$0	$0
Building Demolition	$3,193,943	$599,711	$399,807	$0	$0	$1,051,521	$701,014	$0	$0	$265,134	$176,756	$0	$0	$0	$0	$0	$0
Relocations	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0
Infrastructure																	
Streets / Sewers / Signals	$10,802,732	$1,167,783	$778,522	$0	$0	$3,510,545	$2,340,363	$0	$0	$1,803,311	$1,202,207	$0	$0	$0	$0	$0	$0
Infrastructure Task Adjustment (15%)	($1,620,410)	($175,167)	($116,778)	$0	$0	($526,582)	($351,054)	$0	$0	($270,497)	($180,331)	$0	$0	$0	$0	$0	$0
Railroad Demolition / Relocation	$313,863	$188,318	$125,545	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0
Vacated Road Demolition	$1,390,805	$266,659	$177,773	$0	$0	$567,824	$378,549	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0
Utilities / Site Prep	$2,160,546	$233,557	$155,704	$0	$0	$702,109	$468,073	$0	$0	$360,662	$240,441	$0	$0	$0	$0	$0	$0
Hard Costs Contingency	$2,985,493	$408,374	$272,249	$0	$0	$991,547	$661,032	$0	$0	$391,374	$260,916	$0	$0	$0	$0	$0	$0
Remediation	$4,309,460	$653,088	$435,392	$0	$0	$1,306,578	$871,052	$0	$0	$626,010	$417,340	$0	$0	$0	$0	$0	$0
Soft Costs	$2,907,660	$401,356	$267,571	$0	$0	$954,067	$636,045	$0	$0	$389,173	$259,448	$0	$0	$0	$0	$0	$0
TOTAL USES	$38,437,131	$5,371,392	$3,580,928	$0	$0	$12,641,085	$8,427,390	$0	$0	$5,049,802	$3,366,534	$0	$0	$0	$0	$0	$0
Adjust for Inflation in Costs (2.0%/year)	$4,353,443	$107,428	$144,669	$0	$0	$1,315,694	$1,063,220	$0	$0	$985,179	$737,252	$0	$0	$0	$0	$0	$0
Surplus (Deficit)	**$8,372,112**	**($181,447)**	**($1,116,759)**	**$1,304,649**	**$1,332,639**	**($3,523,156)**	**$267,322**	**$1,613,737**	**$1,725,976**	**($1,012,522)**	**($2,107,105)**	**$1,794,292**	**$268,259**	**$315,234**	**$353,785**	**$387,684**	**$413,351**
Repayment - Land Dev. Fund	($2,940,000)	$0	$0	$0	$0	$0	($980,000)	($980,000)	($980,000)	$0	$0	$0	$0	$0	$0	$0	$0
Repayment-Empowerment Zone	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0
Total LDF & EZ Repayments	($2,940,000)	$0	$0	$0	$0	$0	($980,000)	($980,000)	($980,000)	$0	$0	$0	$0	$0	$0	$0	$0
Surplus (Deficit), net of repayments	**$5,432,112**	**($181,447)**	**($1,116,759)**	**$1,304,649**	**$1,332,639**	**($3,523,156)**	**($712,678)**	**$633,737**	**$745,976**	**($1,012,522)**	**($2,107,105)**	**$1,794,292**	**$268,259**	**$315,234**	**$353,785**	**$387,684**	**$413,351**
Adelaide Business Campus (172 gross acres, 141 net developable acres)																	
TIF Revenue	$53,086,447	$0	$786	$1,587	$4,145	$139,670	$245,810	$373,268	$494,703	$601,862	$719,258	$865,230	$1,123,081	$1,404,566	$1,666,696	$1,967,827	$2,247,918
Sources																	
Capitalized TIF Revenue, (7.0%, 1.25 DSC)	$15,650,514	$2,288,781	$0	$0	$3,582,790	$0	$0	$0	$9,778,944	$0	$0	$0	$0	$0	$0	$0	$0
Remainder TIF Revenue, after bond pymts	$13,271,612	$0	$196	$397	$1,036	$34,917	$61,453	$93,317	$123,676	$150,465	$179,815	$216,308	$280,770	$351,142	$416,674	$491,957	$561,980
Land Sale Revenue	$17,247,690	$0	$958,514	$977,685	$997,238	$1,130,203	$806,965	$823,104	$959,505	$1,468,042	$1,123,052	$1,145,513	$2,726,322	$2,780,848	$1,350,698	$0	$0
Land Development Fund (LDF)	$4,900,000	$4,900,000	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0
LDF Interest Costs	($588,000)	($196,000)	($156,800)	($117,600)	($78,400)	($39,200)	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0
Empowerment Zone	$2,000,000	$2,000,000	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0
Missouri Brownfields Credits/Grants	$4,053,461	$1,017,467	$678,311	$0	$470,886	$313,924	$0	$0	$943,724	$629,149	$0	$0	$0	$0	$0	$0	$0

Table PF.3A Pro Forma Financial Analysis for Full Study Area
St. Louis NRBC

	Total	Year 1 2004	Year 2 2005	Year 3 2006	Year 4 2007	Year 5 2008	Year 6 2009	Year 7 2010	Year 8 2011	Year 9 2012	Year 10 2013	Year 11 2014	Year 12 2015	Year 13 2016	Year 14 2017	Year 15 2018	Year 16 2019
EDA Grants	$4,500,000	$750,000	$750,000	$0	$1,500,000	$0	$0	$0	$1,500,000	$0	$0	$0	$0	$0	$0	$0	$0
EPA Grants	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0
Missouri DOT	$4,861,872	$2,619,560	$1,746,374	$0	$0	$0	$0	$0	$297,563	$198,375	$0	$0	$0	$0	$0	$0	$0
Army Corps of Engineers	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0
TOTAL SOURCES	$65,897,148	$13,379,808	$3,976,595	$860,481	$6,473,550	$1,439,845	$868,418	$916,421	$13,603,411	$2,446,032	$1,302,867	$1,361,821	$3,007,092	$3,131,990	$1,767,372	$491,957	$561,980
Uses																	
Acquisition																	
ROW	$1,512,508	$336,368	$224,245	$0	$0	$0	$0	$0	$571,137	$380,758	$0	$0	$0	$0	$0	$0	$0
Parcel	$9,947,660	$1,575,096	$1,050,064	$0	$973,125	$648,750	$0	$0	$3,420,375	$2,280,250	$0	$0	$0	$0	$0	$0	$0
Building Demolition	$1,017,708	$286,265	$190,844	$0	$5,788	$3,859	$0	$0	$318,571	$212,381	$0	$0	$0	$0	$0	$0	$0
Relocations	$2,780,010	$1,242,007	$828,005	$0	$90,000	$60,000	$0	$0	$335,999	$223,999	$0	$0	$0	$0	$0	$0	$0
Infrastructure																	
Streets / Sewers / Signals	$7,402,108	$4,016,965	$2,677,976	$0	$0	$0	$0	$0	$424,300	$282,867	$0	$0	$0	$0	$0	$0	$0
Infrastructure Task Adjustment (15%)	($1,110,316)	($602,545)	($401,696)	$0	$0	$0	$0	$0	($63,645)	($42,430)	$0	$0	$0	$0	$0	$0	$0
Railroad Demolition / Relocation	$868,350	$0	$0	$0	$521,010	$347,340	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0
Vacated Road Demolition	$728,026	$304,786	$203,190	$0	$0	$0	$0	$0	$132,030	$88,020	$0	$0	$0	$0	$0	$0	$0
Utilities / Site Prep	$1,586,497	$803,393	$535,595	$0	$0	$0	$0	$0	$148,505	$99,003	$0	$0	$0	$0	$0	$0	$0
Hard Costs Contingency	$2,584,287	$856,488	$570,992	$0	$158,992	$105,995	$0	$0	$535,092	$356,728	$0	$0	$0	$0	$0	$0	$0
Remediation	$4,659,150	$1,169,502	$779,668	$0	$541,248	$360,832	$0	$0	$1,084,740	$723,160	$0	$0	$0	$0	$0	$0	$0
Soft Costs	$2,285,481	$829,750	$553,167	$0	$142,060	$94,707	$0	$0	$399,478	$266,319	$0	$0	$0	$0	$0	$0	$0
TOTAL USES	$34,261,467	$10,818,075	$7,212,050	$0	$2,432,223	$1,621,482	$0	$0	$7,306,582	$4,871,055	$0	$0	$0	$0	$0	$0	$0
Adjust for Inflation in Costs (2.0%/year)	$3,081,537	$216,361	$291,367	$0	$200,493	$168,765	$0	$0	$1,254,243	$950,307	$0	$0	$0	$0	$0	$0	$0
Surplus (Deficit)	**$28,554,145**	**$2,345,372**	**($3,526,821)**	**$860,481**	**$3,840,833**	**($350,403)**	**$868,418**	**$916,421**	**$5,042,585**	**($3,375,329)**	**$1,302,867**	**$1,361,821**	**$3,007,092**	**$3,131,990**	**$1,767,372**	**$491,957**	**$561,980**
Repayment - Land Dev. Fund	($4,900,000)	($980,000)	($980,000)	($980,000)	($980,000)	($980,000)	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0
Repayment-Empowerment Zone	($2,000,000)	$0	$0	$0	$0	$0	($2,000,000)	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0
Total LDF & EZ Repayments	($6,900,000)	($980,000)	($980,000)	($980,000)	($980,000)	($980,000)	($2,000,000)	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0
Surplus (Deficit), net of repayments	**$21,654,145**	**$1,365,372**	**($4,506,821)**	**($119,519)**	**$2,860,833**	**($1,330,403)**	**($1,131,582)**	**$916,421**	**$5,042,585**	**($3,375,329)**	**$1,302,867**	**$1,361,821**	**$3,007,092**	**$3,131,990**	**$1,767,372**	**$491,957**	**$561,980**

(Final two payments on LDF are provided by existing Tax Credits of $2,000,000.)

Tyler Business Campus
(39 gross acres, 21 net developable acres)

Nominal TIF Revenue	$9,791,613	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$135,417	$206,109
Sources																	
Capitalized TIF Revenue, (7.0%, 1.25 DSC)	$3,117,534	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$3,117,534	$0	$0
Remainder TIF Revenue, after bond pymts	$2,447,903	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$33,854	$51,527
Land Sale Revenue	$2,923,504	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$1,377,712	$1,545,792
Land Development Fund (LDF)	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0
LDF Interest Costs	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0
Empowerment Zone	$2,000,000	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$2,000,000	$0	$0
Missouri Brownfields Credits/Grants	$1,831,167	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$1,098,700	$732,467	$0
EDA Grants	$1,000,000	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$1,000,000	$0	$0
EPA Grants	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0
Missouri DOT	$1,814,175	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$1,088,505	$725,670	$0
Army Corps of Engineers	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0
TOTAL SOURCES	$15,134,283	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$8,304,739	$2,869,703	$1,597,320
Uses																	
Acquisition																	
ROW	$150,238	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$90,143	$60,095	$0
Parcel	$4,373,688	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$2,624,213	$1,749,475	$0

Table PF.3A Pro Forma Financial Analysis for Full Study Area
St. Louis NRBC

	Total	Year 1 2004	Year 2 2005	Year 3 2006	Year 4 2007	Year 5 2008	Year 6 2009	Year 7 2010	Year 8 2011	Year 9 2012	Year 10 2013	Year 11 2014	Year 12 2015	Year 13 2016	Year 14 2017	Year 15 2018	Year 16 2019
Building Demolition	$637,200	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$382,320	$254,880	$0
Relocations	$1,050,000	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$630,000	$420,000	$0
Infrastructure																	
Streets / Sewers / Signals	$3,585,247	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$2,151,148	$1,434,099	$0
Infrastructure Task Adjustment (15%)	($537,787)	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	($322,672)	($215,115)	$0
Railroad Demolition / Relocation	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0
Vacated Road Demolition	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0
Utilities / Site Prep	$717,049	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$430,230	$286,820	$0
Hard Costs Contingency	$1,051,342	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$630,805	$420,537	$0
Remediation	$2,104,790	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$1,262,874	$841,916	$0
Soft Costs	$953,574	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$572,144	$381,429	$0
TOTAL USES	$14,085,340	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$8,451,204	$5,634,136	$0
Adjust for Inflation in Costs (2.0%/year)	$4,648,649	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$2,699,980	$1,948,669	$0
Surplus (Deficit)	**($3,599,706)**	**$0**	**$0**	**$0**	**$0**	**$0**	**$0**	**$0**	**$0**	**$0**	**$0**	**$0**	**$0**	**$0**	**($2,846,445)**	**($4,713,102)**	**$1,597,320**
Repayment - Land Dev. Fund	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0
Repayment-Empowerment Zone	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0
Total LDF & EZ Repayments	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0
Surplus (Deficit), net of repayments	**($3,599,706)**	**$0**	**$0**	**$0**	**$0**	**$0**	**$0**	**$0**	**$0**	**$0**	**$0**	**$0**	**$0**	**$0**	**($2,846,445)**	**($4,713,102)**	**$1,597,320**
Remaining Area (approximately 740 acres)																	
TIF Revenue	$11,794,063	$0	$48,037	$97,040	$98,303	$159,133	$180,038	$271,910	$302,697	$356,818	$453,223	$520,427	$520,427	$578,925	$578,925	$638,598	$638,598
Sources																	
Capitalized TIF Revenue, (7.0%, 1.25 DSC)	$3,466,275	$3,466,275	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0
Remainder TIF Revenue, after bond pymts	$2,948,516	$0	$12,009	$24,260	$24,576	$39,783	$45,009	$67,978	$75,674	$89,205	$113,306	$130,107	$130,107	$144,731	$144,731	$159,650	$159,650
Land Sale Revenue	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0
Land Development Fund (LDF)	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0
LDF Interest Costs	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0
Empowerment Zone	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0
Missouri Brownfields Credits/Grants	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0
EDA Grants	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0
EPA Grants	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0
Missouri DOT	$49,455,517	$4,945,552	$4,945,552	$4,945,552	$4,945,552	$4,945,552	$4,945,552	$4,945,552	$4,945,552	$4,945,552	$4,945,552	$0	$0	$0	$0	$0	$0
Army Corps of Engineers	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0
TOTAL SOURCES	$55,870,308	$8,411,827	$4,957,561	$4,969,812	$4,970,127	$4,985,335	$4,990,561	$5,013,529	$5,021,226	$5,034,756	$5,058,857	$130,107	$130,107	$144,731	$144,731	$159,650	$159,650
Uses																	
Acquisition																	
ROW	$1,126,563	$112,656	$112,656	$112,656	$112,656	$112,656	$112,656	$112,656	$112,656	$112,656	$112,656	$0	$0	$0	$0	$0	$0
Parcel	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0
Building Demolition	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0
Relocations	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0
Infrastructure																	
Streets / Sewers / Signals	$80,547,110	$8,054,711	$8,054,711	$8,054,711	$8,054,711	$8,054,711	$8,054,711	$8,054,711	$8,054,711	$8,054,711	$8,054,711	$0	$0	$0	$0	$0	$0
Infrastructure Task Adjustment (15%)	($12,082,067)	($1,208,207)	($1,208,207)	($1,208,207)	($1,208,207)	($1,208,207)	($1,208,207)	($1,208,207)	($1,208,207)	($1,208,207)	($1,208,207)	$0	$0	$0	$0	$0	$0
Railroad Demolition / Relocation	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0
Vacated Road Demolition	$5,330,028	$533,003	$533,003	$533,003	$533,003	$533,003	$533,003	$533,003	$533,003	$533,003	$533,003	$0	$0	$0	$0	$0	$0
Utilities / Site Prep	$16,109,422	$1,610,942	$1,610,942	$1,610,942	$1,610,942	$1,610,942	$1,610,942	$1,610,942	$1,610,942	$1,610,942	$1,610,942	$0	$0	$0	$0	$0	$0
Hard Costs Contingency	$10,311,312	$1,031,131	$1,031,131	$1,031,131	$1,031,131	$1,031,131	$1,031,131	$1,031,131	$1,031,131	$1,031,131	$1,031,131	$0	$0	$0	$0	$0	$0
Remediation	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0

Table PF.3A Pro Forma Financial Analysis for Full Study Area
St. Louis NRBC

	Total	Year 1 2004	Year 2 2005	Year 3 2006	Year 4 2007	Year 5 2008	Year 6 2009	Year 7 2010	Year 8 2011	Year 9 2012	Year 10 2013	Year 11 2014	Year 12 2015	Year 13 2016	Year 14 2017	Year 15 2018	Year 16 2019
Soft Costs	$11,790,415	$1,179,042	$1,179,042	$1,179,042	$1,179,042	$1,179,042	$1,179,042	$1,179,042	$1,179,042	$1,179,042	$1,179,042	$0	$0	$0	$0	$0	$0
TOTAL USES	$113,132,784	$11,313,278	$11,313,278	$11,313,278	$11,313,278	$11,313,278	$11,313,278	$11,313,278	$11,313,278	$11,313,278	$11,313,278	$0	$0	$0	$0	$0	$0
Adjust for Inflation in Costs (2.0%/year)	$13,222,003	$226,266	$457,056	$692,463	$932,578	$1,177,495	$1,427,311	$1,682,122	$1,942,030	$2,207,137	$2,477,545	$0	$0	$0	$0	$0	$0
Surplus (Deficit)	**($70,484,479)**	**($3,127,717)**	**($6,812,774)**	**($7,035,930)**	**($7,275,729)**	**($7,505,439)**	**($7,750,028)**	**($7,981,872)**	**($8,234,083)**	**($8,485,659)**	**($8,731,966)**	**$130,107**	**$130,107**	**$144,731**	**$144,731**	**$159,650**	**$159,650**
Repayment - Land Dev. Fund	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0
Repayment-Empowerment Zone	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0
Total LDF & EZ Repayments	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0
Surplus (Deficit), net of repayments	**($70,484,479)**	**($3,127,717)**	**($6,812,774)**	**($7,035,930)**	**($7,275,729)**	**($7,505,439)**	**($7,750,028)**	**($7,981,872)**	**($8,234,083)**	**($8,485,659)**	**($8,731,966)**	**$130,107**	**$130,107**	**$144,731**	**$144,731**	**$159,650**	**$159,650**
Grand Total																	
TIF Revenue	$112,093,618	$0	$50,940	$102,905	$114,399	$474,511	$731,614	$1,142,490	$1,455,169	$1,701,195	$2,030,851	$2,453,421	$2,716,545	$3,244,429	$3,660,759	$4,292,578	$4,746,029
Sources																	
Capitalized TIF Revenue, (7.0%, 1.25 DSC)	$33,281,962	$9,431,993	$0	$0	$3,582,790	$5,601,132	$0	$0	$9,778,944	$1,769,570	$0	$0	$0	$0	$3,117,534	$0	$0
Remainder TIF Revenue, after bond pymts	$28,023,404	$0	$12,735	$25,726	$28,600	$118,628	$182,903	$285,623	$363,792	$425,299	$507,713	$613,355	$679,136	$811,107	$915,190	$1,073,145	$1,186,507
Land Sale Revenue	$34,390,725	$0	$2,236,533	$2,281,264	$2,326,889	$2,373,427	$2,420,896	$2,469,313	$2,638,638	$2,569,074	$2,620,455	$2,672,864	$2,726,322	$2,780,848	$1,350,698	$1,377,712	$1,545,792
Land Development Fund (LDF)	$9,800,000	$4,900,000	$0	$0	$0	$0	$4,900,000	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0
LDF Interest Costs	($1,215,200)	($196,000)	($156,800)	($117,600)	($78,400)	($39,200)	($196,000)	($156,800)	($117,600)	($78,400)	($78,400)	$0	$0	$0	$0	$0	$0
Empowerment Zone	$6,000,000	$2,000,000	$0	$0	$0	$0	$2,000,000	$0	$0	$0	$0	$0	$0	$0	$2,000,000	$0	$0
Missouri Brownfields Credits/Grants	$9,633,858	$1,585,653	$1,057,102	$0	$470,886	$1,450,647	$757,815	$0	$943,724	$1,173,778	$363,086	$0	$0	$0	$1,098,700	$732,467	$0
EDA Grants	$10,000,000	$1,500,000	$1,500,000	$0	$1,500,000	$1,500,000	$0	$0	$1,500,000	$1,500,000	$0	$0	$0	$0	$1,000,000	$0	$0
EPA Grants	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0
Missouri DOT	$58,149,675	$7,867,361	$6,893,425	$4,945,552	$4,945,552	$5,854,170	$5,551,297	$4,945,552	$5,243,115	$5,143,927	$4,945,552	$0	$0	$0	$1,088,505	$725,670	$0
Army Corps of Engineers	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0
TOTAL SOURCES	$188,064,425	$27,089,008	$11,542,995	$7,134,942	$12,776,316	$16,858,803	$15,616,911	$7,543,688	$20,350,612	$12,503,247	$8,358,405	$3,286,219	$3,405,458	$3,591,955	$10,570,626	$3,908,993	$2,732,300
Uses																	
Acquisition																	
ROW	$3,429,531	$586,332	$428,440	$112,656	$112,656	$211,348	$178,451	$112,656	$683,793	$641,548	$211,412	$0	$0	$0	$90,143	$60,095	$0
Parcel	$25,674,163	$3,065,500	$2,043,667	$0	$973,125	$4,633,535	$2,656,523	$0	$3,420,375	$3,616,750	$891,000	$0	$0	$0	$2,624,213	$1,749,475	$0
Building Demolition	$4,848,852	$885,976	$590,651	$0	$5,788	$1,055,380	$701,014	$0	$318,571	$477,515	$176,756	$0	$0	$0	$382,320	$254,880	$0
Relocations	$3,830,010	$1,242,007	$828,005	$0	$90,000	$60,000	$0	$0	$335,999	$223,999	$0	$0	$0	$0	$630,000	$420,000	$0
Infrastructure																	
Streets / Sewers / Signals	$102,337,197	$13,239,459	$11,511,210	$8,054,711	$8,054,711	$11,565,256	$10,395,074	$8,054,711	$8,479,011	$10,140,889	$9,256,918	$0	$0	$0	$2,151,148	$1,434,099	$0
Infrastructure Task Adjustment (15%)	($15,350,580)	($1,985,919)	($1,726,681)	($1,208,207)	($1,208,207)	($1,734,788)	($1,559,261)	($1,208,207)	($1,271,852)	($1,521,133)	($1,388,538)	$0	$0	$0	($322,672)	($215,115)	$0
Railroad Demolition / Relocation	$1,182,213	$188,318	$125,545	$0	$521,010	$347,340	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0
Vacated Road Demolition	$7,448,860	$1,104,448	$913,966	$533,003	$533,003	$1,100,827	$911,552	$533,003	$665,033	$621,023	$533,003	$0	$0	$0	$0	$0	$0
Utilities / Site Prep	$20,573,514	$2,647,892	$2,302,242	$1,610,942	$1,610,942	$2,313,051	$2,079,015	$1,610,942	$1,759,447	$2,070,608	$1,851,384	$0	$0	$0	$430,230	$286,820	$0
Hard Costs Contingency	$16,932,434	$2,295,993	$1,874,373	$1,031,131	$1,190,124	$2,128,674	$1,692,163	$1,031,131	$1,566,223	$1,779,233	$1,292,047	$0	$0	$0	$630,805	$420,537	$0
Remediation	$11,073,400	$1,822,590	$1,215,060	$0	$541,248	$1,667,410	$871,052	$0	$1,084,740	$1,349,170	$417,340	$0	$0	$0	$1,262,874	$841,916	$0
Soft Costs	$17,937,130	$2,410,148	$1,999,779	$1,179,042	$1,321,101	$2,227,815	$1,815,086	$1,179,042	$1,578,520	$1,834,533	$1,438,490	$0	$0	$0	$572,144	$381,429	$0
TOTAL USES	$199,916,723	$27,502,745	$22,106,256	$11,313,278	$13,745,502	$25,575,846	$19,740,669	$11,313,278	$18,619,860	$21,234,135	$14,679,813	$0	$0	$0	$8,451,204	$5,634,136	$0
Adjust for Inflation in Costs (2.0%/year)	$25,305,632	$550,055	$893,093	$692,463	$1,133,071	$2,661,955	$2,490,531	$1,682,122	$3,196,274	$4,142,622	$3,214,797	$0	$0	$0	$2,699,980	$1,948,669	$0
Surplus (Deficit)	**($37,157,929)**	**($963,792)**	**($11,456,354)**	**($4,870,800)**	**($2,102,257)**	**($11,378,997)**	**($6,614,288)**	**($5,451,713)**	**($1,465,522)**	**($12,873,510)**	**($9,536,204)**	**$3,286,219**	**$3,405,458**	**$3,591,955**	**($580,558)**	**($3,673,812)**	**$2,732,300**
Repayment - Land Dev. Fund	($7,840,000)	($980,000)	($980,000)	($980,000)	($980,000)	($980,000)	($980,000)	($980,000)	($980,000)	$0	$0	$0	$0	$0	$0	$0	$0
Repayment-Empowerment Zone	($2,000,000)	$0	$0	$0	$0	$0	($2,000,000)	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0
Total LDF & EZ Repayments	($9,840,000)	($980,000)	($980,000)	($980,000)	($980,000)	($980,000)	($2,980,000)	($980,000)	($980,000)	$0	$0	$0	$0	$0	$0	$0	$0
Surplus (Deficit), net of repayments	**($46,997,929)**	**($1,943,792)**	**($12,436,354)**	**($5,850,800)**	**($3,082,257)**	**($12,358,997)**	**($9,594,288)**	**($6,431,713)**	**($2,445,522)**	**($12,873,510)**	**($9,536,204)**	**$3,286,219**	**$3,405,458**	**$3,591,955**	**($580,558)**	**($3,673,812)**	**$2,732,300**

Table PF.3A Pro Forma Financial Analysis for Full Study Area
St. Louis NRBC

	Year 17 2020	Year 18 2021	Year 19 2022	Year 20 2023	Year 21 2024	Year 22 2025	Year 23 2026	Year 24 2027	Year 25 2028	Year 26 2029	Year 27 2030	Year 28 2031	Year 29 2032	Year 30 2033	Year 31 2034	Year 32 2035	Year 33 2036	Year 34 2037	Year 35 2038	Year 36 2039	Year 37 2040
Produce Row Business Campus (148 gross acres, 122 net developable acres)																					
TIF Revenue	$1,809,720	$1,937,941	$2,102,519	$2,197,178	$2,355,254	$2,475,977	$2,541,407	$2,479,569	$1,666,454	$1,686,053	$1,731,812	$1,456,501	$434,041	$438,025	$450,715	$381,527					
Sources																					
Capitalized TIF Revenue, (7.0%, 1.25 DSC)	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0					
Remainder TIF Revenue, after bond pymts	$452,430	$484,485	$525,630	$549,294	$588,813	$618,994	$635,352	$619,892	$416,613	$421,513	$432,953	$364,125	$108,510	$109,506	$112,679	$95,382					
Land Sale Revenue	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0					
Land Development Fund (LDF)	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0					
LDF Interest Costs	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0					
Empowerment Zone	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0					
Missouri Brownfields Credits/Grants	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0					
EDA Grants	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0					
EPA Grants	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0					
Missouri DOT	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0					
Army Corps of Engineers	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0					
TOTAL SOURCES	$452,430	$484,485	$525,630	$549,294	$588,813	$618,994	$635,352	$619,892	$416,613	$421,513	$432,953	$364,125	$108,510	$109,506	$112,679	$95,382					
Uses																					
Acquisition																					
ROW	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0					
Parcel	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0					
Building Demolition	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0					
Relocations	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0					
Infrastructure																					
Streets / Sewers / Signals	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0					
Infrastructure Task Adjustment (15%)	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0					
Railroad Demolition / Relocation	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0					
Vacated Road Demolition	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0					
Utilities / Site Prep	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0					
Hard Costs Contingency	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0					
Remediation	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0					
Soft Costs	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0					
TOTAL USES	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0					
Adjust for Inflation in Costs (2.0%/year)	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0					
Surplus (Deficit)	**$452,430**	**$484,485**	**$525,630**	**$549,294**	**$588,813**	**$618,994**	**$635,352**	**$619,892**	**$416,613**	**$421,513**	**$432,953**	**$364,125**	**$108,510**	**$109,506**	**$112,679**	**$95,382**					
Repayment - Land Dev. Fund	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0					
Repayment-Empowerment Zone	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0					
Total LDF & EZ Repayments	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0					
Surplus (Deficit), net of repayments	**$452,430**	**$484,485**	**$525,630**	**$549,294**	**$588,813**	**$618,994**	**$635,352**	**$619,892**	**$416,613**	**$421,513**	**$432,953**	**$364,125**	**$108,510**	**$109,506**	**$112,679**	**$95,382**					
Adelaide Business Campus (172 gross acres, 141 net developable acres)																					
TIF Revenue	$2,401,485	$2,489,596	$2,620,594	$2,753,176	$2,900,738	$3,013,929	$3,269,530	$3,445,228	$3,047,861	$3,088,060	$2,975,455	$2,376,212	$2,437,264	$2,470,410	$1,940,499						
Sources																					
Capitalized TIF Revenue, (7.0%, 1.25 DSC)	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0						
Remainder TIF Revenue, after bond pymts	$600,371	$622,399	$655,149	$688,294	$725,184	$753,482	$817,383	$861,307	$761,965	$772,015	$743,864	$594,053	$609,316	$617,603	$485,125						
Land Sale Revenue	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0						
Land Development Fund (LDF)	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0						
LDF Interest Costs	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0						
Empowerment Zone	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0						
Missouri Brownfields Credits/Grants	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0						

Table PF.3A Pro Forma Financial Analysis for Full Study Area
St. Louis NRBC

	Year 17 2020	Year 18 2021	Year 19 2022	Year 20 2023	Year 21 2024	Year 22 2025	Year 23 2026	Year 24 2027	Year 25 2028	Year 26 2029	Year 27 2030	Year 28 2031	Year 29 2032	Year 30 2033	Year 31 2034	Year 32 2035	Year 33 2036	Year 34 2037	Year 35 2038	Year 36 2039	Year 37 2040
EDA Grants	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0						
EPA Grants	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0						
Missouri DOT	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0						
Army Corps of Engineers	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0						
TOTAL SOURCES	$600,371	$622,399	$655,149	$688,294	$725,184	$753,482	$817,383	$861,307	$761,965	$772,015	$743,864	$594,053	$609,316	$617,603	$485,125						
Uses																					
Acquisition																					
ROW	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0						
Parcel	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0						
Building Demolition	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0						
Relocations	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0						
Infrastructure																					
Streets / Sewers / Signals	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0						
Infrastructure Task Adjustment (15%)	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0						
Railroad Demolition / Relocation	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0						
Vacated Road Demolition	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0						
Utilities / Site Prep	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0						
Hard Costs Contingency	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0						
Remediation	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0						
Soft Costs	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0						
TOTAL USES	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0						
Adjust for Inflation in Costs (2.0%/year)	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0						
Surplus (Deficit)	**$600,371**	**$622,399**	**$655,149**	**$688,294**	**$725,184**	**$753,482**	**$817,383**	**$861,307**	**$761,965**	**$772,015**	**$743,864**	**$594,053**	**$609,316**	**$617,603**	**$485,125**						
Repayment - Land Dev. Fund	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0						
Repayment-Empowerment Zone	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0						
Total LDF & EZ Repayments	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0						
Surplus (Deficit), net of repayments	**$600,371**	**$622,399**	**$655,149**	**$688,294**	**$725,184**	**$753,482**	**$817,383**	**$861,307**	**$761,965**	**$772,015**	**$743,864**	**$594,053**	**$609,316**	**$617,603**	**$485,125**						
(Final two payments on LDF are provided by existing Tax C																					
Tyler Business Campus (39 gross acres, 21 net developable acres)																					
Nominal TIF Revenue	$160,285	$233,794	$286,587	$293,279	$303,509	$310,600	$321,309	$328,824	$340,037	$431,353	$539,805	$548,244	$564,170	$573,113	$589,703	$599,181	$616,470	$626,514	$644,538	$655,184	$483,587
Sources																					
Capitalized TIF Revenue, (7.0%, 1.25 DSC)	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0
Remainder TIF Revenue, after bond pymts	$40,071	$58,449	$71,647	$73,320	$75,877	$77,650	$80,327	$82,206	$85,009	$107,838	$134,951	$137,061	$141,042	$143,278	$147,426	$149,795	$154,117	$156,629	$161,135	$163,796	$120,897
Land Sale Revenue	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0
Land Development Fund (LDF)	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0
LDF Interest Costs	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0
Empowerment Zone	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0
Missouri Brownfields Credits/Grants	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0
EDA Grants	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0
EPA Grants	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0
Missouri DOT	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0
Army Corps of Engineers	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0
TOTAL SOURCES	$40,071	$58,449	$71,647	$73,320	$75,877	$77,650	$80,327	$82,206	$85,009	$107,838	$134,951	$137,061	$141,042	$143,278	$147,426	$149,795	$154,117	$156,629	$161,135	$163,796	$120,897
Uses																					
Acquisition																					
ROW	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0
Parcel	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0

Table PF.3A Pro Forma Financial Analysis for Full Study Area
St. Louis NRBC

	Year 17 2020	Year 18 2021	Year 19 2022	Year 20 2023	Year 21 2024	Year 22 2025	Year 23 2026	Year 24 2027	Year 25 2028	Year 26 2029	Year 27 2030	Year 28 2031	Year 29 2032	Year 30 2033	Year 31 2034	Year 32 2035	Year 33 2036	Year 34 2037	Year 35 2038	Year 36 2039	Year 37 2040
Building Demolition	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0
Relocations	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0
Infrastructure																					
Streets / Sewers / Signals	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0
Infrastructure Task Adjustment (15%)	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0
Railroad Demolition / Relocation	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0
Vacated Road Demolition	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0
Utilities / Site Prep	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0
Hard Costs Contingency	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0
Remediation	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0
Soft Costs	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0
TOTAL USES	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0
Adjust for Inflation in Costs (2.0%/year)	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0
Surplus (Deficit)	**$40,071**	**$58,449**	**$71,647**	**$73,320**	**$75,877**	**$77,650**	**$80,327**	**$82,206**	**$85,009**	**$107,838**	**$134,951**	**$137,061**	**$141,042**	**$143,278**	**$147,426**	**$149,795**	**$154,117**	**$156,629**	**$161,135**	**$163,796**	**$120,897**
Repayment - Land Dev. Fund	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0
Repayment-Empowerment Zone	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0
Total LDF & EZ Repayments	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0
Surplus (Deficit), net of repayments	**$40,071**	**$58,449**	**$71,647**	**$73,320**	**$75,877**	**$77,650**	**$80,327**	**$82,206**	**$85,009**	**$107,838**	**$134,951**	**$137,061**	**$141,042**	**$143,278**	**$147,426**	**$149,795**	**$154,117**	**$156,629**	**$161,135**	**$163,796**	**$120,897**

Remaining Area
(approximately 740 acres)

TIF Revenue	$699,471	$699,471	$761,568	$761,568	$824,913	$824,913	$889,530	$889,530
Sources								
Capitalized TIF Revenue, (7.0%, 1.25 DSC)	$0	$0	$0	$0	$0	$0	$0	$0
Remainder TIF Revenue, after bond pymts	$174,868	$174,868	$190,392	$190,392	$206,228	$206,228	$222,383	$222,383
Land Sale Revenue	$0	$0	$0	$0	$0	$0	$0	$0
Land Development Fund (LDF)	$0	$0	$0	$0	$0	$0	$0	$0
LDF Interest Costs	$0	$0	$0	$0	$0	$0	$0	$0
Empowerment Zone	$0	$0	$0	$0	$0	$0	$0	$0
Missouri Brownfields Credits/Grants	$0	$0	$0	$0	$0	$0	$0	$0
EDA Grants	$0	$0	$0	$0	$0	$0	$0	$0
EPA Grants	$0	$0	$0	$0	$0	$0	$0	$0
Missouri DOT	$0	$0	$0	$0	$0	$0	$0	$0
Army Corps of Engineers	$0	$0	$0	$0	$0	$0	$0	$0
TOTAL SOURCES	$174,868	$174,868	$190,392	$190,392	$206,228	$206,228	$222,383	$222,383
Uses								
Acquisition								
ROW	$0	$0	$0	$0	$0	$0	$0	$0
Parcel	$0	$0	$0	$0	$0	$0	$0	$0
Building Demolition	$0	$0	$0	$0	$0	$0	$0	$0
Relocations	$0	$0	$0	$0	$0	$0	$0	$0
Infrastructure								
Streets / Sewers / Signals	$0	$0	$0	$0	$0	$0	$0	$0
Infrastructure Task Adjustment (15%)	$0	$0	$0	$0	$0	$0	$0	$0
Railroad Demolition / Relocation	$0	$0	$0	$0	$0	$0	$0	$0
Vacated Road Demolition	$0	$0	$0	$0	$0	$0	$0	$0
Utilities / Site Prep	$0	$0	$0	$0	$0	$0	$0	$0
Hard Costs Contingency	$0	$0	$0	$0	$0	$0	$0	$0
Remediation	$0	$0	$0	$0	$0	$0	$0	$0

Table PF.3A Pro Forma Financial Analysis for Full Study Area
St. Louis NRBC

	Year 17 2020	Year 18 2021	Year 19 2022	Year 20 2023	Year 21 2024	Year 22 2025	Year 23 2026	Year 24 2027	Year 25 2028	Year 26 2029	Year 27 2030	Year 28 2031	Year 29 2032	Year 30 2033	Year 31 2034	Year 32 2035	Year 33 2036	Year 34 2037	Year 35 2038	Year 36 2039	Year 37 2040
Soft Costs	$0	$0	$0	$0	$0	$0	$0	$0													
TOTAL USES	$0	$0	$0	$0	$0	$0	$0	$0													
Adjust for Inflation in Costs (2.0%/year)	$0	$0	$0	$0	$0	$0	$0	$0													
Surplus (Deficit)	**$174,868**	**$174,868**	**$190,392**	**$190,392**	**$206,228**	**$206,228**	**$222,383**	**$222,383**													
Repayment - Land Dev. Fund	$0	$0	$0	$0	$0	$0	$0	$0													
Repayment-Empowerment Zone	$0	$0	$0	$0	$0	$0	$0	$0													
Total LDF & EZ Repayments	$0	$0	$0	$0	$0	$0	$0	$0													
Surplus (Deficit), net of repayments	**$174,868**	**$174,868**	**$190,392**	**$190,392**	**$206,228**	**$206,228**	**$222,383**	**$222,383**													

Grand Total

TIF Revenue	$5,070,962	$5,360,802	$5,771,268	$6,005,200	$6,384,413	$6,625,418	$7,021,777	$7,143,152	$5,054,352	$5,205,466	$5,247,073	$4,380,958	$3,435,475	$3,481,548	$2,980,917	$980,707	$616,470	$626,514	$644,538	$655,184	$483,587
Sources																					
Capitalized TIF Revenue, (7.0%, 1.25 DSC)	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0
Remainder TIF Revenue, after bond pymts	$1,267,741	$1,340,201	$1,442,817	$1,501,300	$1,596,103	$1,656,355	$1,755,444	$1,785,788	$1,263,588	$1,301,367	$1,311,768	$1,095,239	$858,869	$870,387	$745,229	$245,177	$154,117	$156,629	$161,135	$163,796	$120,897
Land Sale Revenue	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0
Land Development Fund (LDF)	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0
LDF Interest Costs	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0
Empowerment Zone	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0
Missouri Brownfields Credits/Grants	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0
EDA Grants	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0
EPA Grants	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0
Missouri DOT	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0
Army Corps of Engineers	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0
TOTAL SOURCES	$1,267,741	$1,340,201	$1,442,817	$1,501,300	$1,596,103	$1,656,355	$1,755,444	$1,785,788	$1,263,588	$1,301,367	$1,311,768	$1,095,239	$858,869	$870,387	$745,229	$245,177	$154,117	$156,629	$161,135	$163,796	$120,897
Uses																					
Acquisition																					
ROW	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0
Parcel	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0
Building Demolition	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0
Relocations	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0
Infrastructure																					
Streets / Sewers / Signals	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0
Infrastructure Task Adjustment (15%)	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0
Railroad Demolition / Relocation	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0
Vacated Road Demolition	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0
Utilities / Site Prep	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0
Hard Costs Contingency	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0
Remediation	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0
Soft Costs	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0
TOTAL USES	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0
Adjust for Inflation in Costs (2.0%/year)	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0
Surplus (Deficit)	**$1,267,741**	**$1,340,201**	**$1,442,817**	**$1,501,300**	**$1,596,103**	**$1,656,355**	**$1,755,444**	**$1,785,788**	**$1,263,588**	**$1,301,367**	**$1,311,768**	**$1,095,239**	**$858,869**	**$870,387**	**$745,229**	**$245,177**	**$154,117**	**$156,629**	**$161,135**	**$163,796**	**$120,897**
Repayment - Land Dev. Fund	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0
Repayment-Empowerment Zone	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0
Total LDF & EZ Repayments	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0
Surplus (Deficit), net of repayments	**$1,267,741**	**$1,340,201**	**$1,442,817**	**$1,501,300**	**$1,596,103**	**$1,656,355**	**$1,755,444**	**$1,785,788**	**$1,263,588**	**$1,301,367**	**$1,311,768**	**$1,095,239**	**$858,869**	**$870,387**	**$745,229**	**$245,177**	**$154,117**	**$156,629**	**$161,135**	**$163,796**	**$120,897**

Table PF.3B Pro Forma Financial Analysis for Produce Row Campus Area
St. Louis NRBC

	Total	Year 1 2004	Year 2 2005	Year 3 2006	Year 4 2007	Year 5 2008	Year 6 2009	Year 7 2010	Year 8 2011	Year 9 2012	Year 10 2013	Year 11 2014	Year 12 2015	Year 13 2016	Year 14 2017	Year 15 2018	Year 16 2019
Produce Row Business Campus																	
Phase I (47 net developable acres)																	
TIF Revenue	$12,799,335	$0	$2,117	$4,277	$11,951	$175,709	$232,634	$366,310	$408,231	$420,430	$423,691	$436,261	$439,716	$543,817	$638,623	$748,621	$836,624
Sources																	
Capitalized TIF Revenue, (7.0%, 1.25 DSC)	$3,676,937	$3,676,937	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0
Remainder TIF Revenue, after bond pymts	$3,199,834	$0	$529	$1,069	$2,988	$43,927	$58,158	$91,578	$102,058	$105,108	$105,923	$109,065	$109,929	$135,954	$159,656	$187,155	$209,156
Land Sale Revenue	$5,154,473	$0	$1,278,019	$1,303,579	$1,329,651	$1,243,224	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0
Land Development Fund (LDF)	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0
LDF Interest Costs	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0
Empowerment Zone	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0
Missouri Brownfields Credits/Grants	$946,978	$568,187	$378,791	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0
EDA Grants	$1,500,000	$750,000	$750,000	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0
EPA Grants	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0
Missouri DOT	$503,748	$302,249	$201,499	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0
Army Corps of Engineers	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0
TOTAL SOURCES	$14,981,969	$5,297,372	$2,608,839	$1,304,649	$1,332,639	$1,287,151	$58,158	$91,578	$102,058	$105,108	$105,923	$109,065	$109,929	$135,954	$159,656	$187,155	$209,156
Uses																	
Acquisition																	
ROW	$228,848	$137,309	$91,539	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0
Parcel	$2,484,008	$1,490,405	$993,603	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0
Building Demolition	$999,518	$599,711	$399,807	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0
Relocations	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0
Infrastructure																	
Streets / Sewers / Signals	$1,946,305	$1,167,783	$778,522	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0
Infrastructure Task Adjustment (15%)	($291,946)	($175,167)	($116,778)	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0
Railroad Demolition / Relocation	$313,863	$188,318	$125,545	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0
Vacated Road Demolition	$444,432	$266,659	$177,773	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0
Utilities / Site Prep	$389,261	$233,557	$155,704	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0
Hard Costs Contingency	$680,623	$408,374	$272,249	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0
Remediation	$1,088,480	$653,088	$435,392	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0
Soft Costs	$668,927	$401,356	$267,571	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0
TOTAL USES	$8,952,319	$5,371,392	$3,580,928	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0
Adjust for Inflation in Costs (2.0%/year)	$252,097	$107,428	$144,669	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0
Surplus (Deficit)	**$5,777,553**	**($181,447)**	**($1,116,759)**	**$1,304,649**	**$1,332,639**	**$1,287,151**	**$58,158**	**$91,578**	**$102,058**	**$105,108**	**$105,923**	**$109,065**	**$109,929**	**$135,954**	**$159,656**	**$187,155**	**$209,156**
Repayment - Land Dev. Fund	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0
Repayment-Empowerment Zone	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0
Total LDF & EZ Repayments	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0
Surplus (Deficit), net of repayments	**$5,777,553**	**($181,447)**	**($1,116,759)**	**$1,304,649**	**$1,332,639**	**$1,287,151**	**$58,158**	**$91,578**	**$102,058**	**$105,108**	**$105,923**	**$109,065**	**$109,929**	**$135,954**	**$159,656**	**$187,155**	**$209,156**

Table PF.3B Pro Forma Financial Analysis for Produce Row Campus Area
St. Louis NRBC

	Total	Year 1 2004	Year 2 2005	Year 3 2006	Year 4 2007	Year 5 2008	Year 6 2009	Year 7 2010	Year 8 2011	Year 9 2012	Year 10 2013	Year 11 2014	Year 12 2015	Year 13 2016	Year 14 2017	Year 15 2018	Year 16 2019
Produce Row Business Campus																	
Phase II (51 net developable acres)																	
Phase II TIF Year		0	0	0	0	1	2	3	4	5	6	7	8	9	10	11	12
TIF Revenue	$18,542,919	$0	$0	$0	$0	$0	$73,132	$131,002	$249,539	$322,085	$419,492	$560,652	$605,443	$623,993	$635,329	$654,687	$666,699
Sources																	
Capitalized TIF Revenue, (7.0%, 1.25 DSC)	$5,601,132	$0	$0	$0	$0	$5,601,132	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0
Remainder TIF Revenue, after bond pymts	$4,635,730	$0	$0	$0	$0	$0	$18,283	$32,751	$62,385	$80,521	$104,873	$140,163	$151,361	$155,998	$158,832	$163,672	$166,675
Land Sale Revenue	$6,040,304	$0	$0	$0	$0	$0	$1,613,930	$1,646,209	$1,679,133	$1,101,032	$0	$0	$0	$0	$0	$0	$0
Land Development Fund (LDF)	$4,900,000	$0	$0	$0	$0	$0	$4,900,000	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0
LDF Interest Costs	($627,200)	$0	$0	$0	$0	$0	($196,000)	($156,800)	($117,600)	($78,400)	($78,400)	$0	$0	$0	$0	$0	$0
Empowerment Zone	$2,000,000	$0	$0	$0	$0	$0	$2,000,000	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0
Missouri Brownfields Credits/Grants	$1,894,538	$0	$0	$0	$0	$1,136,723	$757,815	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0
EDA Grants	$1,500,000	$0	$0	$0	$0	$1,500,000	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0
EPA Grants	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0
Missouri DOT	$1,514,363	$0	$0	$0	$0	$908,618	$605,745	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0
Army Corps of Engineers	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0
TOTAL SOURCES	$27,458,867	$0	$0	$0	$0	$9,146,473	$9,699,774	$1,522,160	$1,623,918	$1,103,153	$26,473	$140,163	$151,361	$155,998	$158,832	$163,672	$166,675
Uses																	
Acquisition																	
ROW	$164,486	$0	$0	$0	$0	$98,692	$65,794	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0
Parcel	$6,641,308	$0	$0	$0	$0	$3,984,785	$2,656,523	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0
Building Demolition	$1,752,535	$0	$0	$0	$0	$1,051,521	$701,014	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0
Relocations	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0
Infrastructure																	
Streets / Sewers / Signals	$5,850,908	$0	$0	$0	$0	$3,510,545	$2,340,363	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0
Infrastructure Task Adjustment (15%)	($877,636)	$0	$0	$0	$0	($526,582)	($351,054)	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0
Railroad Demolition / Relocation	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0
Vacated Road Demolition	$946,373	$0	$0	$0	$0	$567,824	$378,549	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0
Utilities / Site Prep	$1,170,182	$0	$0	$0	$0	$702,109	$468,073	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0
Hard Costs Contingency	$1,652,579	$0	$0	$0	$0	$991,547	$661,032	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0
Remediation	$2,177,630	$0	$0	$0	$0	$1,306,578	$871,052	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0
Soft Costs	$1,590,112	$0	$0	$0	$0	$954,067	$636,045	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0
TOTAL USES	$21,068,476	$0	$0	$0	$0	$12,641,085	$8,427,390	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0
Adjust for Inflation in Costs (2.0%/year)	$2,378,914	$0	$0	$0	$0	$1,315,694	$1,063,220	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0
Surplus (Deficit)	**$4,011,477**	**$0**	**$0**	**$0**	**$0**	**($4,810,307)**	**$209,164**	**$1,522,160**	**$1,623,918**	**$1,103,153**	**$26,473**	**$140,163**	**$151,361**	**$155,998**	**$158,832**	**$163,672**	**$166,675**
Repayment - Land Dev. Fund	($2,940,000)	$0	$0	$0	$0	$0	($980,000)	($980,000)	($980,000)	$0	$0	$0	$0	$0	$0	$0	$0
Repayment-Empowerment Zone	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0
Total LDF & EZ Repayments	($2,940,000)	$0	$0	$0	$0	$0	($980,000)	($980,000)	($980,000)	$0	$0	$0	$0	$0	$0	$0	$0
Surplus (Deficit), net of repayments	**$1,071,477**	**$0**	**$0**	**$0**	**$0**	**($4,810,307)**	**($770,836)**	**$542,160**	**$643,918**	**$1,103,153**	**$26,473**	**$140,163**	**$151,361**	**$155,998**	**$158,832**	**$163,672**	**$166,675**

Table PF.3B Pro Forma Financial Analysis for Produce Row Campus Area
St. Louis NRBC

	Total	Year 1 2004	Year 2 2005	Year 3 2006	Year 4 2007	Year 5 2008	Year 6 2009	Year 7 2010	Year 8 2011	Year 9 2012	Year 10 2013	Year 11 2014	Year 12 2015	Year 13 2016	Year 14 2017	Year 15 2018	Year 16 2019
Produce Row Business Campus																	
Phase III (24 net developable acres)																	
Phase III TIF Year		0	0	0	0	0	0	0	0	1	2	3	4	5	6	7	8
TIF Revenue	$6,079,241	$0	$0	$0	$0	$0	$0	$0	$0	$0	$15,187	$70,850	$27,878	$93,128	$141,186	$147,427	$150,081
Sources																	
Capitalized TIF Revenue, (7.0%, 1.25 DSC)	$1,769,570	$0	$0	$0	$0	$0	$0	$0	$0	$1,769,570	$0	$0	$0	$0	$0	$0	$0
Remainder TIF Revenue, after bond pymts	$1,519,810	$0	$0	$0	$0	$0	$0	$0	$0	$0	$3,797	$17,713	$6,969	$23,282	$35,297	$36,857	$37,520
Land Sale Revenue	$3,024,754	$0	$0	$0	$0	$0	$0	$0	$0	$0	$1,497,403	$1,527,351	$0	$0	$0	$0	$0
Land Development Fund (LDF)	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0
LDF Interest Costs	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0
Empowerment Zone	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0
Missouri Brownfields Credits/Grants	$907,715	$0	$0	$0	$0	$0	$0	$0	$0	$544,629	$363,086	$0	$0	$0	$0	$0	$0
EDA Grants	$1,500,000	$0	$0	$0	$0	$0	$0	$0	$0	$1,500,000	$0	$0	$0	$0	$0	$0	$0
EPA Grants	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0
Missouri DOT	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0
Army Corps of Engineers	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0
TOTAL SOURCES	$8,721,848	$0	$0	$0	$0	$0	$0	$0	$0	$3,814,198	$1,864,286	$1,545,064	$6,969	$23,282	$35,297	$36,857	$37,520
Uses																	
Acquisition																	
ROW	$246,890	$0	$0	$0	$0	$0	$0	$0	$0	$148,134	$98,756	$0	$0	$0	$0	$0	$0
Parcel	$2,227,500	$0	$0	$0	$0	$0	$0	$0	$0	$1,336,500	$891,000	$0	$0	$0	$0	$0	$0
Building Demolition	$441,890	$0	$0	$0	$0	$0	$0	$0	$0	$265,134	$176,756	$0	$0	$0	$0	$0	$0
Relocations	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0
Infrastructure																	
Streets / Sewers / Signals	$3,005,519	$0	$0	$0	$0	$0	$0	$0	$0	$1,803,311	$1,202,207	$0	$0	$0	$0	$0	$0
Infrastructure Task Adjustment (15%)	($450,828)	$0	$0	$0	$0	$0	$0	$0	$0	($270,497)	($180,331)	$0	$0	$0	$0	$0	$0
Railroad Demolition / Relocation	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0
Vacated Road Demolition	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0
Utilities / Site Prep	$601,104	$0	$0	$0	$0	$0	$0	$0	$0	$360,662	$240,441	$0	$0	$0	$0	$0	$0
Hard Costs Contingency	$652,290	$0	$0	$0	$0	$0	$0	$0	$0	$391,374	$260,916	$0	$0	$0	$0	$0	$0
Remediation	$1,043,350	$0	$0	$0	$0	$0	$0	$0	$0	$626,010	$417,340	$0	$0	$0	$0	$0	$0
Soft Costs	$648,621	$0	$0	$0	$0	$0	$0	$0	$0	$389,173	$259,448	$0	$0	$0	$0	$0	$0
TOTAL USES	$8,416,336	$0	$0	$0	$0	$0	$0	$0	$0	$5,049,802	$3,366,534	$0	$0	$0	$0	$0	$0
Adjust for Inflation in Costs (2.0%/year)	$1,722,431	$0	$0	$0	$0	$0	$0	$0	$0	$985,179	$737,252	$0	$0	$0	$0	$0	$0
Surplus (Deficit)	**($1,416,919)**	**$0**	**$0**	**$0**	**$0**	**$0**	**$0**	**$0**	**$0**	**($2,220,782)**	**($2,239,501)**	**$1,545,064**	**$6,969**	**$23,282**	**$35,297**	**$36,857**	**$37,520**
Repayment - Land Dev. Fund	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0
Repayment-Empowerment Zone	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0
Total LDF & EZ Repayments	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0
Surplus (Deficit), net of repayments	**($1,416,919)**	**$0**	**$0**	**$0**	**$0**	**$0**	**$0**	**$0**	**$0**	**($2,220,782)**	**($2,239,501)**	**$1,545,064**	**$6,969**	**$23,282**	**$35,297**	**$36,857**	**$37,520**

Table PF.3B Pro Forma Financial Analysis for Produce Row Campus Area
St. Louis NRBC

	Total	Year 1 2004	Year 2 2005	Year 3 2006	Year 4 2007	Year 5 2008	Year 6 2009	Year 7 2010	Year 8 2011	Year 9 2012	Year 10 2013	Year 11 2014	Year 12 2015	Year 13 2016	Year 14 2017	Year 15 2018	Year 16 2019
Produce Row Business Campus																	
All Phases (122 net developable acres)																	
TIF Revenue	$37,421,494	$0	$2,117	$4,277	$11,951	$175,709	$305,766	$497,312	$657,770	$742,515	$858,370	$1,067,763	$1,073,036	$1,260,937	$1,415,138	$1,550,735	$1,653,404
Sources																	
Capitalized TIF Revenue, (7.0%, 1.25 DSC)	$11,047,639	$3,676,937	$0	$0	$0	$5,601,132	$0	$0	$0	$1,769,570	$0	$0	$0	$0	$0	$0	$0
Remainder TIF Revenue, after bond pymts	$9,355,374	$0	$529	$1,069	$2,988	$43,927	$76,441	$124,328	$164,442	$185,629	$214,592	$266,941	$268,259	$315,234	$353,785	$387,684	$413,351
Land Sale Revenue	$14,219,531	$0	$1,278,019	$1,303,579	$1,329,651	$1,243,224	$1,613,930	$1,646,209	$1,679,133	$1,101,032	$1,497,403	$1,527,351	$0	$0	$0	$0	$0
Land Development Fund (LDF)	$4,900,000	$0	$0	$0	$0	$0	$4,900,000	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0
LDF Interest Costs	($627,200)	$0	$0	$0	$0	$0	($196,000)	($156,800)	($117,600)	($78,400)	($78,400)	$0	$0	$0	$0	$0	$0
Empowerment Zone	$2,000,000	$0	$0	$0	$0	$0	$2,000,000	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0
Missouri Brownfields Credits/Grants	$3,749,230	$568,187	$378,791	$0	$0	$1,136,723	$757,815	$0	$0	$544,629	$363,086	$0	$0	$0	$0	$0	$0
EDA Grants	$4,500,000	$750,000	$750,000	$0	$0	$1,500,000	$0	$0	$0	$1,500,000	$0	$0	$0	$0	$0	$0	$0
EPA Grants	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0
Missouri DOT	$2,018,111	$302,249	$201,499	$0	$0	$908,618	$605,745	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0
Army Corps of Engineers	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0
TOTAL SOURCES	$51,162,685	$5,297,372	$2,608,839	$1,304,649	$1,332,639	$10,433,624	$9,757,932	$1,613,737	$1,725,976	$5,022,459	$1,996,681	$1,794,292	$268,259	$315,234	$353,785	$387,684	$413,351
Uses																	
Acquisition																	
ROW	$640,224	$137,309	$91,539	$0	$0	$98,692	$65,794	$0	$0	$148,134	$98,756	$0	$0	$0	$0	$0	$0
Parcel	$11,352,815	$1,490,405	$993,603	$0	$0	$3,984,785	$2,656,523	$0	$0	$1,336,500	$891,000	$0	$0	$0	$0	$0	$0
Building Demolition	$3,193,943	$599,711	$399,807	$0	$0	$1,051,521	$701,014	$0	$0	$265,134	$176,756	$0	$0	$0	$0	$0	$0
Relocations	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0
Infrastructure																	
Streets / Sewers / Signals	$10,802,732	$1,167,783	$778,522	$0	$0	$3,510,545	$2,340,363	$0	$0	$1,803,311	$1,202,207	$0	$0	$0	$0	$0	$0
Infrastructure Task Adjustment (15%)	($1,620,410)	($175,167)	($116,778)	$0	$0	($526,582)	($351,054)	$0	$0	($270,497)	($180,331)	$0	$0	$0	$0	$0	$0
Railroad Demolition / Relocation	$313,863	$188,318	$125,545	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0
Vacated Road Demolition	$1,390,805	$266,659	$177,773	$0	$0	$567,824	$378,549	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0
Utilities / Site Prep	$2,160,546	$233,557	$155,704	$0	$0	$702,109	$468,073	$0	$0	$360,662	$240,441	$0	$0	$0	$0	$0	$0
Hard Costs Contingency	$2,985,493	$408,374	$272,249	$0	$0	$991,547	$661,032	$0	$0	$391,374	$260,916	$0	$0	$0	$0	$0	$0
Remediation	$4,309,460	$653,088	$435,392	$0	$0	$1,306,578	$871,052	$0	$0	$626,010	$417,340	$0	$0	$0	$0	$0	$0
Soft Costs	$2,907,660	$401,356	$267,571	$0	$0	$954,067	$636,045	$0	$0	$389,173	$259,448	$0	$0	$0	$0	$0	$0
TOTAL USES	$38,437,131	$5,371,392	$3,580,928	$0	$0	$12,641,085	$8,427,390	$0	$0	$5,049,802	$3,366,534	$0	$0	$0	$0	$0	$0
Adjust for Inflation in Costs (2.0%/year)	$4,353,443	$107,428	$144,669	$0	$0	$1,315,694	$1,063,220	$0	$0	$985,179	$737,252	$0	$0	$0	$0	$0	$0
Surplus (Deficit)	**$8,372,112**	**($181,447)**	**($1,116,759)**	**$1,304,649**	**$1,332,639**	**($3,523,156)**	**$267,322**	**$1,613,737**	**$1,725,976**	**($1,012,522)**	**($2,107,105)**	**$1,794,292**	**$268,259**	**$315,234**	**$353,785**	**$387,684**	**$413,351**
Repayment - Land Dev. Fund	($2,940,000)	$0	$0	$0	$0	$0	($980,000)	($980,000)	($980,000)	$0	$0	$0	$0	$0	$0	$0	$0
Repayment-Empowerment Zone	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0
Total LDF & EZ Repayments	($2,940,000)	$0	$0	$0	$0	$0	($980,000)	($980,000)	($980,000)	$0	$0	$0	$0	$0	$0	$0	$0
Surplus (Deficit), net of repayments	**$5,432,112**	**($181,447)**	**($1,116,759)**	**$1,304,649**	**$1,332,639**	**($3,523,156)**	**($712,678)**	**$633,737**	**$745,976**	**($1,012,522)**	**($2,107,105)**	**$1,794,292**	**$268,259**	**$315,234**	**$353,785**	**$387,684**	**$413,351**
Produce Row Annual TIF Fund Balance		**($181,447)**	**($1,298,206)**	**$6,443**	**$1,339,082**	**($2,184,074)**	**($2,896,752)**	**($2,263,015)**	**($1,517,039)**	**($2,529,561)**	**($4,636,666)**	**($2,842,374)**	**($2,574,115)**	**($2,258,881)**	**($1,905,096)**	**($1,517,413)**	**($1,104,062)**

Table PF.3B Pro Forma Financial Analysis for Produce Row Campus Area
St. Louis NRBC

	Year 17 2020	Year 18 2021	Year 19 2022	Year 20 2023	Year 21 2024	Year 22 2025	Year 23 2026	Year 24 2027	Year 25 2028	Year 26 2029	Year 27 2030	Year 28 2031	Year 29 2032	Year 30 2033	Year 31 2034	Year 32 2035
Produce Row Business Campus																
Phase I (47 net developable acres)																
TIF Revenue	$857,695	$861,805	$883,458	$887,814	$910,069	$914,685	$937,565	$857,233								
Sources																
Capitalized TIF Revenue, (7.0%, 1.25 DSC)	$0	$0	$0	$0	$0	$0	$0	$0								
Remainder TIF Revenue, after bond pymts	$214,424	$215,451	$220,864	$221,953	$227,517	$228,671	$234,391	$214,308								
Land Sale Revenue	$0	$0	$0	$0	$0	$0	$0	$0								
Land Development Fund (LDF)	$0	$0	$0	$0	$0	$0	$0	$0								
LDF Interest Costs	$0	$0	$0	$0	$0	$0	$0	$0								
Empowerment Zone	$0	$0	$0	$0	$0	$0	$0	$0								
Missouri Brownfields Credits/Grants	$0	$0	$0	$0	$0	$0	$0	$0								
EDA Grants	$0	$0	$0	$0	$0	$0	$0	$0								
EPA Grants	$0	$0	$0	$0	$0	$0	$0	$0								
Missouri DOT	$0	$0	$0	$0	$0	$0	$0	$0								
Army Corps of Engineers	$0	$0	$0	$0	$0	$0	$0	$0								
TOTAL SOURCES	$214,424	$215,451	$220,864	$221,953	$227,517	$228,671	$234,391	$214,308								
Uses																
Acquisition																
ROW	$0	$0	$0	$0	$0	$0	$0	$0								
Parcel	$0	$0	$0	$0	$0	$0	$0	$0								
Building Demolition	$0	$0	$0	$0	$0	$0	$0	$0								
Relocations	$0	$0	$0	$0	$0	$0	$0	$0								
Infrastructure																
Streets / Sewers / Signals	$0	$0	$0	$0	$0	$0	$0	$0								
Infrastructure Task Adjustment (15%)	$0	$0	$0	$0	$0	$0	$0	$0								
Railroad Demolition / Relocation	$0	$0	$0	$0	$0	$0	$0	$0								
Vacated Road Demolition	$0	$0	$0	$0	$0	$0	$0	$0								
Utilities / Site Prep	$0	$0	$0	$0	$0	$0	$0	$0								
Hard Costs Contingency	$0	$0	$0	$0	$0	$0	$0	$0								
Remediation	$0	$0	$0	$0	$0	$0	$0	$0								
Soft Costs	$0	$0	$0	$0	$0	$0	$0	$0								
TOTAL USES	$0	$0	$0	$0	$0	$0	$0	$0								
Adjust for Inflation in Costs (2.0%/year)	$0	$0	$0	$0	$0	$0	$0	$0								
Surplus (Deficit)	**$214,424**	**$215,451**	**$220,864**	**$221,953**	**$227,517**	**$228,671**	**$234,391**	**$214,308**								
Repayment - Land Dev. Fund	$0	$0	$0	$0	$0	$0	$0	$0								
Repayment-Empowerment Zone	$0	$0	$0	$0	$0	$0	$0	$0								
Total LDF & EZ Repayments	$0	$0	$0	$0	$0	$0	$0	$0								
Surplus (Deficit), net of repayments	**$214,424**	**$215,451**	**$220,864**	**$221,953**	**$227,517**	**$228,671**	**$234,391**	**$214,308**								

Table PF.3B Pro Forma Financial Analysis for Produce Row Campus Area
St. Louis NRBC

	Year 17 2020	Year 18 2021	Year 19 2022	Year 20 2023	Year 21 2024	Year 22 2025	Year 23 2026	Year 24 2027	Year 25 2028	Year 26 2029	Year 27 2030	Year 28 2031	Year 29 2032	Year 30 2033	Year 31 2034	Year 32 2035
Produce Row Business Campus																
Phase II (51 net developable acres)																
Phase II TIF Year	13	14	15	16	17	18	19	20	21	22	23	24				
TIF Revenue	$795,476	$916,773	$1,052,993	$1,140,315	$1,170,525	$1,184,818	$1,216,185	$1,231,333	$1,263,913	$1,279,966	$1,313,820	$1,034,749				
Sources																
Capitalized TIF Revenue, (7.0%, 1.25 DSC)	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0				
Remainder TIF Revenue, after bond pymts	$198,869	$229,193	$263,248	$285,079	$292,631	$296,205	$304,046	$307,833	$315,978	$319,991	$328,455	$258,687				
Land Sale Revenue	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0				
Land Development Fund (LDF)	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0				
LDF Interest Costs	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0				
Empowerment Zone	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0				
Missouri Brownfields Credits/Grants	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0				
EDA Grants	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0				
EPA Grants	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0				
Missouri DOT	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0				
Army Corps of Engineers	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0				
TOTAL SOURCES	$198,869	$229,193	$263,248	$285,079	$292,631	$296,205	$304,046	$307,833	$315,978	$319,991	$328,455	$258,687				
Uses																
Acquisition																
ROW	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0				
Parcel	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0				
Building Demolition	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0				
Relocations	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0				
Infrastructure																
Streets / Sewers / Signals	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0				
Infrastructure Task Adjustment (15%)	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0				
Railroad Demolition / Relocation	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0				
Vacated Road Demolition	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0				
Utilities / Site Prep	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0				
Hard Costs Contingency	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0				
Remediation	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0				
Soft Costs	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0				
TOTAL USES	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0				
Adjust for Inflation in Costs (2.0%/year)	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0				
Surplus (Deficit)	**$198,869**	**$229,193**	**$263,248**	**$285,079**	**$292,631**	**$296,205**	**$304,046**	**$307,833**	**$315,978**	**$319,991**	**$328,455**	**$258,687**				
Repayment - Land Dev. Fund	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0				
Repayment-Empowerment Zone	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0				
Total LDF & EZ Repayments	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0				
Surplus (Deficit), net of repayments	**$198,869**	**$229,193**	**$263,248**	**$285,079**	**$292,631**	**$296,205**	**$304,046**	**$307,833**	**$315,978**	**$319,991**	**$328,455**	**$258,687**				

Table PF.3B Pro Forma Financial Analysis for Produce Row Campus Area
St. Louis NRBC

	Year 17 2020	Year 18 2021	Year 19 2022	Year 20 2023	Year 21 2024	Year 22 2025	Year 23 2026	Year 24 2027	Year 25 2028	Year 26 2029	Year 27 2030	Year 28 2031	Year 29 2032	Year 30 2033	Year 31 2034	Year 32 2035
Produce Row Business Campus																
Phase III (24 net developable acres)																
Phase III TIF Year	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24
TIF Revenue	$156,549	$159,362	$166,068	$169,049	$274,660	$376,473	$387,657	$391,004	$402,540	$406,087	$417,993	$421,752	$434,041	$438,025	$450,715	$381,527
Sources																
Capitalized TIF Revenue, (7.0%, 1.25 DSC)	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0
Remainder TIF Revenue, after bond pymts	$39,137	$39,841	$41,517	$42,262	$68,665	$94,118	$96,914	$97,751	$100,635	$101,522	$104,498	$105,438	$108,510	$109,506	$112,679	$95,382
Land Sale Revenue	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0
Land Development Fund (LDF)	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0
LDF Interest Costs	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0
Empowerment Zone	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0
Missouri Brownfields Credits/Grants	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0
EDA Grants	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0
EPA Grants	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0
Missouri DOT	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0
Army Corps of Engineers	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0
TOTAL SOURCES	$39,137	$39,841	$41,517	$42,262	$68,665	$94,118	$96,914	$97,751	$100,635	$101,522	$104,498	$105,438	$108,510	$109,506	$112,679	$95,382
Uses																
Acquisition																
ROW	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0
Parcel	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0
Building Demolition	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0
Relocations	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0
Infrastructure																
Streets / Sewers / Signals	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0
Infrastructure Task Adjustment (15%)	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0
Railroad Demolition / Relocation	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0
Vacated Road Demolition	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0
Utilities / Site Prep	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0
Hard Costs Contingency	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0
Remediation	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0
Soft Costs	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0
TOTAL USES	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0
Adjust for Inflation in Costs (2.0%/year)	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0
Surplus (Deficit)	**$39,137**	**$39,841**	**$41,517**	**$42,262**	**$68,665**	**$94,118**	**$96,914**	**$97,751**	**$100,635**	**$101,522**	**$104,498**	**$105,438**	**$108,510**	**$109,506**	**$112,679**	**$95,382**
Repayment - Land Dev. Fund	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0
Repayment-Empowerment Zone	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0
Total LDF & EZ Repayments	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0
Surplus (Deficit), net of repayments	**$39,137**	**$39,841**	**$41,517**	**$42,262**	**$68,665**	**$94,118**	**$96,914**	**$97,751**	**$100,635**	**$101,522**	**$104,498**	**$105,438**	**$108,510**	**$109,506**	**$112,679**	**$95,382**

Table PF.3B Pro Forma Financial Analysis for Produce Row Campus Area
St. Louis NRBC

	Year 17 2020	Year 18 2021	Year 19 2022	Year 20 2023	Year 21 2024	Year 22 2025	Year 23 2026	Year 24 2027	Year 25 2028	Year 26 2029	Year 27 2030	Year 28 2031	Year 29 2032	Year 30 2033	Year 31 2034	Year 32 2035
Produce Row Business Campus																
All Phases (122 net developable acres)																
TIF Revenue	$1,809,720	$1,937,941	$2,102,519	$2,197,178	$2,355,254	$2,475,977	$2,541,407	$2,479,569	$1,666,454	$1,686,053	$1,731,812	$1,456,501	$434,041	$438,025	$450,715	$381,527
Sources																
Capitalized TIF Revenue, (7.0%, 1.25 DSC)	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0
Remainder TIF Revenue, after bond pymts	$452,430	$484,485	$525,630	$549,294	$588,813	$618,994	$635,352	$619,892	$416,613	$421,513	$432,953	$364,125	$108,510	$109,506	$112,679	$95,382
Land Sale Revenue	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0
Land Development Fund (LDF)	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0
LDF Interest Costs	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0
Empowerment Zone	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0
Missouri Brownfields Credits/Grants	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0
EDA Grants	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0
EPA Grants	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0
Missouri DOT	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0
Army Corps of Engineers	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0
TOTAL SOURCES	$452,430	$484,485	$525,630	$549,294	$588,813	$618,994	$635,352	$619,892	$416,613	$421,513	$432,953	$364,125	$108,510	$109,506	$112,679	$95,382
Uses																
Acquisition																
ROW	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0
Parcel	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0
Building Demolition	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0
Relocations	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0
Infrastructure																
Streets / Sewers / Signals	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0
Infrastructure Task Adjustment (15%)	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0
Railroad Demolition / Relocation	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0
Vacated Road Demolition	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0
Utilities / Site Prep	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0
Hard Costs Contingency	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0
Remediation	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0
Soft Costs	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0
TOTAL USES	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0
Adjust for Inflation in Costs (2.0%/year)	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0
Surplus (Deficit)	**$452,430**	**$484,485**	**$525,630**	**$549,294**	**$588,813**	**$618,994**	**$635,352**	**$619,892**	**$416,613**	**$421,513**	**$432,953**	**$364,125**	**$108,510**	**$109,506**	**$112,679**	**$95,382**
Repayment - Land Dev. Fund	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0
Repayment-Empowerment Zone	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0
Total LDF & EZ Repayments	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0
Surplus (Deficit), net of repayments	**$452,430**	**$484,485**	**$525,630**	**$549,294**	**$588,813**	**$618,994**	**$635,352**	**$619,892**	**$416,613**	**$421,513**	**$432,953**	**$364,125**	**$108,510**	**$109,506**	**$112,679**	**$95,382**
Produce Row Annual TIF Fund Balance	**($651,632)**	**($167,146)**	**$358,483**	**$907,778**	**$1,496,591**	**$2,115,585**	**$2,750,937**	**$3,370,829**	**$3,787,443**	**$4,208,956**	**$4,641,909**	**$5,006,035**	**$5,114,545**	**$5,224,051**	**$5,336,730**	**$5,432,112**

Table PF.3C Pro Forma Financial Analysis for Adelaide Campus Area
St. Louis NRBC

	Total	Year 1 2004	Year 2 2005	Year 3 2006	Year 4 2007	Year 5 2008	Year 6 2009	Year 7 2010	Year 8 2011	Year 9 2012	Year 10 2013	Year 11 2014	Year 12 2015	Year 13 2016	Year 14 2017	Year 15 2018	Year 16 2019
Adelaide Business Campus Phase I (32 net developable acres)																	
TIF Revenue	$8,046,011	$0	$786	$1,587	$4,145	$84,394	$149,204	$225,542	$245,399	$252,477	$254,079	$261,360	$263,057	$339,791	$410,830	$491,959	$533,596
Sources																	
Capitalized TIF Revenue, (7.0%, 1.25 DSC)	$2,288,781	$2,288,781	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0
Remainder TIF Revenue, after bond pymts	$2,011,503	$0	$196	$397	$1,036	$21,099	$37,301	$56,386	$61,350	$63,119	$63,520	$65,340	$65,764	$84,948	$102,708	$122,990	$133,399
Land Sale Revenue	$3,498,539	$0	$958,514	$977,685	$997,238	$565,102	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0
Land Development Fund (LDF)	$4,900,000	$4,900,000	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0
LDF Interest Costs	($588,000)	($196,000)	($156,800)	($117,600)	($78,400)	($39,200)	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0
Empowerment Zone	$2,000,000	$2,000,000	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0
Missouri Brownfields Credits/Grants	$1,695,778	$1,017,467	$678,311	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0
EDA Grants	$1,500,000	$750,000	$750,000	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0
EPA Grants	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0
Missouri DOT	$4,365,934	$2,619,560	$1,746,374	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0
Army Corps of Engineers	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0
TOTAL SOURCES	$21,672,534	$13,379,808	$3,976,595	$860,481	$919,875	$547,000	$37,301	$56,386	$61,350	$63,119	$63,520	$65,340	$65,764	$84,948	$102,708	$122,990	$133,399
Uses																	
Acquisition																	
ROW	$560,613	$336,368	$224,245	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0
Parcel	$2,625,160	$1,575,096	$1,050,064	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0
Building Demolition	$477,109	$286,265	$190,844	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0
Relocations	$2,070,012	$1,242,007	$828,005	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0
Infrastructure																	
Streets / Sewers / Signals	$6,694,941	$4,016,965	$2,677,976	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0
Infrastructure Task Adjustment (15%)	($1,004,241)	($602,545)	($401,696)	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0
Railroad Demolition / Relocation	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0
Vacated Road Demolition	$507,976	$304,786	$203,190	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0
Utilities / Site Prep	$1,338,988	$803,393	$535,595	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0
Hard Costs Contingency	$1,427,480	$856,488	$570,992	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0
Remediation	$1,949,170	$1,169,502	$779,668	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0
Soft Costs	$1,382,917	$829,750	$553,167	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0
TOTAL USES	$18,030,125	$10,818,075	$7,212,050	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0
Adjust for Inflation in Costs (2.0%/year)	$507,728	$216,361	$291,367	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0
Surplus (Deficit)	**$3,134,682**	**$2,345,372**	**($3,526,821)**	**$860,481**	**$919,875**	**$547,000**	**$37,301**	**$56,386**	**$61,350**	**$63,119**	**$63,520**	**$65,340**	**$65,764**	**$84,948**	**$102,708**	**$122,990**	**$133,399**
Repayment - Land Dev. Fund	($4,900,000)	($980,000)	($980,000)	($980,000)	($980,000)	($980,000)	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0
Repayment-Empowerment Zone	($2,000,000)	$0	$0	$0	$0	$0	($2,000,000)	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0
Total LDF & EZ Repayments	($6,900,000)	($980,000)	($980,000)	($980,000)	($980,000)	($980,000)	($2,000,000)	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0
Surplus (Deficit), net of repayments	**($3,765,318)**	**$1,365,372**	**($4,506,821)**	**($119,519)**	**($60,125)**	**($433,000)**	**($1,962,699)**	**$56,386**	**$61,350**	**$63,119**	**$63,520**	**$65,340**	**$65,764**	**$84,948**	**$102,708**	**$122,990**	**$133,399**

Table PF.3C Pro Forma Financial Analysis for Adelaide Campus Area
St. Louis NRBC

	Total	Year 1 2004	Year 2 2005	Year 3 2006	Year 4 2007	Year 5 2008	Year 6 2009	Year 7 2010	Year 8 2011	Year 9 2012	Year 10 2013	Year 11 2014	Year 12 2015	Year 13 2016	Year 14 2017	Year 15 2018	Year 16 2019
Adelaide Business Campus Phase II (27 net developable acres)																	
TIF Revenue	$11,673,253	$0	$0	$0	$0	$55,276	$96,607	$147,726	$249,304	$274,610	$370,007	$410,073	$417,195	$428,547	$436,094	$447,964	$495,821
Sources																	
Capitalized TIF Revenue, (7.0%, 1.25 DSC)	$3,582,790	$0	$0	$0	$3,582,790	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0
Remainder TIF Revenue, after bond pymts	$2,918,313	$0	$0	$0	$0	$13,819	$24,152	$36,931	$62,326	$68,653	$92,502	$102,518	$104,299	$107,137	$109,024	$111,991	$123,955
Land Sale Revenue	$3,154,676	$0	$0	$0	$0	$565,102	$806,965	$823,104	$959,505	$0	$0	$0	$0	$0	$0	$0	$0
Land Development Fund (LDF)	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0
LDF Interest Costs	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0
Empowerment Zone	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0
Missouri Brownfields Credits/Grants	$784,810	$0	$0	$0	$470,886	$313,924	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0
EDA Grants	$1,500,000	$0	$0	$0	$1,500,000	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0
EPA Grants	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0
Missouri DOT	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0
Army Corps of Engineers	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0
TOTAL SOURCES	$11,940,589	$0	$0	$0	$5,553,675	$892,844	$831,117	$860,036	$1,021,831	$68,653	$92,502	$102,518	$104,299	$107,137	$109,024	$111,991	$123,955
Uses																	
Acquisition																	
ROW	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0
Parcel	$1,621,875	$0	$0	$0	$973,125	$648,750	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0
Building Demolition	$9,647	$0	$0	$0	$5,788	$3,859	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0
Relocations	$150,000	$0	$0	$0	$90,000	$60,000	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0
Infrastructure																	
Streets / Sewers / Signals	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0
Infrastructure Task Adjustment (15%)	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0
Railroad Demolition / Relocation	$868,350	$0	$0	$0	$521,010	$347,340	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0
Vacated Road Demolition	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0
Utilities / Site Prep	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0
Hard Costs Contingency	$264,987	$0	$0	$0	$158,992	$105,995	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0
Remediation	$902,080	$0	$0	$0	$541,248	$360,832	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0
Soft Costs	$236,766	$0	$0	$0	$142,060	$94,707	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0
TOTAL USES	$4,053,706	$0	$0	$0	$2,432,223	$1,621,482	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0
Adjust for Inflation in Costs (2.0%/year)	$369,259	$0	$0	$0	$200,493	$168,765	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0
Surplus (Deficit)	**$7,517,624**	**$0**	**$0**	**$0**	**$2,920,959**	**($897,403)**	**$831,117**	**$860,036**	**$1,021,831**	**$68,653**	**$92,502**	**$102,518**	**$104,299**	**$107,137**	**$109,024**	**$111,991**	**$123,955**
Repayment - Land Dev. Fund	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0
Repayment-Empowerment Zone	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0
Total LDF & EZ Repayments	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0
Surplus (Deficit), net of repayments	**$7,517,624**	**$0**	**$0**	**$0**	**$2,920,959**	**($897,403)**	**$831,117**	**$860,036**	**$1,021,831**	**$68,653**	**$92,502**	**$102,518**	**$104,299**	**$107,137**	**$109,024**	**$111,991**	**$123,955**

(Final two payments on LDF are provided by existing Tax Credits of $2,000,000.)

Table PF.3C Pro Forma Financial Analysis for Adelaide Campus Area
St. Louis NRBC

	Total	Year 1 2004	Year 2 2005	Year 3 2006	Year 4 2007	Year 5 2008	Year 6 2009	Year 7 2010	Year 8 2011	Year 9 2012	Year 10 2013	Year 11 2014	Year 12 2015	Year 13 2016	Year 14 2017	Year 15 2018	Year 16 2019
Adelaide Business Campus Phase III (82 net developable acres)																	
TIF Revenue	$33,367,183	$0	$0	$0	$0	$0	$0	$0	$0	$74,774	$95,173	$193,797	$442,829	$636,228	$819,772	$1,027,904	$1,218,501
Sources																	
Capitalized TIF Revenue, (7.0%, 1.25 DSC)	$9,778,944	$0	$0	$0	$0	$0	$0	$0	$9,778,944	$0	$0	$0	$0	$0	$0	$0	$0
Remainder TIF Revenue, after bond pymts	$8,341,796	$0	$0	$0	$0	$0	$0	$0	$0	$18,694	$23,793	$48,449	$110,707	$159,057	$204,943	$256,976	$304,625
Land Sale Revenue	$10,594,475	$0	$0	$0	$0	$0	$0	$0	$0	$1,468,042	$1,123,052	$1,145,513	$2,726,322	$2,780,848	$1,350,698	$0	$0
Land Development Fund (LDF)	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0
LDF Interest Costs	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0
Empowerment Zone	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0
Missouri Brownfields Credits/Grants	$1,572,873	$0	$0	$0	$0	$0	$0	$0	$943,724	$629,149	$0	$0	$0	$0	$0	$0	$0
EDA Grants	$1,500,000	$0	$0	$0	$0	$0	$0	$0	$1,500,000	$0	$0	$0	$0	$0	$0	$0	$0
EPA Grants	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0
Missouri DOT	$495,938	$0	$0	$0	$0	$0	$0	$0	$297,563	$198,375	$0	$0	$0	$0	$0	$0	$0
Army Corps of Engineers	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0
TOTAL SOURCES	$32,284,025	$0	$0	$0	$0	$0	$0	$0	$12,520,230	$2,314,260	$1,146,845	$1,193,963	$2,837,029	$2,939,905	$1,555,641	$256,976	$304,625
Uses																	
Acquisition																	
ROW	$951,895	$0	$0	$0	$0	$0	$0	$0	$571,137	$380,758	$0	$0	$0	$0	$0	$0	$0
Parcel	$5,700,625	$0	$0	$0	$0	$0	$0	$0	$3,420,375	$2,280,250	$0	$0	$0	$0	$0	$0	$0
Building Demolition	$530,952	$0	$0	$0	$0	$0	$0	$0	$318,571	$212,381	$0	$0	$0	$0	$0	$0	$0
Relocations	$559,998	$0	$0	$0	$0	$0	$0	$0	$335,999	$223,999	$0	$0	$0	$0	$0	$0	$0
Infrastructure																	
Streets / Sewers / Signals	$707,167	$0	$0	$0	$0	$0	$0	$0	$424,300	$282,867	$0	$0	$0	$0	$0	$0	$0
Infrastructure Task Adjustment (15%)	($106,075)	$0	$0	$0	$0	$0	$0	$0	($63,645)	($42,430)	$0	$0	$0	$0	$0	$0	$0
Railroad Demolition / Relocation	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0
Vacated Road Demolition	$220,050	$0	$0	$0	$0	$0	$0	$0	$132,030	$88,020	$0	$0	$0	$0	$0	$0	$0
Utilities / Site Prep	$247,508	$0	$0	$0	$0	$0	$0	$0	$148,505	$99,003	$0	$0	$0	$0	$0	$0	$0
Hard Costs Contingency	$891,820	$0	$0	$0	$0	$0	$0	$0	$535,092	$356,728	$0	$0	$0	$0	$0	$0	$0
Remediation	$1,807,900	$0	$0	$0	$0	$0	$0	$0	$1,084,740	$723,160	$0	$0	$0	$0	$0	$0	$0
Soft Costs	$665,797	$0	$0	$0	$0	$0	$0	$0	$399,478	$266,319	$0	$0	$0	$0	$0	$0	$0
TOTAL USES	$12,177,637	$0	$0	$0	$0	$0	$0	$0	$7,306,582	$4,871,055	$0	$0	$0	$0	$0	$0	$0
Adjust for Inflation in Costs (2.0%/year)	$2,204,550	$0	$0	$0	$0	$0	$0	$0	$1,254,243	$950,307	$0	$0	$0	$0	$0	$0	$0
Surplus (Deficit)	**$17,901,839**	**$0**	**$0**	**$0**	**$0**	**$0**	**$0**	**$0**	**$3,959,405**	**($3,507,101)**	**$1,146,845**	**$1,193,963**	**$2,837,029**	**$2,939,905**	**$1,555,641**	**$256,976**	**$304,625**
Repayment - Land Dev. Fund	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0
Repayment-Empowerment Zone	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0
Total LDF & EZ Repayments	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0
Surplus (Deficit), net of repayments	**$17,901,839**	**$0**	**$0**	**$0**	**$0**	**$0**	**$0**	**$0**	**$3,959,405**	**($3,507,101)**	**$1,146,845**	**$1,193,963**	**$2,837,029**	**$2,939,905**	**$1,555,641**	**$256,976**	**$304,625**

Table PF.3C Pro Forma Financial Analysis for Adelaide Campus Area
St. Louis NRBC

	Total	Year 1 2004	Year 2 2005	Year 3 2006	Year 4 2007	Year 5 2008	Year 6 2009	Year 7 2010	Year 8 2011	Year 9 2012	Year 10 2013	Year 11 2014	Year 12 2015	Year 13 2016	Year 14 2017	Year 15 2018	Year 16 2019
Adelaide Business Campus All Phases (141 net developable acres)																	
TIF Revenue	$53,086,447	$0	$786	$1,587	$4,145	$139,670	$245,810	$373,268	$494,703	$601,862	$719,258	$865,230	$1,123,081	$1,404,566	$1,666,696	$1,967,827	$2,247,918
Sources																	
Capitalized TIF Revenue, (7.0%, 1.25 DSC)	$15,650,514	$2,288,781	$0	$0	$3,582,790	$0	$0	$0	$9,778,944	$0	$0	$0	$0	$0	$0	$0	$0
Remainder TIF Revenue, after bond pymts	$13,271,612	$0	$196	$397	$1,036	$34,917	$61,453	$93,317	$123,676	$150,465	$179,815	$216,308	$280,770	$351,142	$416,674	$491,957	$561,980
Land Sale Revenue	$17,247,690	$0	$958,514	$977,685	$997,238	$1,130,203	$806,965	$823,104	$959,505	$1,468,042	$1,123,052	$1,145,513	$2,726,322	$2,780,848	$1,350,698	$0	$0
Land Development Fund (LDF)	$4,900,000	$4,900,000	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0
LDF Interest Costs	($588,000)	($196,000)	($156,800)	($117,600)	($78,400)	($39,200)	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0
Empowerment Zone	$2,000,000	$2,000,000	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0
Missouri Brownfields Credits/Grants	$4,053,461	$1,017,467	$678,311	$0	$470,886	$313,924	$0	$0	$943,724	$629,149	$0	$0	$0	$0	$0	$0	$0
EDA Grants	$4,500,000	$750,000	$750,000	$0	$1,500,000	$0	$0	$0	$1,500,000	$0	$0	$0	$0	$0	$0	$0	$0
EPA Grants	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0
Missouri DOT	$4,861,872	$2,619,560	$1,746,374	$0	$0	$0	$0	$0	$297,563	$198,375	$0	$0	$0	$0	$0	$0	$0
Army Corps of Engineers	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0
TOTAL SOURCES	$65,897,148	$13,379,808	$3,976,595	$860,481	$6,473,550	$1,439,845	$868,418	$916,421	$13,603,411	$2,446,032	$1,302,867	$1,361,821	$3,007,092	$3,131,990	$1,767,372	$491,957	$561,980
Uses																	
Acquisition																	
ROW	$1,512,508	$336,368	$224,245	$0	$0	$0	$0	$0	$571,137	$380,758	$0	$0	$0	$0	$0	$0	$0
Parcel	$9,947,660	$1,575,096	$1,050,064	$0	$973,125	$648,750	$0	$0	$3,420,375	$2,280,250	$0	$0	$0	$0	$0	$0	$0
Building Demolition	$1,017,708	$286,265	$190,844	$0	$5,788	$3,859	$0	$0	$318,571	$212,381	$0	$0	$0	$0	$0	$0	$0
Relocations	$2,780,010	$1,242,007	$828,005	$0	$90,000	$60,000	$0	$0	$335,999	$223,999	$0	$0	$0	$0	$0	$0	$0
Infrastructure																	
Streets / Sewers / Signals	$7,402,108	$4,016,965	$2,677,976	$0	$0	$0	$0	$0	$424,300	$282,867	$0	$0	$0	$0	$0	$0	$0
Infrastructure Task Adjustment (15%)	($1,110,316)	($602,545)	($401,696)	$0	$0	$0	$0	$0	($63,645)	($42,430)	$0	$0	$0	$0	$0	$0	$0
Railroad Demolition / Relocation	$868,350	$0	$0	$0	$521,010	$347,340	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0
Vacated Road Demolition	$728,026	$304,786	$203,190	$0	$0	$0	$0	$0	$132,030	$88,020	$0	$0	$0	$0	$0	$0	$0
Utilities / Site Prep	$1,586,497	$803,393	$535,595	$0	$0	$0	$0	$0	$148,505	$99,003	$0	$0	$0	$0	$0	$0	$0
Hard Costs Contingency	$2,584,287	$856,488	$570,992	$0	$158,992	$105,995	$0	$0	$535,092	$356,728	$0	$0	$0	$0	$0	$0	$0
Remediation	$4,659,150	$1,169,502	$779,668	$0	$541,248	$360,832	$0	$0	$1,084,740	$723,160	$0	$0	$0	$0	$0	$0	$0
Soft Costs	$2,285,481	$829,750	$553,167	$0	$142,060	$94,707	$0	$0	$399,478	$266,319	$0	$0	$0	$0	$0	$0	$0
TOTAL USES	$34,261,467	$10,818,075	$7,212,050	$0	$2,432,223	$1,621,482	$0	$0	$7,306,582	$4,871,055	$0	$0	$0	$0	$0	$0	$0
Adjust for Inflation in Costs (2.0%/year)	$3,081,537	$216,361	$291,367	$0	$200,493	$168,765	$0	$0	$1,254,243	$950,307	$0	$0	$0	$0	$0	$0	$0
Surplus (Deficit)	**$28,554,145**	**$2,345,372**	**($3,526,821)**	**$860,481**	**$3,840,833**	**($350,403)**	**$868,418**	**$916,421**	**$5,042,585**	**($3,375,329)**	**$1,302,867**	**$1,361,821**	**$3,007,092**	**$3,131,990**	**$1,767,372**	**$491,957**	**$561,980**
Repayment - Land Dev. Fund	($4,900,000)	($980,000)	($980,000)	($980,000)	($980,000)	($980,000)	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0
Repayment-Empowerment Zone	($2,000,000)	$0	$0	$0	$0	$0	($2,000,000)	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0
Total LDF & EZ Repayments	($6,900,000)	($980,000)	($980,000)	($980,000)	($980,000)	($980,000)	($2,000,000)	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0
Surplus (Deficit), net of repayments	**$21,654,145**	**$1,365,372**	**($4,506,821)**	**($119,519)**	**$2,860,833**	**($1,330,403)**	**($1,131,582)**	**$916,421**	**$5,042,585**	**($3,375,329)**	**$1,302,867**	**$1,361,821**	**$3,007,092**	**$3,131,990**	**$1,767,372**	**$491,957**	**$561,980**
Adelaide Annual TIF Fund Balance		**$1,365,372**	**($3,141,449)**	**($3,260,968)**	**($400,135)**	**($1,730,537)**	**($2,862,120)**	**($1,945,698)**	**$3,096,887**	**($278,442)**	**$1,024,425**	**$2,386,245**	**$5,393,337**	**$8,525,327**	**$10,292,699**	**$10,784,655**	**$11,346,635**

Table PF.3C Pro Forma Financial Analysis for Adelaide Campus Area
St. Louis NRBC

	Year 17 2020	Year 18 2021	Year 19 2022	Year 20 2023	Year 21 2024	Year 22 2025	Year 23 2026	Year 24 2027	Year 25 2028	Year 26 2029	Year 27 2030	Year 28 2031	Year 29 2032	Year 30 2033	Year 31 2034
Adelaide Business Campus Phase I (32 net developable acres)															
TIF Revenue	$546,594	$548,614	$561,951	$564,091	$577,778	$580,046	$594,096	$554,635							
Sources															
Capitalized TIF Revenue, (7.0%, 1.25 DSC)	$0	$0	$0	$0	$0	$0	$0	$0							
Remainder TIF Revenue, after bond pymts	$136,649	$137,153	$140,488	$141,023	$144,445	$145,012	$148,524	$138,659							
Land Sale Revenue	$0	$0	$0	$0	$0	$0	$0	$0							
Land Development Fund (LDF)	$0	$0	$0	$0	$0	$0	$0	$0							
LDF Interest Costs	$0	$0	$0	$0	$0	$0	$0	$0							
Empowerment Zone	$0	$0	$0	$0	$0	$0	$0	$0							
Missouri Brownfields Credits/Grants	$0	$0	$0	$0	$0	$0	$0	$0							
EDA Grants	$0	$0	$0	$0	$0	$0	$0	$0							
EPA Grants	$0	$0	$0	$0	$0	$0	$0	$0							
Missouri DOT	$0	$0	$0	$0	$0	$0	$0	$0							
Army Corps of Engineers	$0	$0	$0	$0	$0	$0	$0	$0							
TOTAL SOURCES	$136,649	$137,153	$140,488	$141,023	$144,445	$145,012	$148,524	$138,659							
Uses															
Acquisition															
ROW	$0	$0	$0	$0	$0	$0	$0	$0							
Parcel	$0	$0	$0	$0	$0	$0	$0	$0							
Building Demolition	$0	$0	$0	$0	$0	$0	$0	$0							
Relocations	$0	$0	$0	$0	$0	$0	$0	$0							
Infrastructure															
Streets / Sewers / Signals	$0	$0	$0	$0	$0	$0	$0	$0							
Infrastructure Task Adjustment (15%)	$0	$0	$0	$0	$0	$0	$0	$0							
Railroad Demolition / Relocation	$0	$0	$0	$0	$0	$0	$0	$0							
Vacated Road Demolition	$0	$0	$0	$0	$0	$0	$0	$0							
Utilities / Site Prep	$0	$0	$0	$0	$0	$0	$0	$0							
Hard Costs Contingency	$0	$0	$0	$0	$0	$0	$0	$0							
Remediation	$0	$0	$0	$0	$0	$0	$0	$0							
Soft Costs	$0	$0	$0	$0	$0	$0	$0	$0							
TOTAL USES	$0	$0	$0	$0	$0	$0	$0	$0							
Adjust for Inflation in Costs (2.0%/year)	$0	$0	$0	$0	$0	$0	$0	$0							
Surplus (Deficit)	**$136,649**	**$137,153**	**$140,488**	**$141,023**	**$144,445**	**$145,012**	**$148,524**	**$138,659**							
Repayment - Land Dev. Fund	$0	$0	$0	$0	$0	$0	$0	$0							
Repayment-Empowerment Zone	$0	$0	$0	$0	$0	$0	$0	$0							
Total LDF & EZ Repayments	$0	$0	$0	$0	$0	$0	$0	$0							
Surplus (Deficit), net of repayments	**$136,649**	**$137,153**	**$140,488**	**$141,023**	**$144,445**	**$145,012**	**$148,524**	**$138,659**							

Table PF.3C Pro Forma Financial Analysis for Adelaide Campus Area
St. Louis NRBC

	Year 17 2020	Year 18 2021	Year 19 2022	Year 20 2023	Year 21 2024	Year 22 2025	Year 23 2026	Year 24 2027	Year 25 2028	Year 26 2029	Year 27 2030	Year 28 2031	Year 29 2032	Year 30 2033	Year 31 2034
Adelaide Business Campus Phase II (27 net developable acres)															
TIF Revenue	$563,254	$625,943	$706,454	$715,433	$733,385	$742,901	$761,579	$771,663	$791,105	$801,791	$630,520				
Sources															
Capitalized TIF Revenue, (7.0%, 1.25 DSC)	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0				
Remainder TIF Revenue, after bond pymts	$140,813	$156,486	$176,614	$178,858	$183,346	$185,725	$190,395	$192,916	$197,776	$200,448	$157,630				
Land Sale Revenue	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0				
Land Development Fund (LDF)	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0				
LDF Interest Costs	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0				
Empowerment Zone	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0				
Missouri Brownfields Credits/Grants	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0				
EDA Grants	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0				
EPA Grants	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0				
Missouri DOT	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0				
Army Corps of Engineers	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0				
TOTAL SOURCES	$140,813	$156,486	$176,614	$178,858	$183,346	$185,725	$190,395	$192,916	$197,776	$200,448	$157,630				
Uses															
Acquisition															
ROW	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0				
Parcel	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0				
Building Demolition	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0				
Relocations	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0				
Infrastructure															
Streets / Sewers / Signals	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0				
Infrastructure Task Adjustment (15%)	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0				
Railroad Demolition / Relocation	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0				
Vacated Road Demolition	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0				
Utilities / Site Prep	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0				
Hard Costs Contingency	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0				
Remediation	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0				
Soft Costs	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0				
TOTAL USES	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0				
Adjust for Inflation in Costs (2.0%/year)	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0				
Surplus (Deficit)	**$140,813**	**$156,486**	**$176,614**	**$178,858**	**$183,346**	**$185,725**	**$190,395**	**$192,916**	**$197,776**	**$200,448**	**$157,630**				
Repayment - Land Dev. Fund	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0				
Repayment-Empowerment Zone	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0				
Total LDF & EZ Repayments	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0				
Surplus (Deficit), net of repayments	**$140,813**	**$156,486**	**$176,614**	**$178,858**	**$183,346**	**$185,725**	**$190,395**	**$192,916**	**$197,776**	**$200,448**	**$157,630**				

(Final two payments on LDF are provided by existi

Table PF.3C Pro Forma Financial Analysis for Adelaide Campus Area
St. Louis NRBC

	Year 17 2020	Year 18 2021	Year 19 2022	Year 20 2023	Year 21 2024	Year 22 2025	Year 23 2026	Year 24 2027	Year 25 2028	Year 26 2029	Year 27 2030	Year 28 2031	Year 29 2032	Year 30 2033	Year 31 2034
Adelaide Business Campus Phase III (82 net developable acres)															
TIF Revenue	$1,291,637	$1,315,039	$1,352,190	$1,473,652	$1,589,574	$1,690,982	$1,913,855	$2,118,931	$2,256,756	$2,286,269	$2,344,936	$2,376,212	$2,437,264	$2,470,410	$1,940,499
Sources															
Capitalized TIF Revenue, (7.0%, 1.25 DSC)	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0
Remainder TIF Revenue, after bond pymts	$322,909	$328,760	$338,047	$368,413	$397,394	$422,746	$478,464	$529,733	$564,189	$571,567	$586,234	$594,053	$609,316	$617,603	$485,125
Land Sale Revenue	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0
Land Development Fund (LDF)	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0
LDF Interest Costs	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0
Empowerment Zone	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0
Missouri Brownfields Credits/Grants	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0
EDA Grants	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0
EPA Grants	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0
Missouri DOT	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0
Army Corps of Engineers	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0
TOTAL SOURCES	$322,909	$328,760	$338,047	$368,413	$397,394	$422,746	$478,464	$529,733	$564,189	$571,567	$586,234	$594,053	$609,316	$617,603	$485,125
Uses															
Acquisition															
ROW	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0
Parcel	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0
Building Demolition	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0
Relocations	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0
Infrastructure															
Streets / Sewers / Signals	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0
Infrastructure Task Adjustment (15%)	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0
Railroad Demolition / Relocation	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0
Vacated Road Demolition	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0
Utilities / Site Prep	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0
Hard Costs Contingency	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0
Remediation	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0
Soft Costs	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0
TOTAL USES	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0
Adjust for Inflation in Costs (2.0%/year)	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0
Surplus (Deficit)	**$322,909**	**$328,760**	**$338,047**	**$368,413**	**$397,394**	**$422,746**	**$478,464**	**$529,733**	**$564,189**	**$571,567**	**$586,234**	**$594,053**	**$609,316**	**$617,603**	**$485,125**
Repayment - Land Dev. Fund	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0
Repayment-Empowerment Zone	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0
Total LDF & EZ Repayments	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0
Surplus (Deficit), net of repayments	**$322,909**	**$328,760**	**$338,047**	**$368,413**	**$397,394**	**$422,746**	**$478,464**	**$529,733**	**$564,189**	**$571,567**	**$586,234**	**$594,053**	**$609,316**	**$617,603**	**$485,125**

Table PF.3C Pro Forma Financial Analysis for Adelaide Campus Area
St. Louis NRBC

	Year 17 2020	Year 18 2021	Year 19 2022	Year 20 2023	Year 21 2024	Year 22 2025	Year 23 2026	Year 24 2027	Year 25 2028	Year 26 2029	Year 27 2030	Year 28 2031	Year 29 2032	Year 30 2033	Year 31 2034
Adelaide Business Campus All Phases (141 net developable acres)															
TIF Revenue	$2,401,485	$2,489,596	$2,620,594	$2,753,176	$2,900,738	$3,013,929	$3,269,530	$3,445,228	$3,047,861	$3,088,060	$2,975,455	$2,376,212	$2,437,264	$2,470,410	$1,940,499
Sources															
Capitalized TIF Revenue, (7.0%, 1.25 DSC)	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0
Remainder TIF Revenue, after bond pymts	$600,371	$622,399	$655,149	$688,294	$725,184	$753,482	$817,383	$861,307	$761,965	$772,015	$743,864	$594,053	$609,316	$617,603	$485,125
Land Sale Revenue	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0
Land Development Fund (LDF)	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0
LDF Interest Costs	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0
Empowerment Zone	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0
Missouri Brownfields Credits/Grants	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0
EDA Grants	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0
EPA Grants	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0
Missouri DOT	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0
Army Corps of Engineers	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0
TOTAL SOURCES	$600,371	$622,399	$655,149	$688,294	$725,184	$753,482	$817,383	$861,307	$761,965	$772,015	$743,864	$594,053	$609,316	$617,603	$485,125
Uses															
Acquisition															
ROW	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0
Parcel	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0
Building Demolition	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0
Relocations	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0
Infrastructure															
Streets / Sewers / Signals	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0
Infrastructure Task Adjustment (15%)	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0
Railroad Demolition / Relocation	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0
Vacated Road Demolition	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0
Utilities / Site Prep	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0
Hard Costs Contingency	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0
Remediation	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0
Soft Costs	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0
TOTAL USES	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0
Adjust for Inflation in Costs (2.0%/year)	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0
Surplus (Deficit)	**$600,371**	**$622,399**	**$655,149**	**$688,294**	**$725,184**	**$753,482**	**$817,383**	**$861,307**	**$761,965**	**$772,015**	**$743,864**	**$594,053**	**$609,316**	**$617,603**	**$485,125**
Repayment - Land Dev. Fund	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0
Repayment-Empowerment Zone	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0
Total LDF & EZ Repayments	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0
Surplus (Deficit), net of repayments	**$600,371**	**$622,399**	**$655,149**	**$688,294**	**$725,184**	**$753,482**	**$817,383**	**$861,307**	**$761,965**	**$772,015**	**$743,864**	**$594,053**	**$609,316**	**$617,603**	**$485,125**
Adelaide Annual TIF Fund Balance	**$11,947,006**	**$12,569,405**	**$13,224,554**	**$13,912,848**	**$14,638,032**	**$15,391,514**	**$16,208,897**	**$17,070,204**	**$17,832,169**	**$18,604,184**	**$19,348,048**	**$19,942,101**	**$20,551,417**	**$21,169,020**	**$21,654,145**

Table PF.4A Estimated Incremental Property Taxes (PILOTS)
Potential North Riverfront TIF Redevelopment Project Area
St. Louis NRBC

				SUM OF ALL ESTIMATED INCREMENTAL PROPERTY TAXES (PILOTS)													
	Assessment Year	Collection Year		Produce Row PHASE 1	Produce Row PHASE 2	Produce Row PHASE 3	Produce Row TOTAL	Adelaide - PHASE 1	Adelaide - PHASE 2	Adelaide - PHASE 3	Adelaide - TOTAL	Tyler - TOTAL	Tyler - PHASE 2	Tyler - PHASE 3	Tyler - Remaining Property	TOTAL - TYLER	Remaining Area	All Areas - GRAND TOTAL
0	2004	2005		2,117			2,117	786			786		-	-	-	-	48,037	50,940
1	2005	2006	*	4,277			4,277	1,587			1,587		-	-	-	-	97,040	102,905
2	2006	2007		4,277			4,277	1,587			1,587		-	-	-	-	98,303	104,168
3	2007	2008	*	87,970			87,970	54,563	-		54,563		-	-	-	-	159,133	301,665
4	2008	2009		172,141	-		172,141	118,506	-		118,506		-	-	-	-	180,038	470,685
5	2009	2010	*	260,393	-		260,393	173,513	-		173,513		-	-	-	-	271,910	705,816
6	2010	2011		299,237	-		299,237	191,858	26,535		218,393		-	-	-	-	302,697	820,327
7	2011	2012	*	308,268	2,326		310,594	197,380	77,836	-	275,215		-	-	-	-	356,818	942,627
8	2012	2013		308,268	102,587	-	410,855	197,380	132,075	-	329,455		-	-	-	-	453,223	1,193,533
9	2013	2014	*	317,482	192,855	-	510,337	203,012	165,223	-	368,235		-	-	-	-	520,427	1,398,999
10	2014	2015		317,482	226,947	-	544,429	203,012	165,223	-	368,235		-	-	-	-	520,427	1,433,091
11	2015	2016	*	418,026	234,485	7,061	659,572	277,999	169,243	33,760	481,002		-	-	-	-	578,925	1,719,500
12	2016	2017		509,172	234,485	52,614	796,272	347,240	169,243	148,670	665,154		-	-	-	-	578,925	2,040,351
13	2017	2018	*	615,402	242,174	56,277	913,853	426,518	173,345	318,569	918,432	-	-	-	-	-	638,598	2,470,883
14	2018	2019		699,525	242,174	56,277	997,976	466,249	213,205	438,001	1,117,455	-	-	-	-	-	638,598	2,754,029
15	2019	2020	*	716,603	358,586	60,013	1,135,202	477,286	272,406	488,403	1,238,095	-	-	-	-	-	699,471	3,072,768
16	2020	2021		716,603	467,155	60,013	1,243,770	477,286	326,622	488,403	1,292,311	10,552	-	-	-	10,552	699,471	3,246,104
17	2021	2022	*	734,024	590,271	63,824	1,388,119	488,545	398,410	501,463	1,388,418	56,844	-	-	-	56,844	761,568	3,594,948
18	2022	2023		734,024	664,105	63,824	1,461,953	488,545	398,410	598,127	1,485,082	56,844	-	-	-	56,844	761,568	3,765,446
19	2023	2024	*	751,795	680,430	166,367	1,598,591	500,030	407,118	688,522	1,595,669	60,186	-	-	-	60,186	824,913	4,079,359
20	2024	2025		751,795	680,430	265,022	1,697,247	500,030	407,118	763,650	1,670,798	60,186	-	-	-	60,186	824,913	4,253,143
21	2025	2026	*	769,923	697,082	272,954	1,739,960	511,746	416,001	959,470	1,887,217	63,595	-	-	-	63,595	889,530	4,580,302
22	2026	2027		769,923	697,082	272,954	1,739,960	511,746	416,001	1,136,698	2,064,444	63,595	-	-	-	63,595	889,530	4,757,529
23	2027	2028	*		714,070	281,045	995,115		425,062	1,245,854	1,670,916	67,073	-	-	-	67,073		2,733,105
24	2028	2029			714,070	281,045	995,115		425,062	1,245,854	1,670,916	150,426						2,816,458
25	2029	2030	*		731,399	289,299	1,020,698		434,306	1,274,139	1,708,445	250,681						2,979,824
26	2030	2031			731,399	289,299	1,020,698		-	1,274,139	1,274,139	250,681						2,545,519
27	2031	2032	*			297,719	297,719			1,302,993	1,302,993	257,920						1,858,632
28	2032	2033				297,719	297,719			1,302,993	1,302,993	257,920						1,858,632
29	2033	2034	*			306,308	306,308			1,332,427	1,332,427	265,303						1,904,039
30	2034	2035				306,308	306,308				-	265,303						571,612
31	2035	2036	*				-				-	272,836						272,836
32	2036	2037					-				-	272,836						272,836
33	2037	2038	*				-				-	280,519						280,519
34	2038	2039					-				-	280,519						280,519
35	2039	2040	*				-				-	288,358						288,358
36	2040	2041					-				-	-						-
Total				**$10,268,727**	**$9,204,111**	**$3,745,944**	**$23,218,783**	**$6,816,404**	**$5,618,442**	**$15,542,136**	**$27,976,982**	**$3,532,176**	**$0**	**$0**	**$0**	**$438,874**	**$11,794,063**	**$66,522,004**

Base EAV is the 2002 EAV of each target area (separate for each Phase) of the Potential Near North Riverfront TIF Redevelopment Area.
Base EAVs for Phase II and III are the 2002 EAV plus 1.0% annual inflation applied until the starting year of their 23-year Redevelopment Project time period.
* Reassessment year

Assumptions:

1. Estimated Tax Rate of 7.2515% (average commercial tax rate of the last six years, excluding the Merchants & Manufacturers Inventory Replacement Tax and the Blind Pension Fund Tax).
2. Annual inflation rate of 1.0% for redeveloped property improvements, realized only in biennial reassessment years (2.01% per biennial period)
3. Annual inflation rate of 1.0% for redeveloped land and property outside of the three Target Areas, realized only in biennial reassessment years (2.01% per biennial period)
4. A collection rate of 93.0% is assumed throughout the lifetime of the TIF.
5. No property taxes will be collected in the final TIF Project year since the TIF Project will expire before the taxes are due.

Table PF.4B Estimated Economic Activity Taxes (EATS)
Potential North Riverfront TIF Redevelopment Project Area
St. Louis NRBC

		SUM OF ALL ESTIMATED ECONOMIC ACTIVITY TAXES (EATS) BY PHASE										
Generation and Collection Year		Produce Row - PHASE 1	Produce Row - PHASE 2	Produce Row - PHASE 3	Produce Row TOTAL	Adelaide - PHASE 1	Adelaide - PHASE 2	Adelaide - PHASE 3	Adelaide - TOTAL	Tyler - TOTAL	Remaining Area	All Areas - GRAND TOTAL
0	2004											
1	2005	-	-	-	-	-	-	-	-	-	-	-
2	2006	-	-	-	-	-	-	-	-	-	-	-
3	2007	7,674	-	-	7,674	2,558	-	-	2,558	-	-	10,232
4	2008	87,739	-	-	87,739	29,831	55,276	-	85,107	-	-	172,846
5	2009	60,492	73,132	-	133,625	30,698	96,607	-	127,305	-	-	260,929
6	2010	105,917	131,002	-	236,919	52,029	147,726	-	199,755	-	-	436,674
7	2011	108,994	249,539	-	358,533	53,541	222,769	-	276,309	-	-	634,842
8	2012	112,162	319,759	-	431,921	55,097	196,775	74,774	326,646	-	-	758,567
9	2013	115,422	316,905	15,187	447,515	56,699	237,932	95,173	389,804	-	-	837,318
10	2014	118,779	367,797	70,850	557,426	58,347	244,851	193,797	496,995	-	-	1,054,422
11	2015	122,234	378,495	27,878	528,607	60,045	251,973	442,829	754,846	-	-	1,283,453
12	2016	125,790	389,508	86,067	601,365	61,792	259,304	602,468	923,564	-	-	1,524,929
13	2017	129,451	400,844	88,572	618,867	63,590	266,851	671,101	1,001,542	-	-	1,620,408
14	2018	133,219	412,513	91,150	636,883	65,441	274,619	709,335	1,049,395	135,417	-	1,821,695
15	2019	137,099	424,525	93,804	655,428	67,347	282,616	780,500	1,130,463	206,109	-	1,991,999
16	2020	141,092	436,890	96,537	674,519	69,308	290,847	803,234	1,163,390	160,285	-	1,998,194
17	2021	145,203	449,619	99,349	694,170	71,328	299,321	826,636	1,197,285	223,243	-	2,114,698
18	2022	149,434	462,722	102,244	714,400	73,406	308,044	850,726	1,232,176	229,743	-	2,176,320
19	2023	153,790	476,210	105,225	735,225	75,546	317,024	875,525	1,268,094	236,435	-	2,239,754
20	2024	158,274	490,095	108,293	756,662	77,749	326,267	901,053	1,305,069	243,324	-	2,305,054
21	2025	162,890	504,389	111,451	778,730	80,016	335,783	927,332	1,343,131	250,415	-	2,372,276
22	2026	167,642	519,103	114,703	801,448	82,351	345,578	954,385	1,382,313	257,714	-	2,441,475
23	2027	87,310	534,250	118,050	739,610	42,889	355,662	982,233	1,380,785	265,228	-	2,385,623
24	2028	-	549,843	121,495	671,339	-	366,043	1,010,902	1,376,945	272,964	-	2,321,247
25	2029	-	565,896	125,042	690,938	-	376,729	1,040,414	1,417,144	280,927	-	2,389,009
26	2030	-	582,421	128,694	711,114	-	196,214	1,070,796	1,267,011	289,124	-	2,267,249
27	2031	-	303,351	132,453	435,803	-	-	1,102,073	1,102,073	297,563	-	1,835,439
28	2032	-	-	136,322	136,322	-	-	1,134,271	1,134,271	306,250	-	1,576,843
29	2033	-	-	140,306	140,306	-	-	1,167,417	1,167,417	315,193	-	1,622,917
30	2034	-	-	144,407	144,407	-	-	608,072	608,072	324,400	-	1,076,879
31	2035	-	-	75,218	75,218	-	-	-	-	333,877	-	409,096
32	2036	-	-	-	-	-	-	-	-	343,634	-	343,634
33	2037	-	-	-	-	-	-	-	-	353,679	-	353,679
34	2038	-	-	-	-	-	-	-	-	364,019	-	364,019
35	2039	-	-	-	-	-	-	-	-	374,664	-	374,664
36	2040	-	-	-	-	-	-	-	-	195,230	-	195,230
Total Incremental Jobs/Revenue		**$2,530,607**	**$9,338,807**	**$2,333,297**	**$14,202,712**	**$1,229,607**	**$6,054,811**	**$17,825,047**	**$25,109,465**	**$6,259,437**	**$0**	**$45,571,614**

Total BASE JOBS:
Total Jobs per Area:

Assumptions:

1. Payroll Taxes are 50% of the additional (incremental) portion of the following taxes: 1.0% St. Louis individual gross payroll deduction, plus 0.5% St. Louis employer gross payroll payments, PLUS 3.0% State of Missouri Individual gross payroll dedu Gross payroll is estimated at an assumed average annual salary of $30,000 per additional worker, with the average salary inflated at 2.5% per year.
2. Earnings Taxes are 50% of the incremental Business Net Profits (after federal and state taxes). Incremental Business Net Profits are roughly estimated at 1.0% of the average worker's salary, times the number of additional workers.
3. Utilities Taxes are 50% of the incremental gross utility taxes. Utilities revenues are 14 cents per 100 gallons of water use. Water Division revenues are then taxed by the City of St. Louis at 10% of gross revenues.
4. No sales, restaurant taxes, or graduated business license taxdes are assumed since they will most likely have neglible impacts.
5. In the last year (23rd) of the TIF only half of the EATS are collected, assuming the TIF is adopted approximately in mid-year 2004.
6. Construction job creation is estimated at 700 full-time equivalent (for one year duration) per million square feet of new construction industrial space.

Table PF.4C Total of Estimated PILOTS and EATS
Potential North Riverfront TIF Redevelopment Project Area
St. Louis NRBC

		SUM OF ALL ESTIMATED PILOTS AND EATS BY PHASE										
	Collection Year	**Produce Row - PHASE 1**	**Produce Row - PHASE 2**	**Produce Row - PHASE 3**	**Produce Row - TOTAL**	**Adelaide - PHASE 1**	**Adelaide - PHASE 2**	**Adelaide - PHASE 3**	**Adelaide - TOTAL**	**Tyler - TOTAL**	**Remaining Area**	**All Areas - GRAND TOTAL**
0	2004											
1	2005	2,117	-	-	2,117	786	-	-	786	-	48,037	50,940
2	2006	4,277	-	-	4,277	1,587	-	-	1,587	-	97,040	102,905
3	2007	11,951	-	-	11,951	4,145	-	-	4,145	-	98,303	114,399
4	2008	175,709	-	-	175,709	84,394	55,276	-	139,670	-	159,133	474,511
5	2009	232,634	73,132	-	305,766	149,204	96,607	-	245,810	-	180,038	731,614
6	2010	366,310	131,002	-	497,312	225,542	147,726	-	373,268	-	271,910	1,142,490
7	2011	408,231	249,539	-	657,770	245,399	249,304	-	494,703	-	302,697	1,455,169
8	2012	420,430	322,085	-	742,515	252,477	274,610	74,774	601,862	-	356,818	1,701,195
9	2013	423,691	419,492	15,187	858,370	254,079	370,007	95,173	719,258	-	453,223	2,030,851
10	2014	436,261	560,652	70,850	1,067,763	261,360	410,073	193,797	865,230	-	520,427	2,453,421
11	2015	439,716	605,443	27,878	1,073,036	263,057	417,195	442,829	1,123,081	-	520,427	2,716,545
12	2016	543,817	623,993	93,128	1,260,937	339,791	428,547	636,228	1,404,566	-	578,925	3,244,429
13	2017	638,623	635,329	141,186	1,415,138	410,830	436,094	819,772	1,666,696	-	578,925	3,660,759
14	2018	748,621	654,687	147,427	1,550,735	491,959	447,964	1,027,904	1,967,827	135,417	638,598	4,292,578
15	2019	836,624	666,699	150,081	1,653,404	533,596	495,821	1,218,501	2,247,918	206,109	638,598	4,746,029
16	2020	857,695	795,476	156,549	1,809,720	546,594	563,254	1,291,637	2,401,485	160,285	699,471	5,070,962
17	2021	861,805	916,773	159,362	1,937,941	548,614	625,943	1,315,039	2,489,596	233,794	699,471	5,360,802
18	2022	883,458	1,052,993	166,068	2,102,519	561,951	706,454	1,352,190	2,620,594	286,587	761,568	5,771,268
19	2023	887,814	1,140,315	169,049	2,197,178	564,091	715,433	1,473,652	2,753,176	293,279	761,568	6,005,200
20	2024	910,069	1,170,525	274,660	2,355,254	577,778	733,385	1,589,574	2,900,738	303,509	824,913	6,384,413
21	2025	914,685	1,184,818	376,473	2,475,977	580,046	742,901	1,690,982	3,013,929	310,600	824,913	6,625,418
22	2026	937,565	1,216,185	387,657	2,541,407	594,096	761,579	1,913,855	3,269,530	321,309	889,530	7,021,777
23	2027	857,233	1,231,333	391,004	2,479,569	554,635	771,663	2,118,931	3,445,228	328,824	889,530	7,143,152
24	2028	-	1,263,913	402,540	1,666,454	-	791,105	2,256,756	3,047,861	340,037	-	5,054,352
25	2029	-	1,279,966	406,087	1,686,053	-	801,791	2,286,269	3,088,060	431,353	-	5,205,466
26	2030	-	1,313,820	417,993	1,731,812	-	630,520	2,344,936	2,975,455	539,805	-	5,247,073
27	2031	-	1,034,749	421,752	1,456,501	-	-	2,376,212	2,376,212	548,244	-	4,380,958
28	2032	-	-	434,041	434,041	-	-	2,437,264	2,437,264	564,170	-	3,435,475
29	2033	-	-	438,025	438,025	-	-	2,470,410	2,470,410	573,113	-	3,481,548
30	2034	-	-	450,715	450,715	-	-	1,940,499	1,940,499	589,703	-	2,980,917
31	2035	-	-	381,527	381,527	-	-	-	-	599,181	-	980,707
32	2036	-	-	-	-	-	-	-	-	616,470	-	616,470
33	2037	-	-	-	-	-	-	-	-	626,514	-	626,514
34	2038	-	-	-	-	-	-	-	-	644,538	-	644,538
35	2039	-	-	-	-	-	-	-	-	655,184	-	655,184
36	2040	-	-	-	-	-	-	-	-	483,587	-	483,587
Total		**$12,799,335**	**$18,542,919**	**$6,079,241**	**$37,421,494**	**$8,046,011**	**$11,673,253**	**$33,367,183**	**$53,086,447**	**$9,791,613**	**$11,794,063**	**$112,093,618**

Table PF.5 Sensitivity Analysis of Tax Abatement Levels
Potential North Riverfront TIF Redevelopment Project Area
St. Louis NRBC

Total Incremental Revenue Generated (PILOTS and EATS)

	10-year Tax Abatement Percentage Rates*				
	A	**B**	**C**	**D**	**E**
Campus Area	**0.0%**	**25.0%**	**50.0%**	**75.0%**	**100.0%**
Produce Row - All Three Phases	$45,094,000	$41,256,000	$37,421,000	$34,008,000	$32,366,000
Adelaide - All Three Phases	$62,267,000	$57,650,000	$53,086,000	$48,624,000	$45,770,000
Tyler Campus	$11,199,000	$10,495,000	$9,792,000	$9,306,000	$9,260,000
Remaining Area-Outside of Campus Areas	$11,794,000	$11,794,000	$11,794,000	$11,794,000	$11,794,000
TOTALS	**$130,354,000**	**$121,195,000**	**$112,093,000**	**$103,732,000**	**$99,190,000**

*For example, in column B, 100% of new development would receive a tax abatement of 25% of their tax bill for 10 years.

APPENDIX ITEMS

No Appendix items.

Table A.1
Per Capita Personal Income,
City of Saint Louis,
1990 - 2000

Area	1990	1991	1992	1993	1994	1995	1996	1997	1998	1999	2000	Average Annual Percentage Change
St. Louis (Independent City)	$ 17,797	$ 19,100	$ 19,713	$ 20,822	$ 21,622	$ 22,203	$ 22,887	$ 24,117	$ 25,197	$ 25,699	$ 27,106	4.30%
St. Louis County	$ 26,163	$ 26,498	$ 27,624	$ 28,890	$ 30,098	$ 31,731	$ 32,989	$ 34,617	$ 37,227	$ 37,777	$ 39,457	4.19%
St. Louis, MO-IL (MSA)	$ 20,631	$ 21,183	$ 22,220	$ 23,112	$ 24,155	$ 25,267	$ 26,209	$ 27,562	$ 29,184	$ 29,855	$ 31,354	4.27%
Missouri total	$ 17,743	$ 18,514	$ 19,454	$ 20,166	$ 21,094	$ 21,873	$ 22,828	$ 23,926	$ 25,171	$ 25,877	$ 27,206	4.37%
Great Lakes	$ 19,143	$ 19,564	$ 20,698	$ 21,480	$ 22,594	$ 23,544	$ 24,408	$ 25,589	$ 26,983	$ 27,832	$ 29,171	4.30%
Plains [1]	$ 18,208	$ 18,794	$ 19,838	$ 20,258	$ 21,381	$ 22,138	$ 23,520	$ 24,517	$ 26,001	$ 26,769	$ 28,228	4.48%
United States	$ 19,572	$ 20,023	$ 20,960	$ 21,539	$ 22,340	$ 23,255	$ 24,270	$ 25,412	$ 26,893	$ 27,843	$ 29,469	4.18%

Notes: [1] Includes Missouri

Source: Bureau of Economic Analysis, Claritas and URS Corp

Table A.2
Population,
City of St. Louis, MO,
1990 - 2000

					Average Annual Percentage Change	
	1990	2000	2002	2007	1990 - 2000	2000 - 2007
North Riverfront	625	885	862	805	3.54%	-1.34%
St. Louis City, Missouri	396,685	348,189	na	na	-1.30%	na

Source: Census Bureau, Claritas and URS Corp

Table A.3
Population Characteristics
Riverfront Business Corridor - North, St. Louis, MO, and Metro Area,
2000 Census, 2002 Estimates

	North Riverfront [1]	Saint Louis [2]		Saint Louis MSA [2]	
		City	County	Missouri Portion	Illinois Portion
Population	862	348,189	1,016,315	2,003,762	599,845
Population by Age					
Under 5	4.08%	6.73%	6.28%	6.69%	6.52%
5 to 15	9.34%	14.90%	14.53%	15.14%	15.02%
15 to 20	4.48%	6.86%	6.91%	7.05%	7.51%
20 to 24	9.11%	7.77%	5.66%	6.03%	6.12%
25 to 35	29.04%	15.48%	12.57%	13.42%	12.75%
35 to 55	34.11%	27.43%	30.86%	30.48%	29.75%
55 to 64	4.98%	7.12%	9.06%	8.56%	8.58%
64 to 84	3.95%	11.63%	12.36%	11.06%	12.07%
85 and over	0.92%	2.08%	1.76%	1.57%	1.69%
Population by Sex					
Male	66.66%	47.03%	47.33%	47.97%	48.30%
Female	33.33%	52.97%	52.67%	52.03%	51.70%
Population Age 25+ by Education Attainment					
Less than 9th grade	16.06%	9.59%	3.98%	5.50%	6.46%
Some High School, no Diploma	18.82%	15.73%	6.71%	8.91%	8.85%
High School Graduate (or GED)	19.26%	27.50%	23.99%	27.64%	32.15%
Some College, no Diploma	13.90%	20.34%	22.74%	22.87%	24.33%
Associate Degree	10.60%	4.37%	5.82%	5.84%	7.35%
Bachelor Degree	11.00%	11.46%	22.03%	17.34%	12.01%
Graduate or Professional Degree	10.36%	7.62%	13.38%	9.97%	6.67%
Housing					
Units	128	176,354	423,749	846,055	246,860
Owner Occupied	43.69%	46.86%	74.15%	71.28%	71.71%
Renter Occupied	56.31%	53.14%	25.85%	28.72%	28.29%
Median Value	$38,462	$63,500	$114,800	$103,000	$77,900
Income					
Per Capita Income	$10,321	$16,108	$27,595	$23,556	$19,832
Population Age 16+ by Employment					
In Armed Forces	15.83%	0.05%	0.09%	0.08%	1.17%
Civilian - Employed	33.84%	53.67%	63.96%	63.58%	59.85%
Civilian - Unemployed	20.09%	6.81%	3.09%	3.68%	3.59%
Not in Labor Force	30.24%	39.47%	32.86%	32.66%	35.39%

Notes: [1] 2002 Estimates
[2] 2000 Census

Source: US Census Bureau, Claritas and URS Corp.

Table B.1.a
Employment Trends By Industry
State of Missouri,
1992 - 2002

Employment

Industry	1992	1993	1994	1995	1996	1997	1998	1999	2000	2001	2002
Construction	90,900	96,800	111,100	111,800	115,200	121,000	126,200	136,700	140,700	143,800	142,200
Manufacturing	412,000	411,100	414,100	420,800	416,600	418,000	418,400	411,800	401,000	379,100	362,800
Transportation, Comm. & Utilities	151,100	152,200	155,900	157,700	160,300	165,400	168,500	172,100	178,900	175,100	167,300
Trade	558,300	568,700	587,800	604,200	612,500	624,500	632,500	642,600	645,900	643,200	642,700
Finance, Insurance & Real Estate	137,500	141,900	146,100	146,100	149,900	155,100	162,000	165,800	167,100	170,800	168,600
Services	608,400	642,600	666,000	685,500	707,500	737,900	757,500	771,000	783,800	787,000	791,900
Government	370,700	376,800	384,900	390,000	400,800	412,800	414,100	421,300	426,200	428,000	427,000
Total [1]	2,328,900	2,390,100	2,465,900	2,516,100	2,562,800	2,634,700	2,679,200	2,721,300	2,743,600	2,727,000	2,702,500

Change in Employment

Industry	1992-93	1993-94	1994-95	1995-96	1996-97	1997-98	1998-99	1999-2000	2000-01	2001-02	*1997-2000*	*1992-2002*
Construction	5,900	14,300	700	3,400	5,800	5,200	10,500	4,000	3,100	(1,600)	*19,700*	*51,300*
Manufacturing	(900)	3,000	6,700	(4,200)	1,400	400	(6,600)	(10,800)	(21,900)	(16,300)	*(17,000)*	*(49,200)*
Transportation, Comm. & Utilities	1,100	3,700	1,800	2,600	5,100	3,100	3,600	6,800	(3,800)	(7,800)	*13,500*	*16,200*
Trade	10,400	19,100	16,400	8,300	12,000	8,000	10,100	3,300	(2,700)	(500)	*21,400*	*84,400*
Finance, Insurance & Real Estate	4,400	4,200	0	3,800	5,200	6,900	3,800	1,300	3,700	(2,200)	*12,000*	*31,100*
Services	34,200	23,400	19,500	22,000	30,400	19,600	13,500	12,800	3,200	4,900	*45,900*	*183,500*
Government	6,100	8,100	5,100	10,800	12,000	1,300	7,200	4,900	1,800	(1,000)	*13,400*	*56,300*
Total [1]	61,200	75,800	50,200	46,700	71,900	44,500	42,100	22,300	(16,600)	(24,500)	*108,900*	*373,600*

Percent Change in Employment

Industry	1992-93	1993-94	1994-95	1995-96	1996-97	1997-98	1998-99	1999-2000	2000-01	2001-02	*1997-2000*	*1992-2002*
Construction	6.5%	14.8%	0.6%	3.0%	5.0%	4.3%	8.3%	2.9%	2.2%	-1.1%	*16.3%*	*56.4%*
Manufacturing	-0.2%	0.7%	1.6%	-1.0%	0.3%	0.1%	-1.6%	-2.6%	-5.5%	-4.3%	*-4.1%*	*-11.9%*
Transportation, Comm. & Utilities	0.7%	2.4%	1.2%	1.6%	3.2%	1.9%	2.1%	4.0%	-2.1%	-4.5%	*8.2%*	*10.7%*
Trade	1.9%	3.4%	2.8%	1.4%	2.0%	1.3%	1.6%	0.5%	-0.4%	-0.1%	*3.4%*	*15.1%*
Finance, Insurance & Real Estate	3.2%	3.0%	0.0%	2.6%	3.5%	4.4%	2.3%	0.8%	2.2%	-1.3%	*7.7%*	*22.6%*
Services	5.6%	3.6%	2.9%	3.2%	4.3%	2.7%	1.8%	1.7%	0.4%	0.6%	*6.2%*	*30.2%*
Government	1.6%	2.1%	1.3%	2.8%	3.0%	0.3%	1.7%	1.2%	0.4%	-0.2%	*3.2%*	*15.2%*
Total [1]	2.6%	3.2%	2.0%	1.9%	2.8%	1.7%	1.6%	0.8%	-0.6%	-0.9%	4.1%	*16.0%*

Note [1] Total does not include Mining or Agriculture Employment
Source: Bureau of Labor Statistics and URS Corp.

Table B.1.b
Employment Trends By Industry
St. Louis MSA, MO,
1992 - 2002

Employment

Industry	1992	1993	1994	1995	1996	1997	1998	1999	2000	2001	2002
Construction	na	na	na	na	na	na	na	na	na	na	na
Manufacturing	202,900	198,200	196,600	200,000	196,800	195,800	195,000	190,200	183,400	176,900	169,200
Transportation, Comm. & Utilities	77,200	76,500	78,200	79,200	80,600	83,400	84,300	86,800	90,900	88,600	86,400
Trade	280,200	283,200	291,600	297,900	301,700	305,500	308,700	312,400	312,500	310,000	309,800
Finance, Insurance & Real Estate	73,000	73,800	76,400	75,800	77,600	79,900	82,500	83,700	83,600	84,800	85,700
Services	338,300	353,200	368,500	378,900	392,200	405,700	414,000	420,800	427,800	424,700	432,500
Government	146,600	149,100	151,100	151,400	155,100	155,500	155,100	156,000	158,900	158,400	155,800
Total [1]	1,118,200	1,134,000	1,162,400	1,183,200	1,204,000	1,225,800	1,239,600	1,249,900	1,257,100	1,243,400	1,239,400

Change in Employment

Industry	1992-93	1993-94	1994-95	1995-96	1996-97	1997-98	1998-99	1999-2000	2000-01	2001-02	*1997-2000*	*1992-2002*
Construction	na	na	na	na	na	na	na	na	na	na	*na*	*na*
Manufacturing	(4,700)	(1,600)	3,400	(3,200)	(1,000)	(800)	(4,800)	(6,800)	(6,500)	(7,700)	*(12,400)*	*(33,700)*
Transportation, Comm. & Utilities	(700)	1,700	1,000	1,400	2,800	900	2,500	4,100	(2,300)	(2,200)	*7,500*	*9,200*
Trade	3,000	8,400	6,300	3,800	3,800	3,200	3,700	100	(2,500)	(200)	*7,000*	*29,600*
Finance, Insurance & Real Estate	800	2,600	(600)	1,800	2,300	2,600	1,200	(100)	1,200	900	*3,700*	*12,700*
Services	14,900	15,300	10,400	13,300	13,500	8,300	6,800	7,000	(3,100)	7,800	*22,100*	*94,200*
Government	2,500	2,000	300	3,700	400	(400)	900	2,900	(500)	(2,600)	*3,400*	*9,200*
Total [1]	15,800	28,400	20,800	20,800	21,800	13,800	10,300	7,200	(13,700)	(4,000)	*31,300*	*121,200*

Percent Change in Employment

Industry	1992-93	1993-94	1994-95	1995-96	1996-97	1997-98	1998-99	1999-2000	2000-01	2001-02	*1997-2000*	*1992-2002*
Construction	na	na	na	na	na	na	na	na	na	na	*na*	*na*
Manufacturing	-2.3%	-0.8%	1.7%	-1.6%	-0.5%	-0.4%	-2.5%	-3.6%	-3.5%	-4.4%	*-6.3%*	*-16.6%*
Transportation, Comm. & Utilities	-0.9%	2.2%	1.3%	1.8%	3.5%	1.1%	3.0%	4.7%	-2.5%	-2.5%	*9.0%*	*11.9%*
Trade	1.1%	3.0%	2.2%	1.3%	1.3%	1.0%	1.2%	0.0%	-0.8%	-0.1%	*2.3%*	*10.6%*
Finance, Insurance & Real Estate	1.1%	3.5%	-0.8%	2.4%	3.0%	3.3%	1.5%	-0.1%	1.4%	1.1%	*4.6%*	*17.4%*
Services	4.4%	4.3%	2.8%	3.5%	3.4%	2.0%	1.6%	1.7%	-0.7%	1.8%	*5.4%*	*27.8%*
Government	1.7%	1.3%	0.2%	2.4%	0.3%	-0.3%	0.6%	1.9%	-0.3%	-1.6%	*2.2%*	*6.3%*
Total [1]	1.4%	2.5%	1.8%	1.8%	1.8%	1.1%	0.8%	0.6%	-1.1%	-0.3%	2.6%	*10.8%*

Note [1] Total does not include Mining or Agriculture Employment
Source: Bureau of Labor Statistics and URS Corp.

Table B.2.a
Employment Trends By Industry,
City of Saint Louis, MO
1997 - 2000

Employment

Industry	1997	1998	1999	2000
Construction	6,564	6,628	7,387	7,947
Manufacturing	39,140	38,608	36,027	34,954
Transportation, Comm. & Utilities	30,823	30,395	30,637	32,224
Trade - Wholesale	14,694	14,873	14,300	13,737
Trade - Retail	27,798	27,385	27,260	26,299
Finance, Insurance & Real Estate	22,354	22,279	21,994	21,286
Services	95,535	96,025	95,511	97,102
Government	13,154	13,767	14,174	13,987
Total [1]	250,062	249,960	247,290	247,536

Change in Employment

Industry	1997-98	1998-99	1999-2000	1997-2000
Construction	64	759	560	1,383
Manufacturing	(532)	(2,581)	(1,073)	-4,186
Transportation, Comm. & Utilities	(428)	242	1,587	1,401
Trade - Wholesale	179	(573)	(563)	-957
Trade - Retail	(413)	(125)	(961)	-1,499
Finance, Insurance & Real Estate	(75)	(285)	(708)	-1,068
Services	490	(514)	1,591	1,567
Government	613	407	(187)	833
Total [1]	(102)	(2,670)	246	-2,526

Percent Change in Employment

Industry	1997-98	1998-99	1999-2000	1997-2000
Construction	1.0%	11.5%	7.6%	21.1%
Manufacturing	-1.4%	-6.7%	-3.0%	-10.7%
Transportation, Comm. & Utilities	-1.4%	0.8%	5.2%	4.5%
Trade - Wholesale	1.2%	-3.9%	-3.9%	-6.5%
Trade - Retail	-1.5%	-0.5%	-3.5%	-5.4%
Finance, Insurance & Real Estate	-0.3%	-1.3%	-3.2%	-4.8%
Services	0.5%	-0.5%	1.7%	1.6%
Government	4.7%	3.0%	-1.3%	6.3%
Total [1]	0.0%	-1.1%	0.1%	-1.0%

Note [1] Total does not include Mining or Agriculture Employment
Source: Bureau of Labor Statistics and URS Corp.

Table B.2.b
Employment Trends By Industry,
Saint Louis County, MO
1997 - 2000

Employment

Industry	1997	1998	1999	2000
Construction	31,860	33,251	36,003	38,373
Manufacturing	95,249	95,415	92,465	85,753
Transportation, Comm. & Utilities	40,890	42,246	45,168	48,486
Trade - Wholesale	40,327	40,726	41,252	41,558
Trade - Retail	117,841	119,452	120,322	121,031
Finance, Insurance & Real Estate	44,484	46,601	47,812	48,776
Services	228,618	234,885	239,628	243,091
Government	10,791	10,623	10,581	11,202
Total [1]	610,060	623,199	633,231	638,270

Change in Employment

Industry	1997-98	1998-99	1999-2000	1997-2000
Construction	1,391	2,752	2,370	6,513
Manufacturing	166	(2,950)	(6,712)	-9,496
Transportation, Comm. & Utilities	1,356	2,922	3,318	7,596
Trade - Wholesale	399	526	306	1,231
Trade - Retail	1,611	870	709	3,190
Finance, Insurance & Real Estate	2,117	1,211	964	4,292
Services	6,267	4,743	3,463	14,473
Government	(168)	(42)	621	411
Total [1]	13,139	10,032	5,039	28,210

Percent Change in Employment

Industry	1997-98	1998-99	1999-2000	1997-2000
Construction	4.4%	8.3%	6.6%	20.4%
Manufacturing	0.2%	-3.1%	-7.3%	-10.0%
Transportation, Comm. & Utilities	3.3%	6.9%	7.3%	18.6%
Trade - Wholesale	1.0%	1.3%	0.7%	3.1%
Trade - Retail	1.4%	0.7%	0.6%	2.7%
Finance, Insurance & Real Estate	4.8%	2.6%	2.0%	9.6%
Services	2.7%	2.0%	1.4%	6.3%
Government	-1.6%	-0.4%	5.9%	3.8%
Total [1]	2.2%	1.6%	0.8%	4.6%

Note [1] Total does not include Mining or Agriculture Employment
Source: Bureau of Labor Statistics and URS Corp.

Table B.2.c
Employment Trends By Industry,
Saint Charles County, MO
1997 - 2000

Employment

Industry	1997	1998	1999	2000
Construction	7,088	8,026	8,492	8,990
Manufacturing	14,109	14,317	14,275	14,367
Transportation, Comm. & Utilities	4,741	4,909	4,899	4,883
Trade - Wholesale	2,895	3,244	3,469	3,727
Trade - Retail	23,294	23,127	23,818	24,548
Finance, Insurance & Real Estate	2,334	2,452	2,753	2,709
Services	28,474	29,534	30,840	32,329
Government	1,998	2,132	2,210	2,398
Total [1]	84,933	87,741	90,756	93,951

Change in Employment

Industry	1997-98	1998-99	1999-2000	1997-2000
Construction	938	466	498	1,902
Manufacturing	208	(42)	92	258
Transportation, Comm. & Utilities	168	(10)	(16)	142
Trade - Wholesale	349	225	258	832
Trade - Retail	(167)	691	730	1,254
Finance, Insurance & Real Estate	118	301	(44)	375
Services	1,060	1,306	1,489	3,855
Government	134	78	188	400
Total [1]	2,808	3,015	3,195	9,018

Percent Change in Employment

Industry	1997-98	1998-99	1999-2000	1997-2000
Construction	13.2%	5.8%	5.9%	26.8%
Manufacturing	1.5%	-0.3%	0.6%	1.8%
Transportation, Comm. & Utilities	3.5%	-0.2%	-0.3%	3.0%
Trade - Wholesale	12.1%	6.9%	7.4%	28.7%
Trade - Retail	-0.7%	3.0%	3.1%	5.4%
Finance, Insurance & Real Estate	5.1%	12.3%	-1.6%	16.1%
Services	3.7%	4.4%	4.8%	13.5%
Government	6.7%	3.7%	8.5%	20.0%
Total [1]	3.3%	3.4%	3.5%	10.6%

Note [1] Total does not include Mining or Agriculture Employment
Source: Bureau of Labor Statistics and URS Corp.

Table B.3
Regional Company Inquiries,
St. Louis Region,
2000 - 2002

	REGION	Companies	Average Number of New Jobs Estimated
Information Technology		**44**	**145**
	12 County Region	26	140
	Missouri Counties	2	96
	Region	1	
	St. Clair County	1	
	St. Louis City	6	133
	St. Louis City/County	1	12
	St. Louis County	4	300
	(blank)	3	200
Advanced Manufacturing		**33**	**158**
	12 County Region	13	56
	Franklin County	1	
	Illinois Counties	1	
	Madison County	1	
	Missouri Counties	8	178
	St. Charles County	2	281
	St. Louis City	2	50
	St. Louis County	4	638
	(blank)	1	50
Call Center		**28**	**733**
	12 County Region	16	951
	Madison County	1	350
	Missouri Counties	5	388
	St. Charles County	1	150
	St. Louis City	2	70
	(blank)	3	600
Transportation/Distribution		**23**	**86**
	12 County Region	14	109
	Missouri Counties	2	29
	St. Clair County	1	
	St. Louis City	2	80
	St. Louis City/County	1	
	St. Louis County	1	25
	(blank)	2	
Life Science/Medical		**12**	**106**
	12 County Region	7	157
	St. Louis County	5	38
HQ/NonProfit		**9**	**352**
	12 County Region	6	444
	St. Charles County	1	30
	St. Louis County	1	30
	(blank)	1	
Banking/Insurance		**4**	**128**
	12 County Region	2	250
	St. Louis City	2	6
Other		**39**	**42**
	12 County Region	26	33
	Missouri Counties	1	3
	St. Louis City	2	
	St. Louis County	2	
	(blank)	8	85
Grand Total		**192**	**257**

Source: St. Louis Regional Chamber Growth Association and URS Corp.

Table C.1
Employment by Company Size,
Riverfront Business Corridor - North, Saint Louis, MO,

Group	Companies	Total Employees	Percentage of Companies	Percentage of Total Employment
500+	1	1,100	0.4%	13%
250 - 500	5	1,557	1.8%	18%
100 - 250	8	1,348	2.8%	16%
50 - 100	23	1,592	8.1%	18%
25 - 50	43	1,455	15.2%	17%
10 - 25	68	994	24.0%	12%
Under 10	135	567	47.7%	7%
Grand Total	**283**	**8,613**	**100%**	**100%**

Source: Dunn & Bradstreet, Sorkins and URS Corp

Table C.2
Employment by Company Classification,
Riverfront Business Corridor - North, Saint Louis, MO,

Classification		Employees	Companies
MANUFACTURING		**3,833**	**65**
	CHEMICALS AND ALLIED PRODUCTS	1,716	11
	FABRICATED METAL PRODUCTS	603	17
	INDUSTRIAL MACHINERY AND EQUIPMENT	449	11
	ELECTRONIC & OTHER ELECTRIC EQUIPMENT	383	4
	MISCELLANEOUS MANUFACTURING INDUSTRIES	148	6
	FURNITURE AND FIXTURES	125	2
	FOOD AND KINDRED PRODUCTS	101	3
	LEATHER AND LEATHER PRODUCTS	85	2
	APPAREL AND OTHER TEXTILE PRODUCTS	77	3
	PRIMARY METAL INDUSTRIES	48	2
	RUBBER AND MISC. PLASTIC PRODUCTS	39	1
	PRINTING AND PUBLISHING	30	1
	TEXTILE MILL PRODUCTS	25	1
	TRANSPORTATION EQUIPMENT	4	1
WHOLESALE TRADE		**2,114**	**84**
	WHOLESALE TRADE-NONDURABLE GOODS	1,075	40
	WHOLESALE TRADE-DURABLE GOODS	1,039	44
TCPU		**1,712**	**62**
	TRANSPORTATION SERVICES	771	19
	TRUCKING AND WAREHOUSING	745	33
	ELECTRIC, GAS, AND SANITARY SERVICES	138	8
	WATER TRANSPORTATION	58	2
SERVICES		**301**	**29**
	SOCIAL SERVICES	85	1
	BUSINESS SERVICES	78	6
	AUTO REPAIR, SERVICES, AND PARKING	56	10
	ENGINEERING AND MANAGEMENT SERVICES	36	3
	EDUCATIONAL SERVICES	19	1
	MEMBERSHIP ORGANIZATIONS	17	4
	MISCELLANEOUS REPAIR SERVICES	5	2
	SERVICES, NEC	4	1
	HEALTH SERVICES	1	1
CONSTRUCTION		**226**	**14**
	SPECIAL TRADE CONTRACTORS	166	11
	HEAVY CONSTRUCTION, EX. BUILDING	57	2
	GENERAL BUILDING CONTRACTORS	3	1
RETAIL TRADE		**217**	**25**
	FOOD STORES	72	3
	EATING AND DRINKING PLACES	60	8
	APPAREL AND ACCESSORY STORES	42	2
	AUTOMOTIVE DEALERS AND SERVICE STATIONS	33	6
	MISCELLANEOUS RETAIL	5	3
	FURNITURE AND HOMEFURNISHINGS STORES	3	2
	GENERAL MERCHANDISE STORES	2	1
PUBLIC ADMINISTRATION		**150**	**1**
	JUSTICE, PUBLIC ORDER, AND SAFETY	150	1
FIRE		**60**	**3**
	DEPOSITORY INSTITUTIONS	42	1
	REAL ESTATE	18	2
Grand Total		**8,613**	**283**

Notes: Sorkins Data: employment estimated by average of range given
Source: Dunn & Bradstreet, Sorkins and URS Corp

Table C.3.a
Top 10 Employers: Apparel and Other Textile Product Manufacturers by SIC Classification,
Riverfront Business Corridor - North, Saint Louis, MO,

COMPANY	Address	Employees
Central Counter Company *	6260 North Broadway	37
Zamzow Manufacturing Co Inc	3201 N Broadway	20
Star Bedding Co	3908 N Broadway	20

Table C.3.b
Top 10 Employers: Chemical and Allied Product Manufacturers by SIC Classification,
Riverfront Business Corridor - North, Saint Louis, MO,

COMPANY	Address	Employees
Mallinckrodt Inc	3600 North Second St.	1,100
Procter & Gamble Manufacturing Company *	169 East Grand Ave.	270
P D George Company	5200 N 2nd	224
Diversified Foam Products *	134 Branch St.	37
Midland Resources Inc	10 Bremen Ave	28
Missouri Paint & Varnish Co	5125 N 2nd St	15
T C I Products Co	420 E De Soto Ave	13
Cotto-Waxo Company Inc	3330 N Broadway	10
Eagle Sales Company	2216 N Broadway	8
Pressure Patch Products Inc. *	1523 North Broadway	7

Table C.3.c
Top 10 Employers: Electronic and Other Electric Equipment Manufacturers by SIC Classification,

Riverfront Business Corridor - North, Saint Louis, MO,

COMPANY	Address	Employees
Killark Electric Manufacturing Company Warehouse Location *	2216 North Broadway	375
JD Bodies Inc	3930 N 9th St	4
ACI Co. *	1526 North Broadway	2
Gateway Carbon Company *	1526 North Broadway	2

Table C.3.d
Top 10 Employers: Fabricated Metal Products Manufacturers by SIC Classification,
Riverfront Business Corridor - North, Saint Louis, MO,

COMPANY	Address	Employees
Bachman Machine Company Inc. Second Location *	4211 North Broadway	175
Ebco Products Corp	P O Box 470125	87
Missouri Threaded Products Corporation *	2511 North Ninth St.	62
Thiel Tool & Engineering Co. Inc. *	4622 Bulwer Ave.	62
Missouri Pipe Fittings Co	400 Withers Ave	50
Missouri Equipment Company	2222 N 9th St	44
Heintz Steel & Mfg Co	3300 Hall St.	25
St Louis Fabrication Service	600 E Athlone Ave	20
Lehner Tool & Manufacturing Co. *	5400 North Broadway	17
Kickham Boiler & Engineering	625 E Carrie Ave	15

Table C.3.e
Top 10 Employers: Food and Kindred Products Manufacturers by SIC Classification,
Riverfront Business Corridor - North, Saint Louis, MO,

COMPANY	Address	Employees
Danisco Cultor USA Inc	411 East Gano St.	80
Louis Maull Company	219 N Market St	17
Thor Distributing Inc	35 Produce Row 39	4

Table C.3.f
Top 10 Employers: Furniture and Fixtures Manufacturers by SIC Classification,
Riverfront Business Corridor - North, Saint Louis, MO,

COMPANY	Address	Employees
Vitro Seating Products Inc	201 Madison St.	80
Crescent Planing Mill Co Inc	3227 N 9th St	45

Table C.3.g
Top 10 Employers: Industrial Machinery and Equipment Manufacturers by SIC Classification,
Riverfront Business Corridor - North, Saint Louis, MO,

COMPANY	Address	Employees
Duke Manufacturing Co	2305 N Broadway	174
Bachman Machine Company	4321 N Broadway	130
Pat Williams Crsher Pulverizer	813 Montgomery St	50
Liberty Machine Works Inc	2410 N 9th St	35
Quality Screw Machine Products	4017 N Broadway	16
Med-Vac Inc	211 Florida St	10
Quality Pattern Co	610 E Red Bud Ave	8
Northside Tool & Machine Inc	5210 N Broadway	7
Vedder (A.F.) Machine Co. *	616 East Red Bud	7
Engine Rebuilders Corporation	1940 N 9th St	6

Table C.3.h
Top 10 Employers: Public Administration Employers by SIC Classification,
Riverfront Business Corridor - North, Saint Louis, MO,

COMPANY	Address	Employees
St Louis Community Release Ctr	1621 N 1st St	150

Table C.3.i
Top 10 Employers: Auto Repair, Services, and Parking Service Companies by SIC Classification,
Riverfront Business Corridor - North, Saint Louis, MO,

COMPANY	Address	Employees
Oln Investment Inc	1838 N Broadway	12
Bills Wrecker Inc	510 E Prairie Ave	12
Middle Sttes MBL Fleet Mntence	5911 Hall St	6
Meder Motor Co Inc	2427 N 9th St	5
Mid-Town Garage Inc	3227 N Broadway	5
Arch Trailer Sales Inc	4800 Bulwer	5
Truck Parts & Sales Co Inc	2615 N 9th St	4
Rapid Ways Truck Leasing Inc	5216 Hall St.	4
Roy & Son Brake Service	5710 N Broadway	2
Challenge Enterprise Inc	3237 N Broadway	1

Table C.3.j
Top 10 Employers: Electric, Gas, and Sanitary Services Companies by SIC Classification,
Riverfront Business Corridor - North, Saint Louis, MO,

COMPANY	Address	Employees
St. Louis Metroplitan- Sewer Dst	10 E Grand Ave	75
St. Louis Trigen- Energy Corp	1 Ashley St	26
Allied Waste North America	5820 N Broadway	15
City Saint Louis North Refuse	100 E Grand Ave	10
Strategic Materials Inc	24 Branch St	6
Allied Waste Systems Inc	71 Angelica St	4
American Iron and Metal Co	3945 N Broadway	2
La Clead Gas Co	720 Howard St	0

Table C.3.k
Top 10 Employers: Transportation Services Companies by SIC Classification,
Riverfront Business Corridor - North, Saint Louis, MO,

COMPANY	Address	Employees
Norfolk Southern Corporation	7021 Hall St	250
American Freightways Inc. *	5300 Hall St.	175
Instant Drayage Co. *	50 Produce Row	62
Bets Express Inc. *	513 East DeSoto Ave.	37
Brandt Truck Line Inc. *	6025 Hall St.	37
Colonial Freight Warehouse Co. Inc. *	4560 North 2nd St.	37
Holmes Freight Lines Inc. *	5015 Hall St.	37
Double S Express Inc. *	6121 Hall St.	17
Gateway Cold Storage *	1800 North Broadway	17
Modern Piano Moving Co. Inc. *	3732 North Broadway	17

Table C.3.l
Top 10 Employers: Trucking and Warehousing Companies by SIC Classification,
Riverfront Business Corridor - North, Saint Louis, MO,

COMPANY	Address	Employees
Consoldted Frightways Corp Del	8500 Hall St	312
Averitt Express Inc	333 E Carrie Ave	100
Adm/Growmark River Systems	1 E Grand Ave	50
Central Freight Lines Inc/TX	6000 Hall St	40
Copp of Saint Louis Inc	6025 Hall St	35
Beelman Truck Co	One North Market	30
R A Christopher Inc	6025 Hall St	25
Gully Transportation Inc	5501 Hall St	25
Red Bird of Mo. Moving and Storage *	3732 North Broadway	17
Affton Trucking Co Shop	4500 N 2nd St	15

Table C.3.m
Top 10 Employers: Water Transportation Services Companies by SIC Classification,
Riverfront Business Corridor - North, Saint Louis, MO,

COMPANY	Address	Employees
Bulk Service	1840 N Wharf St	30
American Commercial Lines Llc	5500 Hall St.	29

Table C.3.n
Top 10 Employers: Wholesale Trade (Durable Goods) Companies by SIC Classification,
Riverfront Business Corridor - North, Saint Louis, MO,

COMPANY	Address	Employees
Grossman Iron & Steel Co	5 N Market St	90
GW Trading Co. *	1920 North Broadway	87
Philip Services- McKinley Yard *	3620 North Hall St.	87
PSC Metals Inc	3620 Hall St	80
Goodman Midwest	119 Cass Ave	70
Ford Hotel Supply Co	2204 N Broadway	68
Joseph T Ryerson & Son Del	5 Clinton St.	60
Shapiro Sales Company	601 E Red Bud Ave	50
General Waste Trading Company	1920 N Broadway	45

Table C.3.o
Top 10 Employers: Wholesale Trade (Non-Durable Goods) Companies by SIC Classification,
Riverfront Business Corridor - North, Saint Louis, MO,

COMPANY	Address	Employees
United Fruit & Produce Company	55 Produce Row	350
Middendorf Meat Company	3737 N Broadway	220
Jones Vend and Ocs Distrg	5409 Bulwer Ave	42
Geo A Heimos Produce Co	32 Produce Row 42	40
Ole Tyme Produce Inc	92 Produce Row 98	35
Lange-Stegmann Co	1 Angelica St	30
M & L Frozen Foods Inc	1717 N Broadway	30
Transchemical Inc	419 E De Soto Ave	26
Missouri Beverage Co	401 Withers Ave	25
Gunther Salt Company	101 Buchanan St	21

Table C.3.p
Top 10 Employers: Construction Employers by SIC Classification,
Riverfront Business Corridor - North, Saint Louis, MO,

COMPANY	Address	Specific Classification	Employees
Subsurface Constructors Inc	110 Angelica St	Heavy Construction, Ex. Building	40
PMI Service Inc. *	6200 North Broadway	Heavy Construction, Ex. Building	17
Young Group Ltd	1948 North 9th St.	Special Trade Contractors	50
Coatings Application & Waterproofing Inc. *	5125 North 2nd St.	Special Trade Contractors	37
Litteken Aquisitions Inc	6200 N Broadway	Special Trade Contractors	20
Kingston Electric Inc	1544 N Broadway	Special Trade Contractors	20
Dipasquale Painting & Hm Imprv	237 Benton St Ste 2104	Special Trade Contractors	10
Asphalt Restoration Co. *	2000 North Broadway	Special Trade Contractors	7
Rainbow Glass Company Inc. *	715 Howard	Special Trade Contractors	7
M D Magary Construction Co	5550 N Broadway	Special Trade Contractors	6

Table C.3.q
Top Employers: Finance, Insurance and Real Estate Employers by SIC Classification,
Riverfront Business Corridor - North, Saint Louis, MO,

COMPANY	Address	Specific Classification	Employees
Breman Bank & Trust Co	3529 N Broadway	Depository Institutions	42
St Louis Produce Market Inc	1 Produce Row	Real Estate	16
5107 Corp	1539 N Broadway	Real Estate	2

Table C.3.r
Top 10 Employers: Miscellaneous Manufacturers by SIC Classification,

Riverfront Business Corridor - North, Saint Louis, MO,

COMPANY	Address	Specific Classification	Employees
Hermann Oak Leather Co	4050 N 1st St	Leather And Leather Products	80
United Bags Inc. *	2508 North Broadway	Miscellaneous Manufacturing Industries	62
Essco Geometric Incorporated	134 Branch St	Rubber And Misc. Plastic Products	39
Wunderlich Fibre Box Company *	821 Clinton St.	Miscellaneous Manufacturing Industries	37
Universal Shank Company *	6260 North Broadway	Miscellaneous Manufacturing Industries	37
Goodwin Bros Printing Co Inc	2613 N Broadway	Printing And Publishing	30
Bodycote Lindberg Corporation	650 E Taylor Ave	Primary Metal Industries	28
United Bags Inc	2508 North Broadway	Textile Mill Products	25
John C Kupferle Foundry Co	813 Hempstead St	Primary Metal Industries	20
Apex Oil Company Inc	Foot of Mullanphy St	Miscellaneous Manufacturing Industries	9

Table C.3.s
Top 10 Employers: Retail Trade Employers by SIC Classification,
Riverfront Business Corridor - North, Saint Louis, MO,

COMPANY	Address	Specific Classification	Employees
Saveway Food Company	5110 N Broadway	Food Stores	65
GVC Vintage & Recycled Clothing *	2820 North 9th St.	Apparel And Accessory Stores	37
Als Restaurant Inc	1200 N 1st St	Eating And Drinking Places	28
Naes Fuel & Wash Inc	1838 N Broadway	Automotive Dealers And Service Stations	10
St Crosby Inc	948 Saint Louis Ave	Eating And Drinking Places	10
Westmorelands Service Inc	6020 N Broadway	Automotive Dealers And Service Stations	8
Gregory Reinberg	4400 N Broadway	Eating And Drinking Places	6
Field Fresh Processed Foods	27 Produce Row 29	Food Stores	6
Color Inc	985s N Market St	Apparel And Accessory Stores	5
M & H Trucks Incorporated	3000 N Broadway	Automotive Dealers And Service Stations	5

Table C.3.t
Top 10 Employers: Service Companies by SIC Classification,
Riverfront Business Corridor - North, Saint Louis, MO,

COMPANY	Address	Specific Classification	Employees
Worth Industries Inc	3501 N Broadway	Social Services	85
Norman Corporation of St. Louis City Plant *	5900 North Broadway	Business Services	37
Franklin Career Services Llc	5601 Hall St	Educational Services	19
3M Media *	5550 North Broadway	Business Services	17
Gateway Foundation Inc	1621 N 1st St	Engineering And Management Services	13
City Design Group Inc	115 Branch St	Engineering And Management Services	13
It Group Inc	1 Angelrodt St	Engineering And Management Services	10
Synergy Foods Inc	5300 N Broadway	Membership Organizations	10
Sonn Signs and Decals Inc	1322 Lewis St	Business Services	9
J F Daley International Ltd	610 E Clarence Ave	Business Services	8

Notes: * Sorkins Data: employment estimated by average of range given

Source: Dunn & Bradstreet, Sorkins and URS Corp

Table C.4
Riverfront Business Corridor - North Employment by Company Classification

Major	Minor	COMPANY	ADDR	EMP_HERE
CONSTRUCTION				**226**
	GENERAL BUILDING CONTRACTORS			3
		Shannon & Williams Gen Contrs		
			611 Harris Ave	3
	HEAVY CONSTRUCTION, EX. BUILDING			57
		Subsurface Constructors Inc		
			110 Angelica St	40
		*PMI Service Inc. **		
			6200 North Broadway	17
	SPECIAL TRADE CONTRACTORS			166
		Young Group Ltd		
			1948 North 9th St.	50
		*Coatings Application & Waterproofing Inc. **		
			5125 North 2nd St.	37
		Kingston Electric Inc		
			1544 N Broadway	20
		Litteken Aquisitions Inc		
			6200 N Broadway	20
		Dipasquale Painting & Hm Imprv		
			237 Benton St Ste 2104	10
		*Asphalt Restoration Co. **		
			2000 North Broadway	7
		*Rainbow Glass Company Inc. **		
			715 Howard	7
		M D Magary Construction Co		
			5550 N Broadway	6
		Angle Roofing		
			2515 N Broadway	5
		Tobin Electric & Hardware		
			3321 N Broadway	3
		Mpv Enterprises		
			410 Talcott Ave	1
FIRE				**60**
	DEPOSITORY INSTITUTIONS			42
		Breman Bank & Trust Co		
			3529 N Broadway	42
	REAL ESTATE			18
		St Louis Produce Market Inc		
			1 Produce Row	16
		5107 Corp		
			1539 N Broadway	2
MANUFACTURING				**3,833**
	FOOD AND KINDRED PRODUCTS			101
		Danisco Cultor USA Inc		
			411 East Gano St.	80
		Louis Maull Company		
			219 N Market St	17
		Thor Distributing Inc		
			35 Produce Row 39	4
	TEXTILE MILL PRODUCTS			25
		United Bags Inc		
			2508 North Broadway	25
	APPAREL AND OTHER TEXTILE PRODUCTS			77
		*Central Counter Company **		
			6260 North Broadway	37
		Zamzow Manufacturing Co Inc		
			3201 N Broadway	20
		Star Bedding Co		
			3908 N Broadway	20
	FURNITURE AND FIXTURES			125
		Vitro Seating Products Inc		
			201 Madison St.	80
		Crescent Planing Mill Co Inc		
			3227 N 9th St	45
	PRINTING AND PUBLISHING			30
		Goodwin Bros Printing Co Inc		
			2613 N Broadway	30
	CHEMICALS AND ALLIED PRODUCTS			1,716
		Mallinckrodt Inc		
			3600 North Second St.	1,100
		*Procter & Gamble Manufacturing Company **		
			169 East Grand Ave.	270
		P D George Company		
			5200 N 2nd	224
		*Diversified Foam Products **		
			134 Branch St.	37
		Midland Resources Inc		
			10 Bremen Ave	28
		Missouri Paint & Varnish Co		
			5125 N 2nd St	15
		T C I Products Co		
			420 E De Soto Ave	13
		Cotto-Waxo Company Inc		
			3330 N Broadway	10
		Eagle Sales Company		
			2216 N Broadway	8
		*Pressure Patch Products Inc. **		
			1523 North Broadway	7
		Morton International Inc		
			44 Dock St	4
	RUBBER AND MISC. PLASTIC PRODUCTS			39
		Essco Geometric Incorporated		
			134 Branch St	39
	LEATHER AND LEATHER PRODUCTS			85
		Hermann Oak Leather Co		
			4050 N 1st St	80
		Belle Counter Company Inc		
			6260 N Broadway	5
	FABRICATED METAL PRODUCTS			603
		*Bachman Machine Company Inc. Second Location **		
			4211 North Broadway	175
		Ebco Products Corp		
			P O Box 470125	87
		*Thiel Tool & Engineering Co. Inc. **		
			4622 Bulwer Ave.	62
		*Missouri Threaded Products Corporation **		
			2511 North Ninth St.	62
		Missouri Pipe Fittings Co		
			400 Withers Ave	50
		Missouri Equipment Company		
			2222 N 9th St	44
		Heintz Steel & Mfg Co		
			3300 Hall St.	25
		St Louis Fabrication Service		
			600 E Athlone Ave	20
		*Lehner Tool & Manufacturing Co. **		
			5400 North Broadway	17
		Kickham Boiler & Engineering		
			625 E Carrie Ave	15
		Modern Screw Products Co		
			2307 N 9th St	11
		Metal Coatings Inc		
			100 Clinton St	9
		Midwest Plating Co Inc		
			513 Gano Ave	8
		American Foundry & Mfg Co		
			920 Palm St	6
		Vulcan Metals Company Inc		
			2600 N 9th St	6
		Marcal Lifting Products Co		
			4052 N Broadway	4
		St Louis Retining Co		
			5100 Bulwer Ave	2

Table C.4
Riverfront Business Corridor - North Employment by Company Classification

Major	Minor	COMPANY	ADDR	EMP_HERE
MANUFACTURING	INDUSTRIAL MACHINERY AND EQUIPMENT			449
		Duke Manufacturing Co		
			2305 N Broadway	174
		Bachman Machine Company		
			4321 N Broadway	130
		Pat Williams Crsher Pulverizer		
			813 Montgomery St	50
		Liberty Machine Works Inc		
			2410 N 9th St	35
		Quality Screw Machine Products		
			4017 N Broadway	16
		Med-Vac Inc		
			211 Florida St	10
		Quality Pattern Co		
			610 E Red Bud Ave	8
		Northside Tool & Machine Inc		
			5210 N Broadway	7
		*Vedder (A.F.) Machine Co. **		
			616 East Red Bud	7
		Matthews Manufacturing Inc		
			41 Branch St	6
		Engine Rebuilders Corporation		
			1940 N 9th St	6
	ELECTRONIC & OTHER ELECTRIC EQUIPMENT			383
		*Killark Electric Manufacturing Company Warehouse Location **		
			2216 North Broadway	375
		JD Bodies Inc		
			3930 N 9th St	4
		*ACI Co. **		
			1526 North Broadway	2
		*Gateway Carbon Company **		
			1526 North Broadway	2
	TRANSPORTATION EQUIPMENT			4
		Andrews Body Co Inc		
			210 Chambers St	4
	MISCELLANEOUS MANUFACTURING INDUSTRIES			148
		*United Bags Inc. **		
			2508 North Broadway	62
		*Wunderlich Fibre Box Company **		
			821 Clinton St.	37
		*Universal Shank Company **		
			6260 North Broadway	37
		Apex Oil Company Inc		
			Foot of Mullanphy St	9
		Missouri Specialties Co Inc		
			1932 N Broadway	2
		Tettaton Lonnie Jr Fine Hand		
			2407 N Broadway	1
	PRIMARY METAL INDUSTRIES			48
		Bodycote Lindberg Corporation		
			650 E Taylor Ave	28
		John C Kupferle Foundry Co		
			813 Hempstead St	20
PUBLIC ADMINISTRATION				**150**
	JUSTICE, PUBLIC ORDER, AND SAFETY			150
		St Louis Community Release Ctr		
			1621 N 1st St	150
RETAIL TRADE				**217**
	FOOD STORES			72
		Saveway Food Company		
			5110 N Broadway	65
		Field Fresh Processed Foods		
			27 Produce Row 29	6
		M J Produce		
			23 Produce Row	1
	AUTOMOTIVE DEALERS AND SERVICE STATIONS			33
		Naes Fuel & Wash Inc		
			1815 N 9th St	5
			1838 N Broadway	10
		Westmorelands Service Inc		
			6020 N Broadway	8
		M & H Trucks Incorporated		
			3000 N Broadway	5
		Community Whl Tire Distrg		
			3812 N Broadway	3
		Midwest Petroleum Co		
			209 E Grand Ave	2
	APPAREL AND ACCESSORY STORES			42
		*GVC Vintage & Recycled Clothing **		
			2820 North 9th St.	37
		Color Inc		
			985s N Market St	5
	FURNITURE AND HOMEFURNISHINGS STORES			3
		Wholesale Warehouse & Applianc		
			4616 N Broadway	2
		B&B Enterprises I		
			5620 N Broadway	1
	EATING AND DRINKING PLACES			60
		Als Restaurant Inc		
			1200 N 1st St	28
		St Crosby Inc		
			948 Saint Louis Ave	10
		Gregory Reinberg		
			4400 N Broadway	6
		Crystal Grill & Cafeteria Inc		
			2401 N Broadway	5
		Eirtens Parlor Inc		
			3523 N Broadway	4
		Bergjans Enterprises Inc		
			1 Mullnphy Grdn Shopg Ctr	3
		Palate Pleasers		
			5716 N Broadway	2
		East Coast Lounge		
			2825 N Broadway	2
	MISCELLANEOUS RETAIL			5
		Johnsons Outlet		
			5706 N Broadway	2
		Missouri Transformer & Switch		
			121 Tyler St	2
		Adult Book Store		
			807 Madison St	1
	GENERAL MERCHANDISE STORES			2
		*Fitzpatrick's Inc. **		
			1420 North Broadway	2
SERVICES				**301**
	BUSINESS SERVICES			78
		*Norman Corporation of St. Louis City Plant **		
			5900 North Broadway	37
		*3M Media **		
			5550 North Broadway	17
		Sonn Signs and Decals Inc		
			1322 Lewis St	9
		J F Daley International Ltd		
			610 E Clarence Ave	8
		Bantam Interactive Tech		
			101 Chambers St	6
		Vintage AMP Restoration		
			728 E Carrie Ave	1

Table C.4
Riverfront Business Corridor - North Employment by Company Classification

Major	Minor	COMPANY	ADDR	EMP_HERE
SERVICES	AUTO REPAIR, SERVICES, AND PARKING			56
		Bills Wrecker Inc		
			510 E Prairie Ave	12
		Oln Investment Inc		
			1838 N Broadway	12
		Middle Sttes MBL Fleet Mntence		
			5911 Hall St	6
		Arch Trailer Sales Inc		
			4800 Bulwer	5
		Meder Motor Co Inc		
			2427 N 9th St	5
		Mid-Town Garage Inc		
			3227 N Broadway	5
		Truck Parts & Sales Co Inc		
			2615 N 9th St	4
		Rapid Ways Truck Leasing Inc		
			5216 Hall St.	4
		Roy & Son Brake Service		
			5710 N Broadway	2
		Challenge Enterprise Inc		
			3237 N Broadway	1
	MISCELLANEOUS REPAIR SERVICES			5
		Walker Washer Service		
			5332 Bulwer Ave	3
		Richey & Sons Electric Mtr Svc		
			3301 N Broadway	2
	HEALTH SERVICES			1
		Janet Hegarty		
			705 Howard St Ste 811	1
	EDUCATIONAL SERVICES			19
		Franklin Career Services Llc		
			5601 Hall St	19
	SOCIAL SERVICES			85
		Worth Industries Inc		
			3501 N Broadway	85
	MEMBERSHIP ORGANIZATIONS			17
		Synergy Foods Inc		
			5300 N Broadway	10
		Vietnamese Buddhist Associaton		
			5234 Bulwer Ave	3
		Hope Foundation		
			2509 N Broadway	2
		United Auto Wkrs Amer Local 18		
			3607 N Broadway	2
	ENGINEERING AND MANAGEMENT SERVICES			36
		City Design Group Inc		
			115 Branch St	13
		Gateway Foundation Inc		
			1621 N 1st St	13
		It Group Inc		
			1 Angelrodt St	10
	SERVICES, NEC			4
		Zymo Sculpture Studio Inc		
			1520 N Broadway	4
TCPU				**1,712**
	TRUCKING AND WAREHOUSING			745
		Consoldted Frightways Corp Del		
			8500 Hall St	312
		Averitt Express Inc		
			333 E Carrie Ave	100
		Adm/Growmark River Systems		
			1 E Grand Ave	50
		Central Freight Lines Inc/TX		
			6000 Hall St	40
		Copp of Saint Louis Inc		
			6025 Hall St	35
		Beelman Truck Co		
			One North Market	30
		R A Christopher Inc		
			6025 Hall St	25
		Gully Transportation Inc		
			5501 Hall St	25
		*Red Bird of Mo. Moving and Storage **		
			3732 North Broadway	17
		Affton Trucking Co Shop		
			4500 N 2nd St	15
		B & L Drayage & Warehouse Co		
			725 E Carrie Ave	10
		Edward Dietiker Mvg & Stor Inc		
			918 La Beaume St	9
		Dancel Dedicated Logistics		
			511 Withers Ave	8
		Colonial Express Partnership		
			4560 N 2nd St	7
		Schaffer Moving Co Inc		
			2426 N Broadway	6
		Central Transport Inc		
			6100 Hall St	6
		Drivco Inc		
			4560 N 2nd St	6
		Dawes Transport Inc		
			6121 Hall St	6
		Jeffco Leasing Company Inc		
			812 East Taylor	5
		Rush Express & Transfer Co		
			821 Clinton St	5
		American Warehouse & Dist Ctr		
			2000 N Broadway	4
		2000 N Broadway Lc		
			2000 N Broadway	3
		Trailer Parts Inc		
			3001 N Broadway	3
		Chester Transfer Inc		
			4560 N 2nd St	3
		Consolidated Whsng & Distrg Co		
			1230 N 1st St	3
		Eileen Randall		
			4119 N 2nd St	2
		Machany Moving & Storage Co		
			2000 N Broadway	2
		M & L Truck Service		
			4315 N 2nd St	2
		G & S Warehouse Inc		
			1932 N Broadway	2
		Amtex Manufacturing Inc		
			1919 N Broadway	2
		Homeyer-Engelhard Mvg Stor Co		
			5 Carr St	1
		Liebman Drayage		
			400 Withers Ave	1
		Supervan Service Co Inc		
			121 Bremen Ave	0
	WATER TRANSPORTATION			58
		Bulk Service		
			1840 N Wharf St	30
		American Commercial Lines Llc		
			5500 Hall St.	28

Table C.4
Riverfront Business Corridor - North Employment by Company Classification

Major	Minor	COMPANY	ADDR	EMP_HERE
TCPU	TRANSPORTATION SERVICES			771
		Norfolk Southern Corporation	7021 Hall St	250
		*American Freightways Inc. **	5300 Hall St.	175
		*Instant Drayage Co. **	50 Produce Row	62
		*Bets Express Inc. **	513 East DeSoto Ave.	37
		*Brandt Truck Line Inc. **	6025 Hall St.	37
		*Colonial Freight Warehouse Co. Inc. **	4560 North 2nd St.	37
		*Holmes Freight Lines Inc. **	5015 Hall St.	37
		*Russell (H.B.) Truck Service Inc. St. Louis Office **	6121 Hall St.	17
		*Gateway Cold Storage **	1800 North Broadway	17
		*Modern Piano Moving Co. Inc. **	3732 North Broadway	17
		*Double S Express Inc. **	6121 Hall St.	17
		*Tom's Truck Repair Inc. **	3500 North 9th St.	17
		Macheca Transport Company Inc	1800 N Broadway	16
		Bros Transportation Service	5126 Bulwer Ave.	15
		*Dietiker (Edward) Moving & Storage Co. **	918 LaBeaume	7
		Door To Door Moving & Storage	918 La Beaume St Ste A	6
		Freight Watchers Inc	121 Bremen Ave	5
		Ballard Public Scale Inc	820 Branch St	2
		Clipper Exxpress Company	4560 N 2nd St	0
	ELECTRIC, GAS, AND SANITARY SERVICES			138
		St. Louis Metroplitan- Sewer Dst	10 E Grand Ave	75
		St. Louis Trigen- Energy Corp	1 Ashley St	26
		Allied Waste North America	5820 N Broadway	15
		City Saint Louis North Refuse	100 E Grand Ave	10
		Strategic Materials Inc	24 Branch St	6
		Allied Waste Systems Inc	71 Angelica St	4
		American Iron and Metal Co	3945 N Broadway	2
		La Clead Gas Co	720 Howard St	0
WHOLESALE TRADE				**2,114**
	WHOLESALE TRADE-DURABLE GOODS			1,039
		Grossman Iron & Steel Co	5 N Market St	90
		*GW Trading Co. **	1920 North Broadway	87
		*Philip Services- McKinley Yard **	3620 North Hall St.	87
		PSC Metals Inc	3620 Hall St	80
		Goodman Midwest	119 Cass Ave	70
		Ford Hotel Supply Co	2204 N Broadway	68
		Joseph T Ryerson & Son Del	5 Clinton St.	60
		Shapiro Sales Company	601 E Red Bud Ave	50
		General Waste Trading Company	1920 N Broadway	45
		Cashs Scrap Metal and Ir Corp	3144 N Broadway	40
		*Heimos (Geo. A.) Produce Company **	32-34 Produce Row	37
		United Petroleum Service Inc	1458 Collins St	25
		Missouri Bolt Corporation	2511 North 9th Street	25
		Wedge Tire Co Inc	2011 N Broadway	20
		Fenster Metals Inc	6000 Prescott Ave	18
		*Allen/Marske Produce Company **	85 Produce Row	17
		*Standard Company **	1609-19 North Broadway	17
		*Golden Railroad Supply Inc. **	#8 Florida St.	17
		*Independent Fruit & Produce Company **	64-70 Produce Row	17
		Rimco Inc	101 Bremen Ave	15
		Midwest Systems Truck Eqp Inc	600 Harris Ave	14
		Z-Specialty Products Inc	3400 North 9th St.	12
		Central Waste Material Co	1510 N Broadway	11
		United Specialty Alloys Inc	107 Ferry St	11
		Harrison Lumber & Hdwr Co Inc	4006 N Broadway	11
		Thomas & Proetz Lumber Co	3400 Hall St	10
		Service Metal Products Co Inc	1939 N Broadway	10
		*Bushman (H.R.) & Son Corp. **	54 Produce Row	7
		Hibdon Hardwood Inc	1406 N Broadway	7
		Rock Star Rags	2820 N 9th St	7
		*Greenlee Foodservice Distributors **	21 O'Fallon St.	7
		Massey Equipment Co	915 Saint Louis Ave	7
		John Fitzpatrick Inc	1420 N Broadway	6
		North St Louis Lbr & Plywd Co	652 E Holly Ave	6
		Golden Railroad Supply Inc	8 Florida St	6
		Foam Material & Equipment Co	512 N 2nd St	4
		Holcim Usa Inc	111 E Carrie Ave	3
		Thenyang USA Inc	2020 N Broadway	3
		Rich & Pat Distributing Co	611 Talcott Ave	3
		John Benson Electric Co	1708 N 8th St	3
		*Jay Hydraulic & Electric Co. **	1434 North Broadway	2
		Mid-City Tires & Services	3001 N Broadway	2
		*Trio Leasing Corp. **	5136 North Broadway	2
		Washington Equipment Company	78 Angelica St	0

Table C.4
Riverfront Business Corridor - North Employment by Company Classification

Major	Minor	COMPANY	ADDR	EMP_HERE
WHOLESALE TRADE	WHOLESALE TRADE-NONDURABLE GOODS			1,075
		United Fruit & Produce Company		
			55 Produce Row	350
		Middendorf Meat Company		
			3737 N Broadway	220
		Jones Vend and Ocs Distrg		
			5409 Bulwer Ave	42
		Geo A Heimos Produce Co		
			32 Produce Row 42	40
		Ole Tyme Produce Inc		
			92 Produce Row 98	35
		Lange-Stegmann Co		
			1 Angelica St	30
		M & L Frozen Foods Inc		
			1717 N Broadway	30
		Transchemical Inc		
			419 E De Soto Ave	26
		Missouri Beverage Co		
			401 Withers Ave	25
		Gunther Salt Company		
			101 Buchanan St	21
		Sherman Produce Co		
			44 Produce Row	20
		Trio Paper & Box Inc		
			5215 North 2nd St.	18
		Franklin Produce Co Inc		
			3-15 Produce Row	15
		Sas Company Inc		
			2600 N Broadway	15
		Shell Oil Company		
			239 E Prairie Ave	14
		William Mantia Fruit Co Inc		
			19 Produce Row	14
		Sunfarm Food Service Inc		
			84 Produce Row	14
		Bam Brokerage Ltd		
			2100 N 9th St	13
		Consolidated Brokerage Co		
			1535 N 7th St	13
		Pro S Produce		
			31 Produce Row	11
		Adolph & Ceresia Produce Co		
			28 Produce Row	10
		All-Type Containers Inc		
			1400 Collins St	10
		Great Western Bag Co Inc		
			1416 N Broadway 18	10
		S & B Entertainment Inc		
			1535 N Broadway	9
		Tom Lange Company Inc		
			97 Produce Row	8
		Frosty Treats Inc		
			4230 N Broadway	8
		HI-Performance Coatings Cons		
			1615 N Broadway	7
		International Food Products		
			165 E Prairie Ave	6
		H R Bushman & Son Corp		
			54 Produce Row	6
		Vegetable Oils Inc		
			3117 N 9th St 21	5
		South County Whl Frt & Prod Co		
			1626 N 8th St	5
		Mar Meat Company Inc		
			3000 North 9th St.	4
		Thomas & English Inc		
			2216 N Broadway	4
		Taylor Paper Corp St Louis		
			5401 Bulwer Ave.	4
		Raith Brothers Produce Co		
			23 Produce Row	3
		Lincoln Trail Produce Inc		
			56 Produce Row	3
		Esselborn News		
			1847 N Broadway	2
		George Louis Makla Inc		
			1619 N 7th St	2
		Porter Poultry		
			3123 N Broadway	2
		Bozarth Group Inc		
			345 Palm St	1
Grand Total				**8,613**

Notes: * Sorkins Data: employment estimated by average of range given

Source: Dunn & Bradstreet, Sorkins and URS Corp

Table C.5.a
Company Interview Summaries,
Riverfront Business Corridor - North, St. Louis, MO,
2002

Company/Owner	Type of Business	Lease/Own	Building Sq. Ft.	Site Size	Number of Employees	Union Status	Expansion Potential			Retention Potential			URS Comments
							Low	Medium	High	Low	Medium	High	
ADM/Growmark	Wholesale trade - grain	Own	NA	NA	50	NA	X					X	Strategic synergy with Lange-Stegmann. Concern about truck access, marshalling area and bridge construction. They are concerned about proposed development of a public park adjacent to their property.
American Commercial Terminals	Water transporation	Own	NA	65 acres	28	Union	X					X	Strong business transloading Powder River basin coal for 2 power plant customers. Expansion potential: 130-car unit train loop track, container transloading.
Beelman River Terminals	Trucking/ water transportation	Lease	90,000	28 acres	25	Non-union	X				X		Beelman's lease expires in 2010. They have developed a 65-acre transload operation in Illinois, which could handle the volume currently handled in St. Louis. Road access and air quality are challenges Beelman faces operating in Missouri.
Duke Manufacturing Co.	Restaurant equipment	Own	60,000	NA	174	Non-union			X		X		Expansion potential - acquired 20,000 sf building from Ehrhardt Tool & Die. Plans to renovate as office space. Most of new expansion has gone to Sedalia, MO plant. Currenty planning a production and distribution expansion in Sedalia.
Ford Hotel Supply	Wholesale trade - hotel/restaurant supplies	Own	125,000	NA	68	Non-union		X		X			Expansion opportunity - paper distribution. Current facility is 4.5 stories. Ideal relocation - 125,000 sf on one story. Center of customer base is I-270.
Grossman Iron & Steel	Wholesale trade - metals	Own	NA	20 acres	90	Union			X			X	Expansion potential - river access. Invested in hydraulic sheer in 1997. Possible future capital investments: new bailer/compactor and/or shredder. Beelman needs to address coal dust.
Kickham Boiler	Boiler repair/manufacturing	Own	NA	5 acres	15	Union	X				X		The business has been downsized from over 100 people to 15. Customer base is shrinking and low-cost competitors in Mexico and Asia are attracting most of the business.
Lange-Stegmann	Wholesale trade - bulk commodities	Own/Lease	NA	60 acres	30	Non-union		X				X	Strategic synergy with grain elevators. Co-location opportunity with processing/packaging operation. Growth opportunity - Nitrogen management technology.
M&L Foods	Wholesale trade - food service	Own	47,000	2 blocks	28	Non-union			X		X		Forced to relocate because of North Mississippi Bridge. M&L needs 2 acres for new facility.
Mallinckrodt	Pharmaceuticals	Own	NA	42 acres	1,100	Union		X				X	Likely to continue capital investment within existing facility.
Middendorf Meat	Food processing	Own	170,000	7.6 acres	220	Non-union			X				Business was recently acquired by Performance Foods. Currently planning addition to dry warehouse. Co-location opportunity: cold storage.
Midwest Systems	Container logistics	Own/Lease	NA	55 acres	95	Non-union	X				X		Midwest Systems is facing difficult economics in the container transportation business, caused by consolidation and lack of growth. There are five companies in the St. Louis market doing container logistics. Midwest expects to continue operating in their present situation but do not anticipate future growth.
Norfolk Southern	Intermodal terminal	Own	NA	NA	250	Union	X					X	Triple Crown was relocated to Illinois in 1999 to make room for Conrail traffic. Expansion opportunity - bulk transloading. Ford plant is the yard's biggest customer.
Procter & Gamble	Soap and detergent	Own	NA	35 acres	270	Union	X				X		High cost structure due to union regulations. Trends - outsourced and offshore production, increased volume with fewer workers. Co-location opportunity: plastic bottle supplier
St. Louis Produce Market	Wholesale trade - produce	Own/Lease	196,000	22 acres	1,200	Non-union			X			X	Expansion opportunity - 200,000 sf new building on BNSF land. Expansion requires addressing adjacency to Grossman. Concern about dust from neighboring industry and truck routes.
Thiel Tool	Metal stamping	Own	100,000	full city block	60	Union	X				X		Recent expansion. Tier II automotive supplier. Currently in a business slump. Major customer - Tower Automotive (Tier I supplier to Ford plant).
United Fruit & Produce Co.	Wholesale trade - produce	Own	68,000 (in Produce Mkt)	NA	325	Non-union			X			X	Expansion opportunity - adding 25,000 sf to new building south of Market St. Also, United could anchor Produce Market expansion. United is looking to double its business in the next 5-10 years.
Vitro Seating Products	Furniture	Own	150,000	NA	80	Non-union		X			X		Recent expansion. Likely to consider re-location when tax abatement expires in 7 years. Ideal expansion scenario - 200,000 sf on 10 acres. Concern about regulatory environment in the City.

Source: Individual companies, URS Corporation, Frauenhoffer & Associates

Table C.5.b
Company Interview Summaries,
Riverfront Business Corridor - North, St. Louis, MO,
2002

Company/Owner	Type of Business	Lease/Own	Building Sq. Ft.	Site Size	Number of Employees	Union Status	Expansion Potential			URS Comments
							Low	Medium	High	
High Retention Potential										
Grossman Iron & Steel	Wholesale trade - metals	Own	NA	20 acres	90	Union			X	Expansion potential - river access. Invested in hydraulic sheer in 1997. Possible future capital investments: new bailer/compactor and/or shredder. Beelman needs to address coal dust.
St. Louis Produce Market	Wholesale trade - produce	Own/Lease	196,000	22 acres	1,200	Non-union			X	Expansion opportunity - 200,000 sf new building on BNSF land. Expansion requires addressing adjacency to Grossman. Concern about dust from neighboring industry and truck routes.
United Fruit & Produce Co.	Wholesale trade - produce	Own	68,000 (in Produce Mkt)	NA	325	Non-union			X	Expansion opportunity - adding 25,000 sf to new building south of Market St. Also, United could anchor Produce Market expansion. United is looking to double its business in the next 5-10 years.
Lange-Stegmann	Wholesale trade - bulk commodities	Own/Lease	NA	60 acres	30	Non-union		X		Strategic synergy with grain elevators. Co-location opportunity with processing/packaging operation. Growth opportunity - Nitrogen management technology.
Mallinckrodt	Pharmaceuticals	Own	NA	42 acres	1,100	Union		X		Likely to continue capital investment within existing facility.
ADM/Growmark	Wholesale trade - grain	Own	NA	NA	50	NA	X			Strategic synergy with Lange-Stegmann. Concern about truck access, marshalling area and bridge construction. They are concerned about proposed development of a public park adjacent to their property.
American Commercial Terminals	Water transporation	Own	NA	65 acres	28	Union	X			Strong business transloading Powder River basin coal for 2 power plant customers. Expansion potential: 130-car unit train loop track, container transloading.
Norfolk Southern	Intermodal terminal	Own	NA	NA	250	Union	X			Triple Crown was relocated to Illinois in 1999 to make room for Conrail traffic. Expansion opportunity - bulk transloading. Ford plant is the yard's biggest customer.
Medium Retention Potential										
Duke Manufacturing Co.	Restaurant equipment	Own	60,000	NA	174	Non-union			X	Expansion potential - acquired 20,000 sf building from Ehrhardt Tool & Die. Plans to renovate as office space. Most of new expansion has gone to Sedalia, MO plant. Currenty planning a production and distribution expansion in Sedalia.
Middendorf Meat	Food processing	Own	170,000	7.6 acres	220	Non-union			X	Business was recently acquired by Performance Foods. Currently planning addition to dry warehouse. Co-location opportunity: cold storage.
M&L Foods	Wholesale trade - food service	Own	47,000	2 blocks	28	Non-union			X	Forced to relocate because of North Mississippi Bridge. M&L needs 2 acres for new facility.
Vitro Seating Products	Furniture	Own	150,000	NA	80	Non-union		X		Recent expansion. Likely to consider re-location when tax abatement expires in 7 years. Ideal expansion scenario - 200,000 sf on 10 acres. Concern about regulatory environment in the City.
Beelman River Terminals	Trucking/ water transportation	Lease	90,000	28 acres	25	Non-union	X			Beelman's lease expires in 2010. They have developed a 65-acre transload operation in Illinois, which could handle the volume currently handled in St. Louis. Road access and air quality are challenges Beelman faces operating in Missouri.
Kickham Boiler	Boiler repair/manufacturing	Own	NA	5 acres	15	Union	X			The business has been downsized from over 100 people to 15. Customer base is shrinking and low-cost competitors in Mexico and Asia are attracting most of the business.
Midwest Systems	Container logistics	Own/Lease	NA	55 acres	95	Non-union	X			Midwest Systems is facing difficult economics in the container transportation business, caused by consolidation and lack of growth. There are five companies in the St. Louis market doing container logistics. Midwest expects to continue operating in their present situation but do not anticipate future growth.
Procter & Gamble	Soap and detergent	Own	NA	35 acres	270	Union	X			High cost structure due to union regulations. Trends - outsourced and offshore production, increased volume with fewer workers. Co-location opportunity: plastic bottle supplier
Thiel Tool	Metal stamping	Own	100,000	full city block	60	Union	X			Recent expansion. Tier II automotive supplier. Currently in a business slump. Major customer - Tower Automotive (Tier I supplier to Ford plant).
Low Retention Potential										
Ford Hotel Supply	Wholesale trade - hotel/restaurant supplies	Own	125,000	NA	68	Non-union		X		Expansion opportunity - paper distribution. Current facility is 4.5 stories. Ideal relocation - 125,000 sf on one story. Center of customer base is I-270.

Source: Individual companies, URS Corporation, Frauenhoffer & Associates

Table D.1
Base Square Feet by Submarket,
Saint Louis Industrial Market,
1999 - 2002

Year	1999			2000				2001				2002		Change, 2nd Q 1999 - 2nd Q 2002		
Quarter	2nd	3rd	4th	1st	2nd	3rd	4th	1st	2nd	3rd	4th	1st	2nd	Total	Average Annual Change	Average Annual Percentage Change
Saint Louis City	78,569,922	78,333,662	77,861,973	78,605,957	78,137,607	78,184,946	78,179,178	78,475,571	78,490,456	79,181,763	78,224,924	77,775,814	77,648,176	-921,746	-283,614	-0.4%
Central County	21,306,095	21,239,575	21,347,575	21,489,998	21,489,919	21,630,624	21,658,438	21,601,231	21,539,701	21,602,321	21,677,531	22,008,454	22,090,508	784,413	241,358	1.2%
Chesterfield Valley	2,411,816	2,300,523	2,369,816	2,411,816	2,498,419	2,507,619	2,544,619	2,519,419	2,534,425	2,625,120	2,625,120	2,785,153	2,986,293	574,477	176,762	7.4%
Earth City	13,333,428	12,553,268	12,799,716	12,999,716	13,262,516	13,604,452	13,307,969	13,614,064	14,309,039	14,330,713	14,748,457	14,835,977	15,156,107	1,822,679	560,824	4.4%
Fenton	6,367,969	6,195,451	6,444,632	6,515,257	6,765,257	7,008,027	7,541,989	7,639,977	7,662,311	7,661,881	7,569,680	7,921,114	7,793,838	1,425,869	438,729	7.0%
North County	28,687,969	28,712,397	28,879,437	28,830,875	29,167,981	29,280,619	29,481,676	29,795,494	29,795,720	30,015,755	29,814,388	29,548,232	29,676,062	988,093	304,029	1.1%
South County	8,493,365	8,347,331	8,335,155	8,359,155	8,371,823	8,309,176	8,321,176	8,347,906	8,347,906	8,341,906	8,863,345	8,963,757	9,061,757	568,392	174,890	2.2%
St. Charles County	16,542,278	15,832,308	16,145,837	16,983,930	17,087,265	17,152,045	17,423,804	18,029,380	18,148,943	18,266,455	18,942,859	18,819,861	18,995,214	2,452,936	754,750	4.7%
Westport	13,730,411	13,622,421	13,555,041	13,910,259	13,710,712	13,485,438	13,501,473	13,706,095	13,731,125	13,746,125	13,841,804	14,200,669	14,011,130	280,719	86,375	0.7%
Missouri Sub-Market	189,443,253	187,136,936	187,739,182	190,106,963	190,491,499	191,162,946	191,960,322	193,729,137	194,559,626	195,772,039	196,308,108	196,858,761	197,419,085	7,975,832	2,454,102	1.4%
Metro East (Illinois)	na	na	na	na	na	na	na	na	18,577,580	18,577,580	18,577,580	18,577,850	18,577,580	na	na	na
St. Louis Market	189,443,253	187,136,936	187,739,182	190,106,963	190,491,499	191,162,946	191,960,322	193,729,137	213,137,206	214,349,619	214,885,688	215,436,611	215,996,665	26,553,412	na	na

Source: CB Richard Ellis and URS Corp

Table D.2
Vacancy Rate by Submarket,
Saint Louis Industrial Market,
1999 - 2002

Year	1999			2000				2001				2002	
Quarter	2nd	3rd	4th	1st	2nd	3rd	4th	1st	2nd	3rd	4th	1st	2nd
Saint Louis City	4.03%	3.39%	2.78%	4.81%	4.16%	4.35%	4.54%	4.33%	2.32%	2.91%	4.07%	5.28%	5.07%
Central County	4.67%	4.10%	4.59%	5.08%	3.71%	5.91%	5.69%	5.96%	5.60%	5.61%	6.15%	7.27%	6.88%
Chesterfield Valley	7.91%	7.04%	7.10%	9.84%	7.78%	10.31%	6.64%	3.32%	3.30%	7.79%	9.55%	14.93%	19.39%
Earth City	7.12%	8.12%	7.94%	10.45%	6.76%	10.25%	7.63%	9.42%	11.35%	10.74%	17.41%	18.29%	17.31%
Fenton	2.83%	2.56%	3.83%	4.74%	8.43%	9.54%	12.06%	14.05%	11.88%	12.43%	11.33%	17.37%	15.47%
North County	6.71%	5.33%	7.33%	5.13%	6.16%	4.86%	6.20%	11.05%	10.00%	9.73%	9.14%	10.75%	9.69%
South County	5.28%	4.52%	4.56%	4.45%	4.71%	6.98%	6.53%	10.45%	8.12%	10.19%	14.85%	16.48%	14.97%
St. Charles County	6.13%	6.41%	4.19%	7.16%	7.42%	7.91%	9.68%	11.12%	11.90%	11.92%	11.74%	13.93%	13.28%
Westport	4.12%	3.96%	4.31%	7.34%	3.66%	3.05%	3.97%	5.27%	4.94%	5.00%	4.38%	5.28%	6.27%
Metro East (Illinois)									12.52%	12.52%	10.73%	10.77%	10.77%
St. Louis Market	4.98%	4.45%	4.44%	5.72%	5.08%	5.63%	5.98%	7.23%	6.79%	7.08%	7.94%	9.39%	9.03%

Source: CB Richard Ellis and URS Corp

Table D.3
Occupied Square Feet by Submarket,
Saint Louis Industrial Market,
1999 - 2002

Year	1999			2000				2001				2002		Change, 2nd Q 1999 - 2nd Q 2002		
Quarter	2nd	3rd	4th	1st	2nd	3rd	4th	1st	2nd	3rd	4th	1st	2nd	Total	Average Annual Change	Average Annual Percentage Change
Saint Louis City	75,403,554	75,678,151	75,697,410	74,825,010	74,887,083	74,783,901	74,629,843	75,077,579	76,669,477	76,877,574	75,041,170	73,669,251	73,711,413	-1,692,141	-520,659	-0.8%
Central County	20,311,100	20,368,752	20,367,721	20,398,306	20,692,643	20,352,254	20,426,073	20,313,798	20,333,478	20,390,431	20,344,363	20,408,439	20,570,681	259,581	79,871	0.4%
Chesterfield Valley	2,221,041	2,138,566	2,201,559	2,174,493	2,304,042	2,249,083	2,375,656	2,435,774	2,450,789	2,420,623	2,374,421	2,369,330	2,407,251	186,209	57,295	2.7%
Earth City	12,384,088	11,533,943	11,783,419	11,641,246	12,365,970	12,209,996	12,292,571	12,331,619	12,684,963	12,791,594	12,180,751	12,122,477	12,532,585	148,497	45,691	0.4%
Fenton	6,187,755	6,036,847	6,197,803	6,206,434	6,194,946	6,339,461	6,632,425	6,566,560	6,752,028	6,709,509	6,712,035	6,545,216	6,588,131	400,376	123,193	2.1%
North County	26,763,006	27,182,026	26,762,574	27,351,851	27,371,233	27,857,581	27,653,812	26,503,092	26,816,148	27,095,222	27,089,353	26,371,797	26,800,452	37,445	11,522	0.0%
South County	8,044,915	7,970,032	7,955,072	7,987,173	7,977,510	7,729,196	7,777,803	7,475,550	7,670,056	7,491,866	7,547,138	7,486,530	7,705,212	-339,703	-104,524	-1.4%
St. Charles County	15,528,236	14,817,457	15,469,326	15,767,881	15,819,390	15,795,318	15,737,180	16,024,513	15,989,219	16,089,094	16,718,967	16,198,254	16,472,650	944,413	290,589	2.0%
Westport	13,164,718	13,082,973	12,970,819	12,889,246	13,208,900	13,074,132	12,965,465	12,983,784	13,052,807	13,058,819	13,235,533	13,450,874	13,132,632	-32,086	-9,873	-0.1%
Missouri Sub-Market	180,008,979	178,809,342	179,403,562	179,232,845	180,814,531	180,400,472	180,481,095	179,722,520	182,413,523	182,921,999	181,239,559	178,630,098	179,915,392	-93,587	-28,796	0.0%
Metro East (Illinois)	na	na	na	na	na	na	na	na	16,251,667	16,251,667	16,584,206	16,577,016	16,576,775	na	na	na
St. Louis Market	180,008,979	178,809,342	179,403,562	179,232,845	180,814,531	180,400,472	180,481,095	179,722,520	198,665,190	199,173,666	197,823,764	195,207,113	196,492,166	na	na	na

Source: CB Richard Ellis and URS Corp

Table D.4
Net Absorption by Submarket,
Saint Louis Industrial Market,
1999 - 2002

Year		1999		2000				2001				2002	
Quarter	2nd	3rd	4th	1st	2nd	3rd	4th	1st	2nd	3rd	4th	1st	2nd
Saint Louis City	na	274,597	19,259	-872,400	62,072	-103,182	-154,058	447,735	1,591,899	208,096	-1,836,404	-1,371,919	42,162
Central County	na	57,652	-1,031	30,585	294,337	-340,389	73,819	-112,275	19,680	56,953	-46,068	64,077	162,242
Chesterfield Valley	na	-82,475	62,993	-27,066	129,549	-54,959	126,573	60,118	15,015	-30,166	-46,202	-5,091	37,921
Earth City	na	-850,145	249,476	-142,173	724,724	-155,974	82,575	39,048	353,344	106,631	-610,844	-58,274	410,108
Fenton	na	-150,908	160,955	8,631	-11,488	144,515	292,964	-65,865	185,468	-42,519	2,526	-166,819	42,915
North County	na	419,020	-419,452	589,277	19,382	486,348	-203,769	-1,150,720	313,056	279,074	-5,869	-717,556	428,655
South County	na	-74,884	-14,960	32,101	-9,662	-248,315	48,608	-302,253	194,506	-178,190	55,272	-60,608	218,682
St. Charles County	na	-710,779	651,869	298,554	51,509	-24,072	-58,138	287,333	-35,294	99,875	629,874	-520,713	274,395
Westport	na	-81,745	-112,154	-81,573	319,654	-134,768	-108,668	18,319	69,024	6,011	176,714	215,341	-318,242
Missouri Sub-Market	na	-1,199,637	594,220	-170,718	1,581,686	-414,059	80,623	-758,574	18,942,669	505,765	-1,681,000	-2,621,563	1,298,838
Metro East (Illinois)	na	na	na	na	na	na	na	na	na	0	332,539	-7,190	-241
St. Louis Market	na	-1,199,637	594,220	-170,718	1,581,686	-414,059	80,623	-758,574	18,942,669	508,476	-1,349,902	-2,616,651	1,285,053

Source: CB Richard Ellis and URS Corp

Table D.5
Completed Construction by Submarket,
Saint Louis Industrial Market,
1999 - 2002

Year	1999			2000				2001				2002		1999 - 2nd Q 2002	
Quarter	2nd	3rd	4th	1st	2nd	3rd	4th	1st	2nd	3rd	4th	1st	2nd	Total	Annual Average
Saint Louis City	496,000	339,600	355,600	0	150,000	150,000	150,000	0	0	0	338,833	0	0	1,980,033	609,241
Central County	68,000	133,000	133,000	150,000	0	0	0	0	0	0	16,038	0	0	500,038	153,858
Chesterfield Valley	42,000	111,293	111,293	0	0	0	36,700	0	0	0	21,000	104,000	204,940	631,226	194,223
Earth City	419,776	1,071,640	1,071,640	0	104,800	134,800	134,800	0	448,975	522,516	666,575	0	173,800	4,749,322	1,461,330
Fenton	141,250	142,800	230,800	0	0	0	534,600	199,000	199,000	199,000	199,000	0	130,000	1,975,450	607,831
North County	0	0	0	0	201,202	245,202	245,202	180,360	180,360	235,360	235,360	30,000	30,000	1,583,046	487,091
South County	0	112,000	24,000	0	0	80,000	80,000	0	0	0	0	0	0	296,000	91,077
St. Charles County	977,735	1,367,235	1,379,235	24,000	94,000	273,000	410,059	0	387,000	454,000	454,522	0	136,284	5,957,070	1,832,945
Westport	70,000	204,882	204,882	208,500	69,465	96,465	96,465	0	0	0	0	38,311	38,311	1,027,281	316,086
Missouri Sub-Market	1,768,361	3,482,450	3,510,450	382,500	619,467	979,467	1,687,826	379,360	1,215,335	1,410,876	1,931,328	172,311	713,335	18,253,066	5,616,328
Metro East (Illinois)	na	na	na	na	na	na	na	na	1,633,000	1,633,000	1,633,000	0	0	4,899,000	1,507,385
St. Louis Market	1,768,361	3,482,450	3,510,450	382,500	619,467	979,467	1,687,826	379,360	2,848,335	3,043,876	3,564,328	172,311	713,335	23,152,066	7,123,713

Source: CB Richard Ellis and URS Corp

Table D.6
Average Asking Gross Lease Rate by Submarket,
Saint Louis Industrial Market,
1999 - 2002

Year	1999			2000				2001				2002	
Quarter	2nd	3rd	4th	1st	2nd	3rd	4th	1st	2nd	3rd	4th	1st	2nd
Saint Louis City	$3.03	$3.05	$2.99	$2.74	$4.50	$2.66	$2.35	$2.55	$2.57	$2.82	$2.62	$2.56	$2.52
Central County	$5.76	$5.55	$5.55	$4.91	$6.75	$5.04	$4.73	$4.66	$4.80	$4.99	$4.79	$4.95	$5.06
Chesterfield Valley	$7.44	$7.27	$7.02	$6.44	$9.37	$7.60	$8.26	$8.28	$8.28	$8.28	$6.12	$6.38	$8.40
Earth City	$5.68	$5.69	$5.50	$4.33	$6.63	$4.60	$7.34	$5.13	$5.60	$5.60	$3.99	$4.16	$5.23
Fenton	$6.84	$6.54	$7.00	$8.82	$9.98	$5.30	$10.50	$6.10	$6.24	$6.17	$5.26	$6.46	$6.54
North County	$4.50	$4.68	$4.62	$3.73	$5.50	$4.48	$3.60	$4.25	$3.90	$4.09	$4.00	$3.34	$4.04
South County	$4.78	$5.09	$7.91	$4.54	$5.28	$3.94	$4.55	$4.03	$3.88	$3.79	$3.87	$3.88	$4.96
St. Charles County	$5.09	$5.22	$5.24	$4.88	$5.50	$4.88	$5.77	$4.54	$5.51	$4.63	$4.17	$4.87	$4.45
Westport	$6.90	$6.89	$6.87	$6.64	$7.80	$6.25	$6.36	$6.24	$5.88	$5.88	$6.19	$6.42	$6.11
Metro East (Illinois)	na	na	na	na	na	na	na	na	$5.18	$5.19	$3.16	$3.59	$3.59
St. Louis Market	$5.26	$5.34	$5.37	$5.40	$6.81	$4.97	$5.94	$5.20	$5.18	$5.14	$4.56	$4.33	$5.00

Source: CB Richard Ellis and URS Corp

Table D.7
Industrial Trends,
City of Saint Louis as a Percentage of the Saint Louis Industrial Market, Missouri Portion,
1999 - 2002

Year	1999			2000				2001				2002	
Quarter	2nd	3rd	4th	1st	2nd	3rd	4th	1st	2nd	3rd	4th	1st	2nd
Base Market	41%	42%	41%	41%	41%	41%	41%	41%	40%	40%	40%	40%	39%
Occupied Space	42%	42%	42%	42%	41%	41%	41%	42%	42%	42%	41%	41%	41%
Vacancy Rate [1]	81%	76%	63%	84%	82%	77%	76%	60%	34%	41%	51%	56%	56%
YTD Absorption	42%	38%	32%	10%	15%	13%	13%	58%	58%	46%	41%	6%	20%
Construction	28%	10%	10%	0%	24%	15%	9%	0%	0%	0%	18%	0%	0%
Asking Rents [1]	58%	57%	56%	51%	66%	54%	40%	49%	50%	55%	57%	59%	50%

Notes: [1] Percentage based on portion of Saint Louis Industrial Market, Missouri and Illinois portions

Source: CB Richard Ellis and URS Corp

Table D.8
Select Major Land Owner Assessment Values,
Riverfront Business Corridor - North, St. Louis, MO,
2002

	Assessments			Number of
Owners Name	**Land**	**Improvement**	**Total**	**parcels**
METROPOLITAN ST LOUIS SEWER DISTRICT	$1,151,200	$7,941,680	$9,092,880	23
MALLINCKRODT INC	$714,500	$7,744,500	$8,459,000	31
TERMINAL RAILROAD ASSOCIATION	$1,141,100	$61,200	$1,202,300	18
AMERICAN COMMERCIAL TERMINAL LLC	$372,400	$377,300	$749,700	1
CITY OF ST LOUIS	$136,800	$522,200	$659,000	8
CHICAGO ROCK IS & PAC R R CO	$453,200	$3,600	$456,800	2
ST LOUIS GRAIN CORP	$66,700	$306,000	$372,700	5
BACHMAN MACHINE CO	$57,400	$290,300	$347,700	8
ST LOUIS PRODUCE MARKET INC	$225,500	$88,700	$314,200	1
CONTINENTAL CEMENT CO LLC	$41,500	$224,600	$266,100	4
AMERICAN COMMERCIAL TERMINALS LLC	$204,400	$0	$204,400	1
ST L MERCHANTS BRIDGE TERMINAL	$189,800	$3,700	$193,500	5
DUNRAINE U S CORP	$64,100	$123,400	$187,500	5
199 RW INC	$28,800	$151,700	$180,500	1
UNITED FRUIT & PRODUCE CO INC	$27,200	$142,900	$170,100	1
DANISCO INGREDIENTS USA INC	$14,300	$147,800	$162,100	1
BURLINGTON NORTHERN RAILROAD CO	$134,600	$4,000	$138,600	21
NORFOLK & WESTERN RAILWAY	$106,900	$10,700	$117,600	27
M & L FROZEN FOODS INC	$24,300	$91,800	$116,100	5
P D GEORGE COMPANY	$46,100	$67,100	$113,200	1
THURMADUKE CO	$19,500	$86,600	$106,100	2
KICKHAM, MICHAEL F SR TRS & ETAL	$34,500	$58,500	$93,000	3
THE TWINFORD CORPORATION	$15,700	$64,900	$80,600	2
ASHCROFT, JOHN GOVERNOR	$65,800	$0	$65,800	4
EAGLE SALES CO A MO CORP	$19,600	$41,900	$61,500	2
TITAN TOWERS	$0	$60,000	$60,000	1
VITRO PRODUCTS INC	$18,300	$40,400	$58,700	4
SAFRON, EDSEL & DOLORES TR	$16,400	$41,500	$57,900	1
CITY OF ST LOUIS WHARF	$0	$51,600	$51,600	1
THE KIESEL CO	$41,700	$8,400	$50,100	2
FRANK C THIEL & BREMEN BANK & TRUST	$24,800	$24,000	$48,800	2
O J M INC	$8,900	$30,000	$38,900	2
CARNAHAN, MEL	$23,000	$0	$23,000	2
THIEL, FRANK C TRS	$13,300	$3,200	$16,500	2
MOUND CO LLC	$12,000	$0	$12,000	2
M P REALTY INC	$7,000	$0	$7,000	1
IRONHORSE RESOURCES INC	$1,600	$0	$1,600	1
CENTER POINT TERMINAL CO	$0	$0	$0	1
ST LOUIS MERCHANTS BRIDGE	$0	$0	$0	1
Grand Total	**$5,522,900**	**$18,814,180**	**$24,337,080**	**205**

Table E.1
Selected St. Louis Industrial Parks and Properties
Profile and Land Absorption, 2002

Name/ Location/ *Developer*	Year Opened	Total Acres	Land Built-Out (acres)	Percent Built-out	Remaining Acres	Absorption of Land (acres) Annual	Absorption of Land (acres) Last 12 mo.	Amenities	Access	Comments
Saint Louis										
Union Seventy Center Union and I 70 *Clark Properties*	1989	161	152	94.4%	9	12	0	Enterprise Zone, Tax Abatement	- I-70 -Rail -60' interior streets	Former GM Plant
Saint Louis Commerce Center Jefferson and Dr. ML King *Balke Brown*	2000	20	20	100.0%	0	10	10	Tax Abatement, New Construction		New construction, redevelopment site, inner city
Barry Wehmiller Property 8000 Hall Street *The Philip Co. (Broker)*	na	20	na	na	na	na	na	5, 10 and 20 ton cranes	Rail	Vacant building directly north of Study Area, outside storage
Subtotal Saint Louis		20	na	0%	9	12	na			
Saint Charles										
Fountain Lakes Rt. 370 @ Elm Street *Balke Brown*	1999	na	na	na	na	na	na	na	na	na
Subtotal Saint Charles		0	0	0%	0	0	0			
ILLINOIS										
Madison County										
Gateway Commerce Center I 255 & I 270, Edwardsville *TriStar*	2001	2,700	na	na (low)	na (many)	na	na	Enterprise Zone	- Highway Access - NS Rail Access -Triple Crown Facility	Large greenfield development
River's Edge SW Madison County *Tri-City Regional Port District*	2002	500+	na	na	na	na	na	18-hole golf course, restaurant, day care center. office park, Free trade zone	-Highway Access -Rail access -River barge	Former US Army support center
Alton Center Business Park Clark Bridge and Il 143, Alton ***Clark Properties***	2001	150	26	17.3%	124	26	26.0	Enterprise Zone, TIF	-NS Rail Access -River barge	Former Owens - Illinois Plant
Subtotal Madison County		2,850	26	1%	124	26	26			
Sauget										
Sauget Business Park N. of St. Louis DT Airport *Sauget Business Park*	1991	700	135	19.3%	450	na	na	Enterprise Zone, TIF	-Adjacent to airport -Rail to North -Direct I-255 Access	Land Costs - $54,450 per acre ($1.25 psf)
Subtotal Sauget		700	135	19%	450	0	0			
Totals		**3,570**	**333**	**9%**	**583**	**38**	**26**			

Source: Developer and Broker survey conducted by URS Corp

Table E.2
Selected St. Louis Industrial Parks and Properties
Space and Tenant Profile, 2002

Name Location *Developer/Owner*	Total Space (sq.ft.)	Space Available (sf)	Manufacturing				Distribution				Office/ Flex/ Service				Building Characteristics	Absorption of Space		Anchor Tenants	
			Total sf	Occ.	Under Const.	Rates	Total sf	Occ.	Under Const.	Rates	Total sf	Occ.	Under Const.	Rates	Ceiling Height	Annual	Last 12 mo.	Name	Size
Saint Louis																			
Union Seventy Center Union and I 70 *Clark Properties*	4,000,000	500,000 (+)	750,000		0	na	3,000,000		0	$3.00 [1]	250,000		0	na	varies	285,714	0	Pepsi: na Smurfit Stone: na Save-a-Lot: na	
Saint Louis Commerce Center Jefferson and Dr. ML King *Balke Brown*	490,000	25,000	0		0	na	490,000	94%	0	$3.50 - 5.25 Net	na		0	na	28' clear	245,000	315,000	GPX: 180,000 Sigma Aldrich: na Killark Electric: na McLeod USA: na	
Barry Wehmiller Property 8000 Hall Street *The Philip Co. (Broker)*	272,000	272,000	272,000 [2]	0%	0	$2.95 - 3.25 NNN	[2]				na		na	na	24' to 30' clear	na	na	na	
Subtotal Saint Louis	4,762,000	797,000	1,022,000		0		3,490,000		0		250,000		0			530,714	315,000		
Saint Charles																			
Fountain Lakes Rt. 370 @ Elm Street *Balke Brown*	851,850	730,621	na		na	na	851,850	14%	na	$3.35 - 3.95 NNN	na		na	na	28' Clear	na	na	na	
Subtotal Saint Charles	851,850	730,621	0		0		851,850		0		0		0			0	0		
ILLINOIS																			
Maidson County																			
Gateway Commerce Center I 255 & I 270 *TriStar*	na(>1m)	na (B to S)	na		na	na	na (most)	na (100%)	na (2 pads)	na	na		na	na	varies	na	na	Dial: na Lanter Corporation: na (2, 50 bay bldgs) Buske Truck: na Proctor and Gamble: na (1, 100 bay bldg)	
River's Edge SW Madison County *Tri-City Regional Port District*	2,000,000	1,800,000	0		0		2,000,000	10%	0	$2 - $4.50 NNN	na	na	0		18' - 21'	na	na	na	na
Alton Center Business Park Clark Bridge and Il 143 *Clark Properties*	450,000	225,000	0		0		0		0		450,000	50%	na	na	na	225,000	225,000	American Water: 225,000 (call center)	
Subtotal Madison County	2,450,000	2,025,000	0		0		2,000,000		0		450,000		0			225,000	225,000		
Sauget																			
Sauget Business Park N. of St. Louis DT Airport *Sauget Business Park*	518,000	0	517,965	100%	0	na	0		0		35,000	100%	0	na	varies	47,091	0	Stellar Manufacturing: 130,000 Holten Meat: 85,000 MidAmerica Fiber: 75,000 R&L Carriers 70,000	
Subtotal Sauget	518,000	0	517,965		0		0		0		35,000		0			47,091	0		
Totals	8,581,850	3,552,621	1,539,965	NA	0	NA	6,341,850	NA	0	NA	735,000	NA	0			802,805	540,000		

Notes: [1] Cost of 1st floor Distribution Center space

[2] Warehouse/Manufacturing Space

Source: Developer and Broker survey conducted by URS Corp.

Table F.1
Total Waterborne Commerce Tonnage for Select Domestic River Ports,
United States,
1996 - 2000

Port Name	1996	1997	1998	1999	2000	Average Annual Percentage Change 1996 - 2000
Huntington - Tristate	na	na	na	na	76,867,987	na
Huntington, WV	27,478,215	25,175,459	24,738,617	22,313,997	na	na
Pittsburgh, PA	50,874,367	51,662,378	52,904,388	52,931,007	53,922,676	1.5%
St. Louis, MO and IL	**30,161,905**	**31,287,584**	**31,757,671**	**32,650,783**	**33,337,815**	**2.5%**
Memphis, TN	17,299,836	18,015,173	17,210,885	16,611,022	18,269,265	1.4%
Cincinnati, OH	12,803,247	12,878,606	11,987,060	14,293,775	14,337,043	2.9%
Louisville, KY	8,779,342	9,043,176	8,616,878	8,797,978	9,167,326	1.1%
St. Paul, MN	4,755,765	4,866,033	5,014,235	5,334,884	5,254,012	2.5%
Victoria, TX	4,351,045	4,999,658	5,297,710	5,521,873	5,104,245	4.1%
Vicksburg, MS	4,728,437	5,627,234	5,824,652	6,093,270	4,972,751	1.3%
Nashville, TN	3,777,854	3,904,419	4,019,135	4,723,194	4,523,011	4.6%
Kansas City, MO	3,009,981	3,417,348	3,451,378	3,863,728	3,819,732	6.1%
Greenville, MS	2,543,382	2,808,368	3,254,825	2,853,505	3,069,359	4.8%
Mount Vernon, IN	6,985,531	5,863,403	5,577,100	3,172,224	3,067,268	-18.6%
Chattanooga, TN	2,717,613	3,031,139	2,743,034	2,787,001	2,854,579	1.2%
Biloxi, MS	2,266,417	2,521,187	na	2,957,308	2,508,367	2.6%
Minneapolis, MN	1,567,477	1,619,328	1,660,628	1,689,296	1,936,945	5.4%
Tulsa, Port of Catoosa, OK	1,909,574	2,107,393	2,367,486	2,246,906	1,926,638	0.2%
Guntersville, AL	2,597,760	2,764,521	2,920,505	2,595,701	1,862,593	-8.0%
Helena, AR	2,285,638	1,810,133	2,033,325	1,815,938	1,797,390	-5.8%

Source: US Corp of Engineers and URS Corp

Appendix Item G

CITY OF CHICAGO PLANNED MANUFACTURING AREAS ORDINANCE

PART F

CHAPTER 16-8
(CHAPTER 194D*)
PLANNED MANUFACTURING DISTRICTS

Article I. General Provisions

16-8-010	Scope	16-8-060	Approval Procedure—Commission Empowered to Adopt Regulations
16-8-020	Purpose	16-8-070	Supplementary Use Regulations
16-8-030	Definitions and Rules of Construction	16-8-080	Administration
16-8-040	Eligibility	16-8-090	Violation—Penalties—Remedies
16-8-050	Application—Review and Determination	16-8-100	Severability

Article II. Designated District Maps and Supplementary Land Use Regulations

Article I - General Provisions

Scope

16-8-010 (194D-1.) This ordinance consists of Articles I and II. Article II shall include such maps and text delineating each district designated pursuant to the provisions of Article I and related Supplementary Special Uses as enacted by the City Council from time to time.

Purpose

16-8-020 (194D-1.1.) It is the policy of the City of Chicago and the intent and purpose of this ordinance:

(a) to foster the City's industrial base and to maintain the City's diversified economy for the general welfare of its citizens;

(b) to strengthen existing manufacturing areas which are suitable in size, location and character and which the City Council deems may benefit from designation;

(c) to encourage industrial investment, modernization, and expansion by providing for stable and predictable industrial environments;

(d) to designate specific manufacturing districts of five or more contiguous acres in order for the City better to plan and direct programs and initiatives to promote their growth and development;

(e) to encourage the designation of districts to be known as "Planned Manufacturing Districts" and to authorize the imposition in any such district or portion thereof at the time of designation supplementary land use regulations delineating for the particular district additional permitted uses, prohibited uses or allowable special uses which may enhance the character of the district and promote the purposes of this ordinance.

Definitions and Rules of Construction

16-8-030 (194D-2.) (a) Rules of Construction.

(1) Where any provision of this chapter is either more or less restrictive than any comparable provision concerning the same subject matter under the city's Zoning Ordinance, the provisions of this ordinance shall govern.

(2) In their interpretation and application, except as provided in Section 16-8-030(a)(1), the provisions of this Chapter shall be held to be the minimum requirements for the promotion of the public welfare and to accomplish the purposes of the ordinance.

(3) With respect to property located within any Planned Manufacturing District designated as such in Article II of this Chapter, as amended from time to time, the applicable permitted use, special use, lot area and floor area ratio provisions of the Chicago Zoning Ordinance, Title 17 of the Municipal Code of Chicago, shall govern except where they are in conflict with the purposes of this Chapter or to the extent that they differ from the general provisions in Sections 16-8-040 through 16-8-070 or the Supplementary Use Regulations in Section 16-8-080 and Article II imposed for particular districts at the time of designation pursuant to this Chapter. In the case of such a conflict, the provisions of this Chapter shall govern.

(4) This ordinance is not intended to abrogate any easement, covenant or any other private agreement, but where the provisions of this Chapter are more restrictive or impose higher standards or requirements than such easements, covenants or other private agreements, the requirements of this Chapter shall govern.

(b) Definitions. Wherever used in this Chapter, the following words shall have the following meanings unless the context clearly indicates otherwise:

"Administrator" means the City of Chicago Zoning Administrator.

"Commissioner" means the Commissioner of Planning and Development of the City

*Passed. Coun. J. 4-13-88, p. 12145.

of Chicago.

"Owner" means the person or entity which appears in the authentic tax records of Cook County.

"Plan Commission" or "Commission" means the Chicago Plan Commission.

"Planned Manufacturing District" means a district of five acres or more that is designated by the City Council pursuant to the provisions of this Chapter. For the purposes of this Chapter, measurements of acreage shall apply to land which is contiguous or would be contiguous except for separation by a public way or a railroad right of way. [Amend. Coun. J. 12-11-91, p. 10937.]

Eligibility

16-8-040 (194D-3.) Any area of five or more contiguous acres shall be eligible for designation as a Planned Manufacturing District by the City Council upon the recommendation of the Plan Commission.

Application - Review and Determination

16-8-050 (194D-3.1.)(a) Initiation of Designation. On receipt of the written application of the Mayor or of the owners of all land within the boundaries of a proposed district, or of the alderman of the ward in which a manufacturing district of suitable size exists, the Commission shall promptly commence the review and determination process set forth in Section 16-8-060.

(b) Application. An application for designation of an area as a Planned Manufacturing District shall be filed with the Zoning Administrator on forms provided by him and in the number of copies he shall require. The Administrator shall transmit an original copy of any such application without delay to the City Clerk, who shall record it in the proceedings of the City Council at its next regular meeting. The Administrator shall also transmit copies of any such application without delay to the Commissioner of Planning and Development and the Plan Commission.
[Amend. Coun. J. 12-11-91, p. 10937.]

Approval Procedure - Commission Empowered to Adopt Regulations

16-8-060 (194D-3.2.)(a) Department of Planning and Development - Community Meeting. Before a formal public hearing provided for in Section 16-8-060(b) to consider recommending the designation of any district as a Planned Manufacturing District, the Commissioner of Planning and Development shall hold at least one public meeting in the ward in which the district proposed for designation is located, for the purpose of explaining the proposal and soliciting comments on it. The Commissioner shall notify the alderman of the ward in writing of the time, place and purpose of the meeting and shall also publish notice of the same in a newspaper of general circulation within the ward.

The Commissioner shall make a written report and recommendation on the proposal to the Plan Commission before the date the Plan Commission has scheduled public hearings on the proposal pursuant to Section 16-8-060(b).

(b) Plan Commission - Public Hearing. The Plan Commission shall, after written notice as provided in Section 16-8-060(d), hold a public hearing at such a time and place as the Commission shall set, for the purpose of determining the industrial viability of the district and the need for Planned Manufacturing District status. The Commission shall hear testimony and make appropriate findings in accordance with Section 16-8-060(c).

(c) Findings - Factors to be Considered. The applicant shall present evidence on the following factors for the Commission's consideration:

(1) With respect to industrial viability, the factors the Commission shall consider shall include the following:

A. the size of the district;

B. the number of existing firms and employees that would be affected;

C. the nature and size of recent and planned public and private investments within the district;

D. the potential of the district to support additional industrial uses and increased manufacturing employment;

E. the proportion of land in the district currently in industrial uses;

F. the proportion of land in the district currently in legal nonconforming uses;

G. the area's importance to the City as an industrial district; and

H. the proportion of land owners and manufacturing and other industrial land users within the proposed district who testify in favor of or in opposition to the designation.

(2) With respect to the need for Planned Manufacturing District status, the factors the Commission shall consider shall include the following:

A. evidence of conflict with or encroachment on industrial uses by nonindustrial uses;

B. demand for zoning changes or use conversions which may be incompatible with the character of the manufacturing district; and

C. continuing industrial viability of the area in accordance with Section 16-8-060(c)(1).

Nothing in this section shall be construed to limit the right of any person other than the applicant to present evidence to the Commission.

(d) Notice of Public Hearing. The Plan Commission shall give written notice in advance of any public hearing required in Section 16-8-060(b) as provided herein. The notice shall contain a brief statement of the nature of the hearing, the area under consideration for Planned Manufacturing District status, and the time and place of the hearing. The City Clerk shall cause the notice to be published in a newspaper of general circulation at least 15 days but not more than 30 days before the date of the hearing. In addition, at least 15 days but not more than 30 days before the date of the hearing, the Plan Commission shall send notice by registered or certified mail, return receipt requested, to the owners of all property within the proposed Planned Manufacturing District and to the owners of all property within 250 feet, excluding from the computation the number of feet occupied by any public way, of the boundary lot lines of the proposed district. If the mailed notice is returned because the owner of a property to whom notice is required to be sent cannot be found at his or its last known address, the notice requirements of this provision shall be deemed satisfied as to that owner. No further notice shall be required when a hearing is resumed after recess to a date certain. The Commission shall provide the Zoning Administrator with a copy of the notice and shall solicit his advice and counsel in evaluating the proposal and evidence offered at the hearing.

(e) Recommendation of the Plan Commission. After public hearing, the Plan Commission shall within seven days forward to the City Council for consideration its findings, determination and recommendation, together with the recommendation of the Zoning Administrator, in a written report describing the proposed district, including relevant maps and any recommended supplementary use regulations commensurate with the character and needs of the proposed district.

(f) City Council. No planned manufacturing district ordinance shall be changed without City Council approval.

(g) Review by Plan Commission. The Plan Commission shall from time to time review the effectiveness of designated Planned Manufacturing Districts in achieving the purposes set forth in Sections 16-8-010 and 16-8-020. The Plan Commission shall recommend to the City Council changes in or repeal of a designated district if after following the hearing processes for district designation set forth in Section 16-8-060., it finds the purposes are not being met.

(h) Rules and Regulations. The Plan Commission may from time to time promulgate rules and regulations appropriate to effectuate the purposes of this ordinance; such rules and regulations shall be submitted to the City Council, and each of members, to take effect 30 days thereafter unless the City Council shall reject them in whole or in part within that time. At least two weeks before they are to take effect, the Commission shall post notice of any proposed rules and regulations in the public reception area of its general offices and shall provide copies of the notice to the Zoning Administrator for posting in the public reception areas of his office. The notice shall indicate where copies of the proposed rules and regulations may be obtained, their proposed effective date, and the person to whom comments thereon may be directed.
[Amend. Coun. J. 12-11-91, p. 10937.]

Supplementary Use Regulations

16-8-070 (194D-3.3.) Within any Planned Manufacturing District, no residential uses shall be permitted or allowed. The Commission, after consultation with the Administrator, may recommend additional land use regulations in the nature of additional prohibited uses, permitted uses, allowable special uses or special restrictions which the Commission may deem necessary to enhance the character of the particular district and further the purposes of this ordinance. The only special uses which may be allowed within any Planned Manufacturing District shall be those set forth in the supplementary use regulations pertaining to it. Nonconforming uses may be replaced by any other permitted use not prohibited in the supplementary use regulations in the district or by a use listed in the supplementary use regulations. The Commission shall enumerate any such proposed supplementary use regulations in its report and recommendations to the City Council, and no supplementary use regulations shall be effective in any Planned Manufacturing District unless expressly enacted by the City Council.

Administration

16-8-080 (194D-4.) Within any Planned Manufacturing District, any applicant for zoning exceptions, variations, variations in the nature of special uses, or any initial changes from a manufacturing use existing at the time the particular district was created to an allowable non-manufacturing special use, as set forth in the supplementary use regulations for that district, shall apply under procedures set forth in Title 17, the Chicago

Zoning Ordinance. In the case where an applicant seeks a variation in the nature of a special use, the applicant shall demonstrate that any proposed use will be compatible with the provisions of this Chapter 16-8, and in particular the supplemental use regulations applicable to the affected Planned Manufacturing District. In acting on any such application, the Chicago Zoning Board of Appeals shall consider, in addition to those factors set forth in Title 17, the probable effects of any proposed use on:

a. existing manufacturing activities, including the potential for land use conflicts and nuisance complaints;

b. the number and types of jobs in the district;

c. real estate values and taxes;

d. traffic flow and parking;

e. efforts to market the property for industrial use;

and it shall make specific findings with respect to each of these factors.

Violation - Penalties - Remedies

16-8-090 (194D-5.) (a) Any person found guilty of violating, disobeying, omitting, neglecting, or refusing to comply with, or resisting or opposing the enforcement of any of the provisions of this chapter, except when otherwise specifically provided, upon conviction thereof shall be punished by a fine of not less than Fifty Dollars ($50.00) nor more than Three Hundred Dollars ($300.00) for the first offense and not less than Two Hundred Dollars ($200.00) nor more than Five Hundred Dollars ($500.00) for the second and each subsequent offense in any 180-day period; provided, however, that all actions seeking the imposition of fines only shall be filed as quasi-criminal actions subject to the provisions of the Illinois Code of Civil Procedure (Ill.Rev.Stat. ch. 110, pars. 1 *et seq.*)(1985), as amended. Repeated offenses in excess of three (3) within any 180-day period may also be punishable as a misdemeanor by incarceration in the county jail for a term of not to exceed six (6) months under the procedures set forth in Section 1-2-1.1 of the Illinois Municipal Code (Ill.Rev.Stat. ch. 24, par. 1-2-1.1)(1985), as amended, and under the provisions of the Illinois Code of Criminal Procedure (Ill.Rev.Stat. ch. 38, pars. 100-1 *et seq.*)(1985), as amended, in a separate proceeding. A separate and distinct offense shall be regarded as committed each day upon which each person shall continue any such violation, or permit any such violation to exist after notification thereof.

(b) Notwithstanding the provisions of subparagraph (a) hereof, in the event any use of property has been or is about to be undertaken in violation of this chapter the City of Chicago may institute appropriate legal or equitable proceedings to prevent the illegal use or the continuation thereof.

Severability

16-8-100 (194D-6.) If any provision, clause, sentence, paragraph, section, or part of this chapter, or application thereof to any person, firm, corporation, public agency or circumstances, shall, for any reason, be adjudged by a court of competent jurisdiction to be unconstitutional or invalid, said judgment shall not affect, impair or invalidate the remainder of this chapter and the application of such provision to other persons, firms, corporations, public agencies, or circumstances, but shall be confined in its operation to the provision, clause, sentence, paragraph, section, or part thereof directly involved in the controversy in which such judgment shall have been rendered and to the person, firm, corporation, public agency, or circumstances involved. It is hereby declared to be the legislative intent of the City Council that this chapter would have been adopted had such unconstitutional or invalid provision, clause, sentence, paragraph, section or part thereof not been included.

ARTICLE II
DESIGNATED DISTRICT MAPS
AND
SUPPLEMENTARY LAND USE REGULATIONS

GENERAL APPENDIX

No Appendix items.

Table H.2 NRBC Public Utilities, Streets West-East

Carrie

Intersection	O/H Tel/Cable	O/H Electric	UG Telephone	UG Electric	Fire Hydrants	Water	Gas	Storm	Sanitary	Combined
Broadway										
Ouida	Yes	Yes	No	No	1	Yes	No	No	No	Yes
Prescott	Yes	Yes	No	No	2	Yes	Yes	No	No	Yes
Bulwer	Yes	Yes	No	No	2	Yes	Yes	No	No	Yes
Railroad (Terminal)	Yes	Yes	No	No	1	Yes	Yes	Yes	No	Yes
Railroad (Norfolk & Western)	Yes	Yes	No	No	1	Yes	Yes	Yes	No	Yes
E Third	Yes	Yes	No	No	1	Yes	Yes	Yes	No	Yes
Hall	Yes	Yes	No	No	4	Yes	Yes	No	No	Yes

Pope

Intersection	O/H Tel/Cable	O/H Electric	UG Telephone	UG Electric	Fire Hydrants	Water	Gas	Storm	Sanitary	Combined
Broadway										
Ouida	Yes	Yes	No	No	0	Yes	No	No	No	Yes
Prescott	Yes	Yes	No	No	0	Yes	Yes	No	No	Yes
Bulwer	Yes	Yes	No	No	0	Yes	Yes	No	No	Yes

Clarence

Intersection	O/H Tel/Cable	O/H Electric	UG Telephone	UG Electric	Fire Hydrants	Water	Gas	Storm	Sanitary	Combined
Broadway										
Ouida	Yes	Yes	No	No	0	Yes	Yes	No	No	Yes
Prescott	Yes	Yes	No	No	0	Yes	Yes	No	No	Yes
Bulwer	Yes	Yes	No	No	0	Yes	No	No	No	Yes

Holly

Intersection	O/H Tel/Cable	O/H Electric	UG Telephone	UG Electric	Fire Hydrants	Water	Gas	Storm	Sanitary	Combined
Prescott										
Bulwer	Yes	Yes	No	No	0	Yes	Yes	No	No	Yes

Athlone

Intersection	O/H Tel/Cable	O/H Electric	UG Telephone	UG Electric	Fire Hydrants	Water	Gas	Storm	Sanitary	Combined
Broadway										
Prescott	No	Yes	No	No	1	Yes	Yes	No	No	Yes
Railroad (Terminal)	No	Yes	No	No	1	Yes	Yes	No	No	Yes

Red Bud

Intersection	O/H Tel/Cable	O/H Electric	UG Telephone	UG Electric	Fire Hydrants	Water	Gas	Storm	Sanitary	Combined
Broadway										
Prescott	No	Yes	No	No	0	Yes	Yes	No	No	Yes
Bulwer	No	Yes	No	No	2	Yes	Yes	No	No	Yes

Harris

Intersection	O/H Tel/Cable	O/H Electric	UG Telephone	UG Electric	Fire Hydrants	Water	Gas	Storm	Sanitary	Combined
Broadway										
Bulwer	No	Yes	No	No	0	Yes	Yes	No	No	Yes

Adelaide

Intersection	O/H Tel/Cable	O/H Electric	UG Telephone	UG Electric	Fire Hydrants	Water	Gas	Storm	Sanitary	Combined
Broadway										
Bulwer	No	No	No	No	0	Yes	Yes	No	No	Yes
Railroad (Terminal)	No	No	No	No	1	Yes	Yes	No	No	Yes
Railroad (Norfolk & Western)	No	Yes	No	No	0	Yes	Yes	No	No	Yes
E Third	No	Yes	No	No	0	Yes	Yes	No	No	Yes
Hall	No	Yes	No	No	0	Yes	No	No	No	Yes

Withers

Intersection	O/H Tel/Cable	O/H Electric	UG Telephone	UG Electric	Fire Hydrants	Water	Gas	Storm	Sanitary	Combined
Broadway										
Bulwer	Yes	Yes	No	No	0	Yes	Yes	No	No	Yes

Railroad (Terminal)	Yes	Yes	No	No	0	Yes	Yes	No	No	Yes
Railroad (Norfolk & Western)	Yes	Yes	No	No	0	Yes	Yes	No	No	Yes
E Third	Yes	Yes	No	No	0	Yes	Yes	No	No	Yes

Talcott

Intersection	O/H Tel/Cable	O/H Electric	UG Telephone	UG Electric	Fire Hydrants	Water	Gas	Storm	Sanitary	Combined
Broadway										
Bulwer	Yes	Yes	No	No	0	Yes	Yes	No	No	Yes
Railroad (Terminal)	Yes	Yes	No	No	0	Yes	Yes	No	No	Yes
Railroad (Norfolk & Western)	Yes	Yes	No	No	0	Yes	Yes	No	No	Yes
E Third	Yes	Yes	No	No	0	Yes	Yes	No	No	Yes

De Soto

Intersection	O/H Tel/Cable	O/H Electric	UG Telephone	UG Electric	Fire Hydrants	Water	Gas	Storm	Sanitary	Combined
Broadway										
Bulwer	No	No	No	No	0	Yes	Yes	No	No	Yes
Railroad (Terminal)	No	Yes	No	No	0	Yes	Yes	No	No	Yes
Railroad (Norfolk & Western)	No	Yes	No	No	0	Yes	Yes	No	No	Yes
Railroad (Norfolk & Western)										
Benedict	No	Yes	No	No	0	Yes	Yes	No	No	Yes
Hall	No	Yes	No	No	0	No	Yes	No	No	Yes

E Prairie

Intersection	O/H Tel/Cable	O/H Electric	UG Telephone	UG Electric	Fire Hydrants	Water	Gas	Storm	Sanitary	Combined
Broadway										
Bulwer	Yes	Yes	No	No	0	Yes	Yes	No	No	Yes
Railroad (Terminal)	Yes	Yes	No	No	0	Yes	Yes	No	No	Yes
Railroad (Norfolk & Western)	Yes	Yes	No	No	0	Yes	Yes	No	No	Yes
E Third	Yes	Yes	No	No	0	Yes	Yes	No	No	Yes
Benedict										
Hall	Yes	Yes	No	No	2	Yes	Yes	No	No	Yes
Powder	Yes	Yes	No	No	0	Yes	Yes	No	No	Yes

Gano

Intersection	O/H Tel/Cable	O/H Electric	UG Telephone	UG Electric	Fire Hydrants	Water	Gas	Storm	Sanitary	Combined
Broadway										
Bulwer	Yes	Yes	No	No	0	No	No	No	No	Yes
Railroad (Terminal)	Yes	Yes	No	No	0	Yes	Yes	No	No	Yes
Railroad (Norfolk & Western)	Yes	Yes	No	No	0	Yes	Yes	No	No	Yes

John

Intersection	O/H Tel/Cable	O/H Electric	UG Telephone	UG Electric	Fire Hydrants	Water	Gas	Storm	Sanitary	Combined
Broadway										
Bulwer	No	Yes	No	No	0	No	No	No	No	Yes
Railroad (Terminal)	No	Yes	No	No	0	No	No	No	No	Yes
McKissock	No	Yes	No	No	0	No	No	No	No	Yes

E Grand

Intersection	O/H Tel/Cable	O/H Electric	UG Telephone	UG Electric	Fire Hydrants	Water	Gas	Storm	Sanitary	Combined
Broadway										
Bulwer	Yes	Yes	No	No	1	Yes	No	No	No	Yes
Railroad (Terminal)	Yes	Yes	No	No	1	Yes	Yes	No	No	Yes
McKissock	Yes	Yes	No	No	0	Yes	Yes	No	No	Yes
Railroad (Norfolk & Western)	Yes	Yes	No	No	0	Yes	Yes	No	No	Yes
Hall	Yes	Yes	No	No	0	Yes	Yes	No	No	Yes

May

Intersection	O/H Tel/Cable	O/H Electric	UG Telephone	UG Electric	Fire Hydrants	Water	Gas	Storm	Sanitary	Combined
Broadway										
N Second	No	No	No	No	0	Yes	Yes	No	No	Yes
Railroad (Terminal)	No	Yes	No	No	0	Yes	Yes	No	No	Yes

Cornelia

Intersection	O/H Tel/Cable	O/H Electric	UG Telephone	UG Electric	Fire Hydrants	Water	Gas	Storm	Sanitary	Combined
Broadway										
N Second	Yes	Yes	No	No	1	Yes	Yes	No	No	Yes
End -	Yes	Yes	No	No	0	Yes	Yes	No	No	Yes

Ferry

Intersection	O/H Tel/Cable	O/H Electric	UG Telephone	UG Electric	Fire Hydrants	Water	Gas	Storm	Sanitary	Combined
Broadway										
N Second	No	Yes	No	No	0	Yes	Yes	No	No	Yes
Railroad (Norfolk & Western)	Yes	Yes	No	No	0	Yes	Yes	No	No	Yes
N First	Yes	Yes	No	No	0	Yes	Yes	No	No	Yes
McKissock	Yes	Yes	No	No	0	Yes	Yes	No	No	Yes
Railroad (Terminal)	Yes	Yes	No	No	0	Yes	Yes	No	No	Yes
Railroad (Terminal)	No	Yes	No	No	2	Yes	Yes	No	No	Yes

Penrose

Intersection	O/H Tel/Cable	O/H Electric	UG Telephone	UG Electric	Fire Hydrants	Water	Gas	Storm	Sanitary	Combined
Broadway										
N Second	No	Yes	No	No	1	Yes	Yes	No	No	Yes

Angelica

Intersection	O/H Tel/Cable	O/H Electric	UG Telephone	UG Electric	Fire Hydrants	Water	Gas	Storm	Sanitary	Combined
Broadway										
Railroad (Norfolk & Western)	Yes	Yes	No	No	0	Yes	Yes	No	No	Yes
N First	Yes	Yes	No	No	0	Yes	Yes	No	No	Yes
Railroad (Terminal)	Yes	Yes	No	No	1	Yes	Yes	No	No	Yes
Railroad (Burlington)	Yes	Yes	No	No	1	Yes	Yes	No	No	Yes

Bremen

Intersection	O/H Tel/Cable	O/H Electric	UG Telephone	UG Electric	Fire Hydrants	Water	Gas	Storm	Sanitary	Combined
Broadway										
Railroad (Norfolk & Western)	Yes	Yes	No	No	0	Yes	Yes	No	No	Yes
Railroad (Terminal)	Yes	Yes	No	No	1	Yes	Yes	No	No	Yes
Railroad (Burlington)	No	Yes	No	No	1	Yes	Yes	No	No	Yes

McKinley Bridge

Intersection	O/H Tel/Cable	O/H Electric	UG Telephone	UG Electric	Fire Hydrants	Water	Gas	Storm	Sanitary	Combined
N Ninth										
Broadway	No	No	No	No	0	No	No	No	No	Yes
Railroad (Norfolk & Western)	No	No	No	No	0	No	No	No	No	Yes
Railroad (Terminal)	No	No	No	No	0	No	No	No	No	Yes

Salisbury

Intersection	O/H Tel/Cable	O/H Electric	UG Telephone	UG Electric	Fire Hydrants	Water	Gas	Storm	Sanitary	Combined
Start-										
N Ninth	No	No	No	No	0	No	No	No	No	Yes
Broadway	No	Yes	No	No	1	Yes	Yes	No	No	Yes
End-	No	Yes	No	No	0	Yes	No	No	No	Yes

Mallinckrodt

Intersection	O/H Tel/Cable	O/H Electric	UG Telephone	UG Electric	Fire Hydrants	Water	Gas	Storm	Sanitary	Combined
N Ninth										
Broadway	Yes	No	No	No	0	Yes	Yes	No	No	Yes

Destrahan

Intersection	O/H Tel/Cable	O/H Electric	UG Telephone	UG Electric	Fire Hydrants	Water	Gas	Storm	Sanitary	Combined
N Ninth										
Broadway	Yes	Yes	No	No	0	Yes	Yes	No	No	Yes

Angelrodt

Intersection	O/H Tel/Cable	O/H Electric	UG Telephone	UG Electric	Fire Hydrants	Water	Gas	Storm	Sanitary	Combined
N Ninth										
Broadway	Yes	Yes	No	No	1	Yes	No	No	No	Yes

Railroad (Terminal)	Yes	Yes	No	No	0	Yes	No	No	No	Yes
Railroad (Terminal)	Yes	Yes	No	No	0	Yes	No	No	No	Yes

Buchanan

Intersection	O/H Tel/Cable	O/H Electric	UG Telephone	UG Electric	Fire Hydrants	Water	Gas	Storm	Sanitary	Combined
Start-										
N Ninth	Yes	Yes	No	No	1	Yes	Yes	No	No	Yes
Broadway	Yes	Yes	No	No	0	Yes	Yes	No	No	Yes
Railroad (Terminal)	Yes	Yes	No	No	2	Yes	No	No	No	Yes
Railroad (Terminal)	Yes	Yes	No	No	0	Yes	Yes	No	No	Yes

Dock

Intersection	O/H Tel/Cable	O/H Electric	UG Telephone	UG Electric	Fire Hydrants	Water	Gas	Storm	Sanitary	Combined
N Eleventh										
N Ninth	Yes	Yes	No	No	0	No	No	No	No	Yes
Broadway	Yes	Yes	No	No	0	Yes	No	No	No	Yes
Railroad (Terminal)	No	Yes	No	No	0	Yes	Yes	No	No	Yes
Railroad (Terminal)	No	Yes	No	No	2	Yes	Yes	No	No	Yes

Branch

Intersection	O/H Tel/Cable	O/H Electric	UG Telephone	UG Electric	Fire Hydrants	Water	Gas	Storm	Sanitary	Combined
Start-										
N Eleventh	No	No	No	No	2	Yes	Yes	No	No	Yes
N Ninth	Yes	Yes	No	No	0	Yes	Yes	No	No	Yes
Broadway	Yes	Yes	No	No	1	Yes	Yes	No	No	Yes
Railroad (Terminal)	Yes	Yes	Yes	No	0	Yes	Yes	No	No	Yes
Railroad (Terminal)	No	Yes	Yes	No	1	Yes	Yes	No	No	Yes
Railroad (Terminal)	No	Yes	Yes	No	0	Yes	Yes	No	No	Yes
Railroad (Burlington)	No	Yes	Yes	No	1	Yes	Yes	No	No	Yes

Palm

Intersection	O/H Tel/Cable	O/H Electric	UG Telephone	UG Electric	Fire Hydrants	Water	Gas	Storm	Sanitary	Combined
N Eleventh										
N Ninth	Yes	Yes	No	No	0	Yes	Yes	No	No	Yes
Broadway	Yes	Yes	Yes	No	0	Yes	Yes	No	No	Yes
Railroad (Terminal)	Yes	Yes	Yes	No	1	Yes	Yes	No	No	Yes

Wright

Intersection	O/H Tel/Cable	O/H Electric	UG Telephone	UG Electric	Fire Hydrants	Water	Gas	Storm	Sanitary	Combined
Start-										
N Ninth	Yes	Yes	No	No	0	No	No	No	No	Yes
Broadway	Yes	Yes	Yes	No	0	Yes	Yes	No	No	Yes
Railroad (Terminal)	Yes	Yes	Yes	No	1	Yes	Yes	No	No	Yes

St Louis

Intersection	O/H Tel/Cable	O/H Electric	UG Telephone	UG Electric	Fire Hydrants	Water	Gas	Storm	Sanitary	Combined
Start-										
N Tenth	No	No	No	No	0	No	No	No	No	Yes
N Ninth	No	No	No	No	0	Yes	Yes	No	No	Yes
Broadway	No	No	No	No	0	Yes	Yes	No	No	Yes
Railroad (Terminal)	No	No	No	No	0	Yes	Yes	No	No	Yes

Montgomery

Intersection	O/H Tel/Cable	O/H Electric	UG Telephone	UG Electric	Fire Hydrants	Water	Gas	Storm	Sanitary	Combined
N Tenth										
N Ninth	Yes	Yes	No	No	0	Yes	Yes	No	No	Yes
Broadway	Yes	Yes	No	No	0	Yes	Yes	No	No	Yes
End-	Yes	Yes	No	No	0	Yes	Yes	No	No	Yes

Warren

Intersection	O/H Tel/Cable	O/H Electric	UG Telephone	UG Electric	Fire Hydrants	Water	Gas	Storm	Sanitary	Combined
N Tenth										
N Ninth	Yes	Yes	No	No	2	Yes	Yes	No	No	Yes
Broadway	Yes	Yes	No	No	0	Yes	No	No	No	Yes
End-	Yes	Yes	No	No	0	Yes	No	No	No	Yes

Benton

Intersection	O/H Tel/Cable	O/H Electric	UG Telephone	UG Electric	Fire Hydrants	Water	Gas	Storm	Sanitary	Combined
N Tenth										
N Ninth	Yes	Yes	No	No	1	Yes	Yes	No	No	Yes
Broadway	Yes	Yes	No	No	2	Yes	No	No	No	Yes
End-	Yes	Yes	No	No	0	Yes	No	No	No	Yes

N Market

Intersection	O/H Tel/Cable	O/H Electric	UG Telephone	UG Electric	Fire Hydrants	Water	Gas	Storm	Sanitary	Combined
N Tenth										
N Ninth	Yes	Yes	No	No	1	Yes	Yes	No	No	Yes
Broadway	Yes	Yes	No	No	2	Yes	Yes	No	No	Yes
N Second	No	Yes	No	No	1	Yes	Yes	No	No	Yes
Railroad (Terminal)	No	Yes	No	No	0	Yes	Yes	No	No	Yes
N First	No	Yes	No	No	0	Yes	Yes	No	No	Yes

Monroe

Intersection	O/H Tel/Cable	O/H Electric	UG Telephone	UG Electric	Fire Hydrants	Water	Gas	Storm	Sanitary	Combined
N Tenth										
Railroad (Terminal)	No	Yes	No	No	1	Yes	Yes	No	No	Yes
N Ninth	No	Yes	No	No	0	Yes	Yes	No	No	Yes
Broadway										
N Second	No	Yes	No	No	0	Yes	Yes	No	No	Yes
Railroad (Terminal)	No	Yes	No	No	0	Yes	Yes	No	No	Yes
N First	No	Yes	No	No	0	Yes	Yes	No	No	Yes

Clinton

Intersection	O/H Tel/Cable	O/H Electric	UG Telephone	UG Electric	Fire Hydrants	Water	Gas	Storm	Sanitary	Combined
N Tenth										
Railroad (Terminal)	Yes	Yes	No	No	0	Yes	Yes	No	No	Yes
N Ninth	Yes	Yes	No	No	0	Yes	Yes	No	No	Yes
Broadway										
N Second	Yes	Yes	No	No	0	Yes	No	No	No	Yes
Railroad (Terminal)	Yes	Yes	No	No	0	Yes	Yes	No	No	Yes
N First	Yes	Yes	No	No	0	Yes	Yes	No	No	Yes

Madison

Intersection	O/H Tel/Cable	O/H Electric	UG Telephone	UG Electric	Fire Hydrants	Water	Gas	Storm	Sanitary	Combined
Start-										
N Tenth	No	Yes	No	No	0	No	No	No	No	Yes
Railroad (Terminal)	No	Yes	No	No	0	Yes	Yes	No	No	Yes
N Ninth	No	Yes	No	No	0	Yes	Yes	No	No	Yes
Broadway	Yes	Yes	No	No	0	Yes	Yes	No	No	Yes
N Second	Yes	Yes	No	No	0	No	Yes	No	No	Yes
Railroad (Terminal)	Yes	Yes	No	No	0	Yes	Yes	No	No	Yes
Railroad (Terminal)	Yes	Yes	No	No	0	Yes	Yes	No	No	Yes

Chambers

Intersection	O/H Tel/Cable	O/H Electric	UG Telephone	UG Electric	Fire Hydrants	Water	Gas	Storm	Sanitary	Combined
N Tenth										
Railroad (Terminal)	Yes	Yes	No	No	0	Yes	Yes	No	No	Yes
N Ninth	Yes	Yes	No	No	0	Yes	Yes	No	No	Yes
Broadway										
N Second	Yes	Yes	No	No	0	No	Yes	No	No	Yes
Railroad (Terminal)	Yes	Yes	No	No	0	Yes	Yes	No	No	Yes
N First	Yes	Yes	No	No	2	Yes	Yes	No	No	Yes

Tyler

Intersection	O/H Tel/Cable	O/H Electric	UG Telephone	UG Electric	Fire Hydrants	Water	Gas	Storm	Sanitary	Combined
N Tenth										
N Ninth	Yes	Yes	No	No	0	Yes	Yes	No	No	Yes
Broadway	Yes	Yes	No	No	0	Yes	Yes	No	No	Yes
N Second	Yes	Yes	No	No	0	Yes	No	No	No	Yes

Railroad (Terminal)	No	Yes	No	No	0	Yes	No	No	No	Yes
N First	No	Yes	No	No	0	Yes	No	No	No	Yes
Railroad (Terminal)	No	Yes	No	No	0	Yes	No	No	No	Yes
End-	No	Yes	No	No	0	Yes	No	No	No	Yes

Labeaume

Intersection	O/H Tel/Cable	O/H Electric	UG Telephone	UG Electric	Fire Hydrants	Water	Gas	Storm	Sanitary	Combined
N Tenth										
N Ninth	No	Yes	No	No	0	Yes	Yes	No	No	Yes
Broadway	Yes	Yes	No	No	0	Yes	Yes	No	No	Yes

Hempstead

Intersection	O/H Tel/Cable	O/H Electric	UG Telephone	UG Electric	Fire Hydrants	Water	Gas	Storm	Sanitary	Combined
N Ninth										
Broadway	Yes	Yes	No	No	0	Yes	Yes	No	No	Yes

Brooklyn

Intersection	O/H Tel/Cable	O/H Electric	UG Telephone	UG Electric	Fire Hydrants	Water	Gas	Storm	Sanitary	Combined
N Tenth										
N Ninth	No	No	No	No	0	Yes	No	No	No	Yes
Broadway	Yes	Yes	No	No	0	Yes	Yes	No	No	Yes
Railroad (Terminal)	Yes	Yes	No	No	0	Yes	No	No	No	Yes
N First										
Railroad (Terminal)	No	No	No	No	0	Yes	No	No	No	Yes
End-	No	No	No	No	0	Yes	No	No	No	Yes

Mound

Intersection	O/H Tel/Cable	O/H Electric	UG Telephone	UG Electric	Fire Hydrants	Water	Gas	Storm	Sanitary	Combined
N Eighth										
Broadway	No	No	No	No	0	Yes	Yes	No	No	Yes
Railroad (Terminal)	No	No	No	No	0	Yes	No	No	No	Yes
N Second	No	No	No	No	0	Yes	No	No	No	Yes
N First										
Railroad (Terminal)	No	No	No	No	0	Yes	No	No	No	Yes
End-	No	No	No	No	0	Yes	No	No	No	Yes

Howard

Intersection	O/H Tel/Cable	O/H Electric	UG Telephone	UG Electric	Fire Hydrants	Water	Gas	Storm	Sanitary	Combined
Start-										
N Eighth	Yes	Yes	No	No	0	Yes	Yes	No	No	Yes
N Seventh	No	Yes	No	No	0	Yes	Yes	No	No	Yes

Mullanphy

Intersection	O/H Tel/Cable	O/H Electric	UG Telephone	UG Electric	Fire Hydrants	Water	Gas	Storm	Sanitary	Combined
Start-										
N Seventh	No	No	No	No	0	Yes	Yes	No	No	Yes
Broadway	No	No	Yes	No	0	Yes	Yes	No	No	Yes
Railroad (Terminal)	No	Yes	Yes	No	0	Yes	Yes	No	No	Yes
N Second	No	Yes	No	No	0	Yes	Yes	No	No	Yes
N First	No	Yes	No	No	0	Yes	Yes	No	No	Yes
Railroad (Terminal)	No	Yes	No	No	0	Yes	Yes	No	No	Yes
End-	No	Yes	No	No	0	Yes	Yes	No	No	Yes

Florida

Intersection	O/H Tel/Cable	O/H Electric	UG Telephone	UG Electric	Fire Hydrants	Water	Gas	Storm	Sanitary	Combined
Broadway										
Railroad (Terminal)	Yes	Yes	No	No	0	Yes	Yes	No	No	Yes
End-	Yes	Yes	No	No	0	Yes	Yes	No	No	Yes

Cass

Intersection	O/H Tel/Cable	O/H Electric	UG Telephone	UG Electric	Fire Hydrants	Water	Gas	Storm	Sanitary	Combined
Start-										
Broadway	No	No	No	No	0	Yes	No	No	No	Yes
Railroad (Terminal)	Yes	Yes	No	No	0	Yes	Yes	No	No	Yes
Railroad (Terminal)	Yes	Yes	Yes	No	0	Yes	Yes	No	No	Yes

Appendix Table I

SUMMARY OF INFRASTRUCTURE REQUIREMENTS AND 2003 COST ESTIMATES

Improvement	Description	Estimated Cost*
TRANSPORTATION		
➢ St. Louis Avenue full interchange	New diamond construction for better interstate access	MoDOT
➢ Mississippi River Bridge	Remove parkway complex for improved bridge access	MoDOT
➢ Miscellaneous	Resurfacing, cul-de-sacs, minor utility	$19,352,000
➢ Broadway Realignment at Grand Avenue	Alignment construction-reduce intersection congestion	$750,000
➢ Salisbury / Mallinckrodt	"User expectancy" improvements	$483,000
➢ Adelaide Bridge	Road resurfacing only Master Plan Development – additional local access	$365,000
➢ Bulwer Extension	Master Plan Development – additional local access	$600,000
➢ Broadway Ramp at Adelaide	Master Plan Development – additional local access	$3,200,000
➢ Carrie Bridge and Ramp	Master Plan Development – additional access	$19,000,000
➢ Broadway Ramp at Carrie	Master Plan Development – improved full access	$3,200,000
➢ Alignment (Adelaide/Hall)	Master Plan Development – additional local access	$180,000
➢ Adelaide Extension	Master Plan Development – additional local access	$200,000

Improvement	Description	Estimated Cost*
➢ S. Hall (Tyler – N. Market)	Master Plan Development – additional local access	$350,000
➢ S. Hall (N. Market–Angelrodt)	Master Plan Development – additional local access	$800,000
DRAINAGE / WASTEWATER		
➢ Televise and Clean	Master Plan Development	$157,000
➢ Combined Sewer Replacement	Master Plan Development	$9,628,000
UTILITIES AND SERVICE AMENITIES		
➢ Levee Gate Replacement		
➢ Gates C-3 to C-15	Gates with Project Area	CORPS
➢ Gates C-1, C-2, C-16, C-17 and C-18	Gates protecting Project Area	CORPS
GRAND TOTAL		**$58,265,000**

**Estimates are for 2003 and do not reflect land acquisition costs.*

Appendix Item J

ROADWAY CLASSIFICATIONS: URBAN AREA DEFINITIONS AND STANDARDS

--Roadway Functional Classification Standards and Procedures for the St. Louis Metropolitan Area*, (East West Gateway Coordinating Council, September 28, 2000)*

1. Principal Arterials

- Serve major centers of activity of a metropolitan area.
- Serve the highest traffic volume corridors.
- Serve the longest trip desires.
- Carry a high proportion of the total urban area travel on a minimum of mileage.
- Carry the major portion of trips entering and leaving the urban area.
- Carry the major portion of trips bypassing the central city.
- Serve significant intra-area travel between central business Areas and outlying residential areas, between major inner city communities, and major suburban centers.
- May carry intra-urban and intercity buses.
- Provide continuity of urban rural arterials that intercept the urban boundary.
- Include, but are not limited to, almost all fully or partially controlled access facilities.
- Stratification of this classification is as follows:

  a) Interstates

  b) other Freeways, Expressways

  c) other Principal arterials with no access control

2. Minor Arterials

- Should interconnect with and augment the Principal arterial system.
- Are generally located between and spaced closer than Principal arterials.
- Provide service to trips of moderate lengths at a lower level of travel mobility.
- Distribute traffic to geographic areas smaller than those identified with the higher system.
- Should not penetrate into neighborhoods.
- May carry inter and intra-city bus service.

3. Collector Streets

- Provide land access and traffic circulation within residential neighborhoods, commercial, and industrial areas.
- Distribute traffic to and from lower and higher order systems.
- May penetrate neighborhoods, distributing trips from arterials through the area to their ultimate destination.
- May carry intra-city bus service.
- In the CBD, and in other areas of like development and traffic density, the collector system may include the street grid, which forms a logical entity for traffic circulation.

4. Local Streets

- Serve primarily to provide direct access to abutting land and access to higher order systems.
- Lowest level of mobility.
- Carries no bus traffic.
- Through traffic is discouraged.

A properly established roadway classification system for an area should contain set amounts of each individual classification. This balance is based on the percentage of mileage and VMT[**] each classification contains in comparison to the entire system. For urban areas the following guidelines, as shown in the table below, are used.

Appendix Table J

FUNCTIONAL ROADWAY CLASSIFICATION GUIDELINES

	Proposed Range (%)	
Street Classification	**VMT[††]**	**Street Miles**
Principal arterial system	40-65%	5-10%
Principal arterial system + Minor arterial system	65-80%	15-25%
Collector street system	5-10%	5-10%
Local street system	10-30%	65-80%

[**] Vehicle Miles Traveled – Calculated by multiplying the ADT for a roadway segment by the length of the segment.
[††] Vehicle Miles Traveled – Calculated by multiplying the ADT for a roadway segment by the length of the segment.

Table K.1 Sewer Measurements per Produce Row Buisness Campus by Street, Pipe Size, Kind and Length				
Street Name	**Pipe Size**	**Length(ft)**	**Inlet**	**Manhole**
Angelica	12"	119	21	11
	15"	174		
	2'x3'	504		
	2.5'	476		
Angelrodt	6"VCR	69	7	6
	8"	166		
	12"	220		
Buchanan	2'x3'	163	8	5
	18"	167		
Dock	2"	122	13	9
	8"	314		
	9"	146		
	12"	501		
	15"	188		
	20"x30"	271		
Branch	11'x12'	1941	19	30
	11'x12'Brick	1463		
	12"	403		
	11.5'	108		
	15'x10'	83		
Palm	15'RCHS	212	4	6
	18'RCHS	1451		
	12"	34		
Wright	12"	185	5	2
	2'x3'	185		
St.Louis Ave	2'x3'	372	13	9
	2'x3'Brick	337		
	12"	154		
Montgomery	2'x3'Brick	230	1	5
	2'x3'	186		
Warren	2'x3'	295	2	3
	6"	238		
Benton	4'x5.5'	889	1	9

N Market	48"	362	13	9
	2'x3'Brick	224		
	8"VCP	89		
	6'x6' Tunnel	1286		
	30"VCP	24		
	18"	377		
	15"	377		
	7'Circ Brick	776		
	30"RCP	36		
	15"	180		
	60" Conc	284		
Madison	6"	67	29	11
	10"	48		
	8"	167		
	21"	441		
Tyler	15"	498	12	6
	12"VCP	121		
	24"	201		
	12"	470		
	17.5'X2.5'	360		
N11th Street	12"	607	6	8
N Tenth Street	12"	48	9	5
	2'x3'	1970		
N Ninth Street	2'x3'	1960	46	25
	2'x3' Brick	538		
	2.5'X3.5'	499		
N Broadway St	2'x3'	1242	64	56
	2.5'x3.5'	260		
	3'x4'	746		
	24"	104		
	27"	346		
Source: St. Louis MSD, ABNA Engineering, URS Corporation				

Table K.2 Sewer Measurements per Adelaide Buisness Campus by Street, Pipe Size, Kind and Length

Street Name	Pipe Size	Length(ft)	Inlet	Manhole
E Grand	12"	80	10	7
	15"	332		
Adelaide	12"	761	17	5
	15"	289		
	18"	141		
Harris	0	0	2	1
Bulwer	12"	724	2	6
	21"	297		
Red Bud	12"	114	3	0
Athlone	12"	13	5	1
	15"	275		
Holly	15"	380	3	2
Clarence	0	0	7	0
Pope	0	0	4	1
Carrie	15"	188	14	8
	21"	1555		
	60"	61		
Prescott	12"	463	12	14
	15"	1037		
	18"	184		
	2'x3'	176		
Ouida	12"	308	3	6
	15"	339		
Hall	12"	1435	27	28
	12"VCP	99		
	15"	2758		
	18"	1929		
	21"	562		
	21"VCP	1801		
E Prairie	88"RSL	713	9	19
	84"	465		
	75"CIPP	100		
Powder	0	0	0	0
N Broadway	2'x3'	1246	15	19
	34"x51"	910		
	3'x4'	380		
	15"	436		
	0.5"	610		

Source: St. Louis MSD, ABNA Engineering, URS Corporation

Table K.3 Sewer Measurements per Produce Row Buisness Campus by Totals, Pipe, Kind and Length

Pipe Size	Total length (ft)
6"	305
8"	647
9"	146
10"	48
12"	2741
15"	1417
18"	544
21"	441
24"	305
27"	346
48"	362
2'x3'	6877
2.5'x3.5'	759
3'x4'	746
4'x5.5'	889
11'x12'	1941
15'x10'	83
17.5'X2.5'	360
2'x3'Brick	791
6'x6' Tunnel	1286
11'x12'Brick	1463
6"VCR	69
8"VCP	89
12"VCP	121
15'RCHS	212
18'RCHS	1451
30"VCP	24
30"RCP	36
60" Conc	284
Total Inlets	273
Total Manholes	215

Source: St. Louis MSD, ABNA Engineering, URS Corporation

Table K.4 Sewer Measurements per Adelaide Buisness Campus by Totals, Pipe, Kind and Length

Pipe Size	Total length (ft)
12"	3898
15"	6034
18"	2254
21"	2414
60"	61
84"	465
12"VCP	99
21"VCP	1801
75"CIIP	0
88"RSL	713
2'x3'	1422
3'x4'	380
34"x51"	910
Total Inlets	133
Total Manholes	117

Source: St. Louis MSD, ABNA Engineering, URS Corporation

Table K.5 Sewer Measurements per Produce Row & Adelaide Business Campuses, by Pipe Size and Kind, and Total Length

Pipe Size	Total length (ft)
6"	305
8"	647
9"	146
10"	48
12"	6639
15"	7451
18"	2798
21"	2856
24"	305
27"	346
48"	362
60"	61
84"	465
2'x3'	8229
2.5'x3.5'	759
3'x4'	1126
34"x51"	910
4'x5.5'	889
11'x12'	1941
15'x10'	83
17.5'X2.5'	360
2'x3'Brick	791
6'x6' Tunnel	1286
11'x12'Brick	1463
6"VCR	69
8"VCP	89
12"VCP	220
21"VCP	1801
15'RCHS	212
18'RCHS	1451
30"VCP	24
30"RCP	36
60" Conc	284
75"CIIP	100
88"RSL	713
Total Strcutures	**738**

Source: St. Louis MSD, ABNA Engineering, URS Corporation

GENERAL APPENDIX

No Appendix items.

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No Appendix items.

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No Appendix items.

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Interviews

Captain John Walk, City of St. Louis Division of Public Safety

Michael Borgard, Assistant Plan Review Manager, St. Louis Metropolitan Sewer Area

Deanna Venker, Area Engineer, Missouri Department of Transportation Area 6