RIVERRIDGE
COMMERCE CENTER

Strategic Plan

RESOLUTION NO. 17-2018

A RESOLUTION ADOPTING THE RIVER RIDGE COMMERCE CENTER 2018 STRATEGIC PLAN

WHEREAS, the River Ridge Development Authority ("RRDA") is the body charged with the redevelopment of the River Ridge Commerce Center ("RRCC");

WHEREAS, the RRDA has the responsibility to create developable land to be sold to investors for the purpose of creating economic development and job opportunities; and

WHEREAS, in accordance with this responsibility RRDA adopted a masterplan in 2001 and then updated the plan in 2010 in order to guide development of the RRCC; and

WHEREAS, in an on-going effort for successful redevelopment RRDA issued a Request for Qualifications and Proposals for the development of a strategic plan to evaluate and optimize the sustainable future of the RRCC; and

WHEREAS, RRDA selected American Structurepoint to conduct the strategic planning process and create a flexible plan that is adaptable to changing RRCC circumstances over time; and

WHEREAS, following a lengthy process of data investigation, meetings and study that involved both RRDA staff and Board members, American Stucturepoint has completed the RRCC Strategic Plan in the year 2018; and

WHEREAS, RRDA staff and Board members have reviewed the RRCC 2108 Strategic Plan and recommend its adoption by the RRDA Board of Directors;

NOW THEREFORE, BE IT RESOLVED BY THE RIVER RIDGE DEVELOPMENT AUTHORITY BOARD OF DIRECTORS AS FOLLOWS:

The RRDA Board of Directors concurs with the recommendation of the RRDA staff and formally adopts the RRCC 2018 Strategic Plan as a guide for the successful development of the RRCC.

RESOLVED BY VOTE OF THE BOARD AT A DULY CALLED REGULAR MEETING OF THE BOARD OF DIRECTORS FOR THE RIVER RIDGE DEVELOPMENT AUTHORITY ON MARC 19, 2018.

Attest: _____ J. Mark Robinson, President

Attest: _____ Philip W. McCauley, II, Secretary/Treasurer

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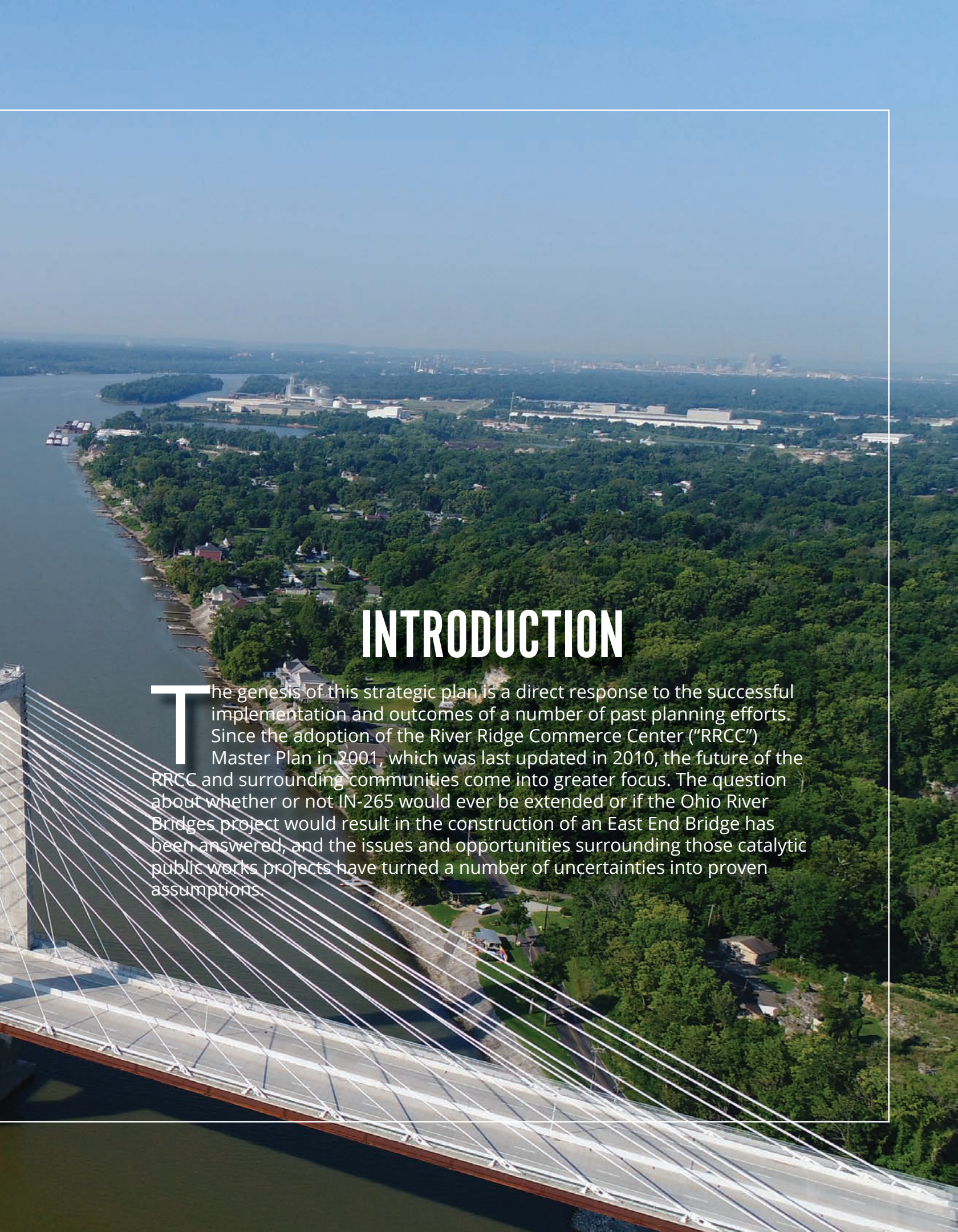


INTRODUCTION

The genesis of this strategic plan is a direct response to the successful implementation and outcomes of a number of past planning efforts. Since the adoption of the River Ridge Commerce Center ("RRCC") Master Plan in 2001, which was last updated in 2010, the future of the RRCC and surrounding communities come into greater focus. The question about whether or not IN-265 would ever be extended or if the Ohio River Bridges project would result in the construction of an East End Bridge has been answered, and the issues and opportunities surrounding those catalytic public works projects have turned a number of uncertainties into proven assumptions.

This document is a dynamic blueprint for future development and redevelopment opportunities within the River Ridge Commerce Center ("RRCC"). It describes the various assumptions that exist in the establishment of a set of build out scenarios that are then used to better gauge the fiscal and economic outcomes over a 10, 20 or 30-year period of time. It establishes a number of measurable action steps to be completed by the River Ridge Development Authority ("RRDA") as they continue their mission to create **THE** nation's premier development site for manufacturing, distribution, and technological advancement, and ultimately replace the economic value that was lost when the Indiana Army Ammunition Plant was decommissioned. This plan offers findings and recommendations that anticipate any number of decisions that the RRDA Board of Directors could be expected to address now and for the foreseeable future. It is not a prediction of what is to come, or even a best case scenario about what could happen. Rather it is the product of an intensive planning process designed to create a sustainable future for both the RRCC, and – to the extent that it wants to exist in perpetuity – the RRDA.

OUR MISSION

The River Ridge Development Authority ("RRDA") was originally established to replace the lost economic revenue previously generated by the now shuttered Indiana Army Ammunition Plant. Our goal has expanded to meet the tailored needs and create the top destination for advanced manufacturing, distribution and industrial companies from across the nation and around the world. The new vision also includes providing homes for research and development organizations capable of keeping River Ridge on the cutting edge of technologies across the service spectrum. With our exceptional logistical advantages now in place and the recently completed Lewis and Clark Bridge, the River Ridge Commerce Center has all the elements to become America's premier development site.

BACKGROUND

Constructed after the passage of the first National Defense Appropriations Act and subsequent creation of the Munitions Program, the Indiana Army Ammunition Plant ("INAAP") became the largest manufacturing facility of its kind to produce smokeless gunpowder and rocket propellant. Nearly 10,000 acres of farm ground, historic residences, homestead, churches, pioneer cemeteries and a former amusement park was re-purposed to be a self-sustaining facility, with its own infrastructure systems serving numerous manufacturing plants and related facilities; including some family housing units. Employing over 25,000 people at its peak, the plant produced not only the ammunition, but also the combustible cloth bags that the propellant was placed into.

The plant operated throughout World War II, the Korean War, and the Vietnam War. In the fall of 1992, production ceased, and by 1998 special legislation was passed to transfer 6,000 acres to a reuse authority. By this time, the once pristine landscaped property started to became completely overgrown, and invasive species of plants began to take hold. Over 1,400 existing structures and hundreds of miles of roads and railroad tracks began to deteriorate. Less developed areas became grazing pastures. The remaining 4,000 acres was transferred to the Indiana Department of Natural Resources to expand the Charlestown State Park.

Between 2005 and 2016, portions of the approximately 6,000 acres that make up the entire RRCC were conveyed from the United States Army to

the RRDA (formerly the INAAP Reuse Authority) for economic development purposes. Initially identified in 1990, the first set of targeted industries included manufacturing, distribution, retail and professional offices. Re-examined and refined numerous times since, the targeted industries have continued to play an integral role in shaping the policies and decision making processes of the RRDA.

Fast-forward to 2017 and the well-known and highly regarded RRCC land is transformed once again; this time as a master planned industrial, research, commercial business park. The implementation of past planning efforts - a genuine sense of the quality of place - is already evident in the new roadway infrastructure, signage, building facades, and users. The capital investments in the Gateway District demonstrates what it means to be the gateway to the southern Indiana region and one of the premier gateways to the entire State of Indiana, the RRCC is poised to move the entire 15-county region from where it is today – in terms of the number and types of careers that are available and the ability to retain, expand and attract businesses to the region – to where it wants to be in the future.

PURPOSE // INTENT

The purpose of this strategic plan, and something that sets it apart from all other plans relating to the RRCC, is the degree to which the project team was able to combine all that is known about the status of the redevelopment of the site with all that is left unknown to develop a set of reasonable build out scenarios capable of resulting in sustainable outcomes for both the RRCC and the RRDA, or its successor(s).

It is the intent of the RRDA that this plan be used to:

- Make the RRCC the premier industrial/office park in the country;
- Increase the Clark County tax base;
- Provide more career opportunities within the region; and
- Expand the number and types of economic development opportunities within the region.

None of what follows is intended to serve as a directive made by or for the RRDA Board of Directors or staff. This guidance document offers a framework which the RRDA Board of Directors can use to make real-time decisions: ones that have and will continue to be informed and influenced by the supply and demand for land or redevelopment within the region. Included are specific, data-driven strategies and measurable actions steps that the RRDA Board of Directors can choose to exercise. The conclusions and recommendations of this plan anticipate change and maximize flexibility in site development.

PROJECT AREA

The boundary of the RRCC extends from Charlestown Landing Road to the north, Patrol Road (extended) to the south, and follows the Charlestown State Park boundary to the east and the SR 62 corridor to the west. Due in large part to the number and types of land use, transportation and utility implications that are likely to result from the full reuse of the property, the project area extends just beyond the physical boundary of the RRCC. Consideration was also given to:

- The intersection of IN-265/International Drive and Old Salem Road – for its role as the "front door" to, not only the Gateway District and entire RRCC, but also the 15-county region and arguably the State of Indiana.
- Transportation access – the current and future carrying capacity of the SR 62 corridor.
- Charlestown State Park – the potential to swap undevelopable land for developable land, and/or establish another entrance to the park from the RRCC.
- Commerce connector – the potential to strengthen the county's primary thoroughfare network and directly connect more places to the SR 60 (Exit 7) highway interchange.
- Freight rail – the potential to need or want direct rail access to the Ports of Indiana Jeffersonville.
- Air travel – the opportunity to increase traffic at the Clark Regional Airport in support of the South Central Regional Airport Authority's mission to maintain the airport as a vital, self-supporting transportation asset capable of improving the economic climate of the region.
- Trail network – the opportunity to provide direct access to and connectivity between area trail systems.

PROJECT AREA // Current aerials are available in the offices of the RRDA

INAAP REUSE: AN UPDATE

The following list of accomplishments is a testament to not only how far the RRDA has come in terms of facilitating the reuse and development of properties within RRCC, but the responsibilities that the organization has assumed as well.

- Approximately 1,000 acres, 20% of the total area of the RRCC have been development by private investors, as of the publication date of this plan.
- There is over $65M in infrastructure investments by the RRDA already in the ground, including road, water, sewer and other improvements.
- Approximately $35M in road, water, sewer and other infrastructure improvements have been made by the municipalities and the state.
- Private business operations have already had a $1.74B impact on the regional economy.
- A portion of the RRCC has been designated as a certified mega site by McCallum Sweeney; a designation that means as much to the southern Indiana/Louisville metro area as it does to the future success of the RRCC.
- A tax increment finance district, pursuant to IC 36-7-30-25, produces revenue generated by on-site improvements and investment in real property that in turn funds the on-going capital improvement projects that the RRDA is responsible to complete.

- An Urban Enterprise Zone, pursuant to IC 5-28-15, was established to incentivize private investment through property tax investment deductions.
- New roadways built to heavy haul standards that are capable of handling an ever increasing amount of tractor trailer traffic.
- The RRDA worked with the City of Jeffersonville to develop and adopt and overlay zoning district and overlay district regulations designed to limit the types of uses that can locate on the privately held property just outside of the Gateway District between the RRCC and the new extended IN-265, a logical extension of the State's scenic byways.
- As evidenced by the Gateway District, the RRDA has demonstrated its commitment to both the natural environment, and the superior design aesthetic that business and visitors can expect to find at River Ridge.

Issues identified during previous studies or planning efforts that will require further consideration include:

- Sub-area planning, including a: signage master plan for the entire RRCC, and a corridor plan for River Ridge Parkway
- Additional study to determine the best (or most feasible) alignment for the proposed rail line connecting the RRCC to the Ports of Indiana Jeffersonville
- Advance the capability of the Ranney Wells regional water system in association with the new tank and booster system provided by the Indiana Department of Natural Resources


KOMATSU

PAST PLANNING PROJECTS

Gateway Master Plan
(RRDA, September 2017)

Report of Preliminary Geotechnical Engineering Investigation
(Patriot Engineering & Environmental, Inc. 2014)

River Ridge Commerce Center Transportation Vicinity Plan
(RRDA, 2014)

Preliminary geotechnical engineering investigation
(Patriot Engineering & Environmental, Inc., 2014)

River Ridge Commerce Center New Roadway Corridor Study
(Jacobi, Tooms & Lantz, Inc., and Bernardin Lockmueller & Associates, Inc. 2013)

Section 6 – Aesthetic Enhancements: Old Salem Road Trailhead
(WVB East End Partners, 2013)

Indiana's P3 Success – East End Crossing
(Indiana Finance Authority and Indiana Department of Transportation, 2013)

Port of Indiana to River Ridge Connectivity Study
(American Structurepoint, 2013)

RRCC Declaration of Covenants, Conditions, and Restrictions
(RRDA, 2012)

Lentzier Creek Watershed Drainage Study
(Bernardin, Lockmueller & Associates, Inc., 2011)

Louisville-Southern Indiana Ohio River Bridges Project
(U.S. Department of Transportation Federal Highway Administration, 2011)

River Ridge Commerce Center Master Plan Update – Land Planning Element (Waggoner Engineering, Inc. & Bernardin Lochmueller & Associates, Inc, circa 2010)

Clark County Transportation Plan
(Bernardin Lockmueller & Associates, Inc. circa 2007)

Finding of Suitability to Transfer ("FOST")
(March 2005)

River Ridge Commerce Center Master Plan
(RRDA, 2001)

Endangered Species Management Plan and Environmental Assessment for the Gray Bat
(Tetra Tech EM, Inc. 2000)

Endangered Species Management Plan & Environmental Assessment
(Tetra Tech EM, Inc., 2000)

EXECUTIVE SUMMARY

Reference this chapter to quickly ascertain whether or not a policy decision, land sale/development proposal, or capital investment is supported by the strategies described herein, and again when evaluating the plan in accordance with the guidelines at the end of this document.

This chapter summarizes the conclusions and recommendations that are a result of the planning process. Included is a description of the process that was used to derive the strategies contained herein, as well as an acknowledgment of the individuals who were instrumental in the creation of this document; many of whom have assumed the responsibility of implementing this plan and ensuring that it stays relevant over time.

CONCLUSIONS // PRIORITIES

Having completed the strategic planning process, the project team offers the following conclusions:

1. Achieving the highest and best uses while making efficient use of available land means developing a strong understanding of target industry sectors and, in the case of the RRCC, industry sub-sectors.
2. Experiential marketing, bringing people to the RRCC so that they can experience it first-hand, requires reaching beyond the "bricks and mortar" to include everything from transportation access and placemaking, to the availability of childcare and workforce training.
3. The demolition and cleanup of the former munitions manufacturing plant is a significant financial undertaking for the RRDA. The revenues generated from investment in other areas of the RRCC will be critical to achieving the RRDA's mission.
4. A large single use production facility located at the mega site would yield near-term benefits. However, this strategy carries a significant amount of risk due to the global competition for these investments. A denser, multi-use development of the mega site area has the potential to generate higher levels of long-term financial and economic return with a lower overall level of risk.
5. The exploration of alternative long-term revenue options can lead to reduced reliance on TIF revenues, and more flexibility in funding ongoing operational activities.
6. Once the RRCC is fully developed, the economic activity at River Ridge will create or sustain and estimated 33K to 37K jobs by 2040. These jobs will generate $2.0 to $2.3 billion in labor income annually (2017 dollars) throughout the Southern Indiana/Louisville regional economy.
7. The investment and economic activity at River Ridge will produce an additional $11 million in annual revenues to local Clark County taxing units by 2040 (2017 dollars). In the long term, once the investment of public infrastructure is complete, the RRDA could potentially release up to $280M in assessed value to local taxing units, generating an additional $2.1M in local property tax revenues annually. River Ridge businesses are projected to generate $62 to $72 million in annual state sales and income tax revenues by 2040.

The strategies recommended by this plan were derived from a set of priorities established by the project team. The desire and need to **retain and attract businesses that employ higher-skilled workers, and that pay above average wages** is considered to be the single most important priority to consider when making future policies or decisions. The full set of priorities requires that the RRDA continue to seek to place:

Wages
At the time of this study, the targeted hourly wage was $21 - $24 per hour. The median hourly wage was approximately $17 per hour.

- Employers that pay higher wages over employers that pay wages at or below the median hourly wage; regardless of the number of jobs proposed
- Careers over jobs

- Highest and best land uses over a wide variety of land uses, where the highest and best use of the Gateway District differs from that of the rest of the RRCC
- Advanced manufacturing over warehousing and distribution
- Jobs and assessed value over large buildings or any one specific industry
- Commercial and industrial enterprises over the creation of a walkable, urban town center
- Research and development over entertainment and leisure
- A campus comprised of a diverse set of end users over a park full of a single industry or use

STRATEGIC PLANNING PROCESS

An iterative planning process was used to generate a list of desired outcomes that are likely to become necessary if the RRDA is going to realize its overarching vision for the RRCC. Driven by the need to add value to the well-established goals and objectives of past planning efforts, the consulting team led by American Structurepoint and supported by Policy Analytics, LLC and Thomas P. Miller and Associates, worked with the project team to, among other things:

- Develop a single, straightforward vision statement
- Firmly establish a list of priorities to serve as the foundation for future policy decisions
- Re-frame the list of target industries to impress upon the fact that the RRCC is and will continue to be a place for innovation, career advancement, and wellness
- Identify or otherwise define River Ridge's competitive advantages from a national and global perspective
- Define the development character of each planning area
- Simplify the list of desirable land uses
- Establish a methodology by which to base future decisions about the subdivision of land and siting of buildings
- Prepare a set of cost estimates for future construction activities: those undertaken by the RRDA, as well as the investments that will be made by private property owners and developers
- Determine the scale of total development and mix of land uses to create a set of assumptions that could be used to estimate revenues and expenses over time
- Evaluate the sustainability of each of the potential development concepts
- Present the economic outcomes of two possible full build out scenarios
- First explain and then elevate the importance of workforce development in economic development
- Determine the steps that need to be taken to market, or sell, the RRCC to new and emerging businesses around the world

- Determine a proactive approach for implementing the plan
- Determine ways in which to ensure that the strategic plan stays current
- Establish a road map for future policy and decision making that produces a sustainable future for both the RRCC and the RRDA.

ACKNOWLEDGMENTS

The completion of this plan would not have been possible without both the vision and unwavering dedication of the following individuals.

River Ridge Commerce Center Strategic Plan Project Team
Phil McCauley
Board Member appointed by the Indiana Port Commission

Kim Matthews
Former RRCC Board Member

Jerry Acy
Executive Director

Dustin Coffman
Director of Finance & Marketing

Tom Vittitow
Planning and Development Manager

Marc Hildenbrand
Director of Project Management & Utility Operations

David Lewis
General Counsel

River Ridge Development Authority Board of Directors
J. Mark Robinson
Board President appointed by the Clark County Commissioners

Norman E. "Ned" Pfau, Jr.
Board Vice President appointed by the City of Jeffersonville

Philip W. "Phil" McCauley
Board Member appointed by the Indiana Port Commission

Patrick J. Glotzbach
Board Member appointed by the City of Charlestown

Edward Meyer
Board Member appointed by the Town of Utica

River Ridge Commerce Center Strategic Plan Consulting Team
American Structurepoint
Brooke Thomas, Project Manager//Senior Planner

Policy Analytics, LLC
Jason O'Neill, Senior Consultant

Thomas P. Miller & Associates
Dustin Lester, Assistant Director//Economic Development


Guiding Principles & Goals
ision
Transportation Investments
Property Development
Utilities
ATEGIC LAN
Desired Land Uses
Emerging Trends & Projection (2025)
Economic Development
rkforce elopment
Target Industry Sectors
Competitive Analysis
Market Assessment

VISION STATEMENT

Refer to this chapter to determine whether or not a policy decision, land sale/development proposal, or capital investment is consistent with the adopted vision, but also in instances when an issue, opportunity or predicament arises that did not exist during the strategic planning process. In these instances, the vision can serve as "common ground" moving forward.

This chapter houses the overarching vision for future build-out of the RRCC. The vision serves as the cornerstone upon which the remainder of the strategic planning process was completed, and upon which most policy decisions, land sales/development approvals and capital investments should flow.

It is the vision of the RRDA that the RRCC become:

A WORLD-CLASS BUSINESS PARK AND EMPLOYMENT DESTINATION

To that end, the RRDA seeks to build upon the following strengths:

River Ridge Commerce Center

- A land area of such size and scale that it sets the industrial business park apart from the vast majority of all other industrial business parks across the country
- A central, Midwest location that puts businesses within a day's drive of much of the US population
- Proximity to a large metropolitan city that offers the types of places and amenities that become equally attractive to employers and employees alike
- Transportation options that span roads, bridges , air , water, rail and trails
- Great visibility from the new IN-265 interchange and proximity to the new Lewis and Clark Bridge
- A certified mega site
- Presence of and capacity in utility infrastructure, including reliable and fast fiber optics, an extensive water supply system, a new on-site waste water treatment plant, readily available gas and multiple on-site electrical substations
- The ability for employees to connect with nature in a unique and attractive natural setting
- Opportunities for existing businesses to expand within the park
- A publicly recognizable and distinguishable "place"
- Proximity to like uses; and protection from conflicting uses

River Ridge Development Authority

- Existence as a quasi-public, but non-partisan entity
- Appointed officials that span multiple jurisdictions
- Professional and dedicated staff
- A self-sustaining Reuse Authority
- Recipient of an Urban Enterprise Zone designation with the ability to streamline the entitlements process
- Authority over a tax increment finance (TIF) district with the flexibility to distribute the tax increment when and where it is needed most

- Strong track record of providing infrastructure and delivering services when opportunity knocks, effectively removing some of the development impact fees that local government would otherwise have to impose on the developer to provide the same
- An extensive database of information and intimate knowledge of the entire 6,000+ acres
- On-site, technical assistance for property owners and developers looking to customize a site

GUIDING PRINCIPLES // REDEVELOPMENT GOALS

Building off of the vision established in the RRCC Master Plan and the Gateway Master Plan, this strategic plan seek to build:

A PLACE OF LASTING ECONOMIC VALUE.

A PLACE THAT ATTRACTS BOTH INNOVATIVE COMPANIES AND SKILLED WORKERS.

A PLACE THAT OFFERS AMENITIES, TRANSPORTATION OPTIONS, CONVENIENCE, AND CHARACTER.

A PLACE THAT RESPECTS THE AREA'S UNIQUE NATURAL FEATURES AND ENVIRONMENTALLY SENSITIVE AREAS.

A PLACE THAT IS LIKE NO OTHER IN THE COUNTRY.

CURRENT ROLES // RESPONSIBILITIES

The RRDA, formerly the INAAP Reuse Authority, is the local redevelopment authority responsible for creating and maintaining a redevelopment plan and directing implementation of the plan over a long period of time. Comprised of appointed members from Clark County Commissioners, the Indiana Port Commission, City of Jeffersonville, City of Charlestown, and Town of Utica, the RRDA is uniquely positioned to represent the widest possible range of interests. Guided by the RRDA Board of Directors and other local leaders, RRDA staff:

- Involves the community in the redevelopment planning process
- Keeps the public informed about the progress
- Inquiries about community wants and needs
- Solicits ideas for redevelopment
- Cultivates community interest and support
- Mitigates environmental concerns
- Demolishes antiquated or dilapidated structures and facilities
- Develops road and utility infrastructure
- Protects wildlife habitats
- Adapts and incorporate best development practices
- Balances fiscal responsibility with economic impacts

- Reviews development proposals and capital investments that make efficient use of available land
- Fosters a distinctive, attractive sense of place
- Makes development decisions predictable, fair and cost effective
- Fosters collaboration among various legislative, administrative and regulatory agencies
- Establishes and maintains the overall vision for the future of the RRCC

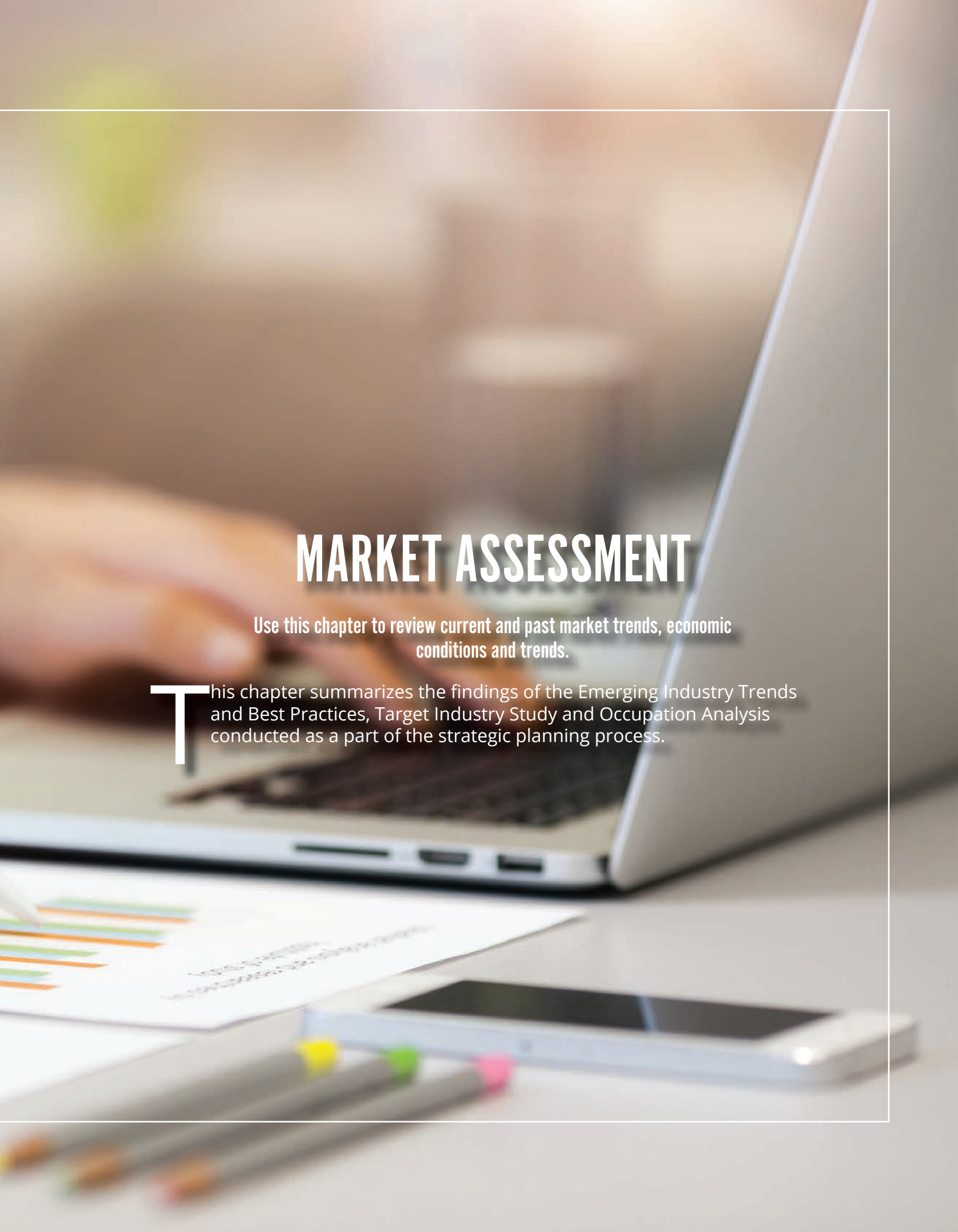
REUSE AUTHORITY

The River Ridge Development Authority is a military reuse authority created under Ind. Code 36-7-30 for the purpose of redeveloping a 6,000-acre portion of the decommissioned Army property formerly known as the Indiana Army Ammunition Plant, a munitions manufacturing facility.

The reuse authority was initially called the INAAP Reuse Authority when it was created by Clark County Commissioner Ordinance 6-1998 on February 17, 1998, pursuant to IC 36-7-30-3. On March 19, 1998, the County Commissioners agreed to share operation and control of the INAAP Reuse Authority with three other participating governments: the City of Jeffersonville, the City of Charlestown, and the Town of Utica (collectively, including the County, "Local Governments"), under an inter-local cooperation agreement ("ILA") as authorized by Ind. Code 36-1-7. The Local Governments agreed to allow the Indiana Port Commission to make an appointment to RRDA's governing board. The ILA was executed by all participants (including the Port Commission) and was recorded in the Clark County Recorder's Office on December 13, 1999 as Instrument #3126548.

The Local Governments have signed four amendments to the ILA addressing a variety of issues ranging from (a) qualifications to serve on the governing board; (b) how to finance shortfalls in RRDA funding; (c) the percentage breakdown of RRDA reimbursements to participants who funded RRDA's early expenses; (d) the disbursement of excess RRDA revenue to Local Governments; (e) leasing, purchasing, or construction of RRDA offices; (f) RRDA's participation in a group health insurance plan; and (g) public use of a privately-owed RRDA road, among other things.

Under the ILA and its amendments the RRDA is governed by a 5-person Board of Directors. The **Clark County Commissioners**, *the* **Mayor of Charlestown**, *the* **Mayor of Jeffersonville**, *the* **Town Council of Utica**, *and the* **Port Commission** *each make one appointment.*



MARKET ASSESSMENT

Use this chapter to review current and past market trends, economic conditions and trends.

This chapter summarizes the findings of the Emerging Industry Trends and Best Practices, Target Industry Study and Occupation Analysis conducted as a part of the strategic planning process.

Central to the development of the findings and recommendations pertaining to this market assessment were the one-on-one interviews with the RRDA's economic development partners. The key takeaways from these stakeholder interviews included: 1) growing importance and appreciation for regionalism, with a Big "R," in terms of business retention, expansion and attraction, as well as workforce development; and 2) the significance of a having a mega site, wherein the RRCC mega site serves as the only site of its kind in entire Greater Louisville metropolitan area, for its potential to generate a significant economic benefit for the entire region.

CURRENT // EMERGING TRENDS

The following sub-sections describe the various trends - both national and global - that have and are likely to continue to have an influence on the future build-out of the RRCC. Central to these trends is the need to consider site selector preferences.

Drivers of Industrial Demand

Industrial demand is being driven by a number of factors, including: the expansion of the Panama Canal, the e-commerce and just-in-time distribution systems that turn conventional warehouses into sophisticated logistics centers, and the uncertainty surrounding mega-regional trade agreements.

Panama Canal Expansion

The size of ships that could travel through the Panama Canal was previously restricted due to the size of locks and depth. The new expansion allows larger ships to travel through the Canal. The largest size ship that can travel the canal is capable of moving 14,000 containers instead of 5,000, the previous max.[1] The expansion is considered an important shift in the shipment of Asian goods to the United States. It will shift US Cargo from slightly favoring the West Coast to a more even split between the two coasts.[2] This will increase the amount of goods shipped to ports on the Gulf of Mexico and the east coast. River Ridge could leverage this due to its location on the Ohio River, which is a midway point for goods moving across the eastern US in all directions.

Rise of E-commerce

Online shopping has grown dramatically and more people are shopping online than ever before. The rapid development of e-commerce is now the biggest driver of supply chain and transportation related changes.[3] A big change is that consumers can order products for in-store pick up; businesses can ship products directly from retail stores.[4] In effect, retail stores are also acting as distribution centers, adopting an inventory strategy where they receive only the goods that are needed to fill orders. Retailers are also able to decrease the amount of floor space they have, while increasing accessibility through the online market place. Online shopping is giving the consumer more options about how they get their products. The two greatest factors that influence consumers' decision in the online space is cost of shipping and time.[5] Consumers favor free shipping on products and are more often going to choose an online buyer that offers this; however, they are willing to sacrifice

Market Assessment METHODOLOGY

The market assessment used emerging trends, market demand, 2025 market projections, interviews with economic development partners, and feedback from existing on-site businesses to produce or otherwise identify: a list of target industry sectors; competitive analysis; site selector strategy; conference strategy; best-practices in park management; opportunities to align with economic development partners; and an overarching marketing strategy.

on cost if the free shipping will take an inconvenient amount of time. These trends have caused physical shopping centers to innovate. Shopping centers are now being curated to bring a special vibe or character to physical stores that cannot be replicated online.[6]

Rise in 'Just-in-time' supply chain management systems

Modern manufacturing has adapted to increase the speed of production, meet customer demand more quickly, and to lower inventories and cost. Therefore, supply chains have been forced to be leaner and faster. This modern demand has adopted the Just-in-Time approach developed by Toyota, also known as the Toyota Production System and related to the Japanese continuous improvement philosophy of Kaizen, which simply means "change for better." Just-in-time supply chain management ensures that tiered suppliers' parts are being delivered with little-to-no time waiting in stock, which reduced inventory overhead.

Uncertainty Surrounding Mega-Regional Trade Agreements

Mega-regional trade agreements are partnerships between countries or regions that comprise a large percentage of global trade and foreign direct investment (FDI).[7] Examples include the Transatlantic Partnership or the Trans Pacific Partnership, which the US backed out of in 2017. The purpose of these agreements is to decrease regulatory burdens by making regulations more compatible between signatory nations. These agreements are also aimed at making business climates more compatible between countries.[8] The current political climate in the United States makes it unlikely that the US would enter or create a new

Mega-regional agreement in the near future. It is more likely that the US may recoil from these type of agreements, which would make global trade a more inconvenient process for many American exporters.

Drivers of Demand for Class-A Commercial Office Space

Class A office buildings offer modern, collaborative, and technologically advanced office product to an increasingly growing and adapting economy. These office buildings may be known as trophy buildings, due to their high-profile and economic potential. Adaptation to company culture and generational shifts may result in office relocations realizing a smaller but more efficient and collaborative footprint. These modern spaces can help companies attract talent that demand engaging, inclusive, fun, convenient, and productive work environments. Further, Class A office product helps corporate, mid-size, and entrepreneurs establish not only a place to do business, but a place to help represent their company culture and brand.

The demand for Class A office space can be attributed to a rise in competitive economic development projects, reurbanization, a focus on efficiency, and a generational workplace shift to demand collaborative and open workspaces. The demand for Class A is also driven by valuable clients, representing increased economic development potential both in jobs and wages but also capital investment.

Factors Affecting Site Selection

There are a number of factors beyond industry growth trends that continue to affect site selection.[9] Foreign trade, with emphasis on Asia, has influenced and accelerated investments in port, rail, and highway infrastructure. Trade pacts with Central and South America have resulted in two-way trade growth. Like the Panama Canal, the Suez Canal has also increased traffic through East Coast ports. As a result, site selection criteria is known to require that the site be:

- At or near a port.
- Near a rail intermodal site.
- In a high population state.
- In a state that has population growth.
- Near the customers or suppliers.
- Near a major international airport.
- Served by a superior road system.
- In a Foreign Trade Zone.
- In a park where land costs are reasonable, sites vary in size, and there is a mix of uses including, warehouse and distribution, manufacturing, office, research and development, support retail.

Research suggests that there are a handful of “intangibles” that have the potential to “break ties” between sites. They include:

- Available work force that is skilled and trainable.
- Government agencies that are pro-business – demonstrated by policies, regulations, and taxes.
- Good local schools and colleges willing to meet a company’s training needs.

- Sites that are fully permitted and where documentation of these permits can be provided.
- A high assurance that development permits will be granted in a timely, predictable manner.
- All utilities are available and at a reasonable cost.
- Power is reliable, and hopefully, affordable.
- Alternative sources of broadband connectivity exist.
- Incentives are available for expansions and relocations.
- Housing is available and affordable for the work force.
- There is a good quality of life.
- Proximity to a "job generator" or a business cluster is a bonus.
- A sustainable development.
- Highly efficient transportation systems.
- A site that is port-, rail- and population-centric

The Supersite Factor

Another differentiator are large contiguous tracts of developable land. Whether it's a certified mega site or not, large contiguous tract of developable land offer advantages over development areas with smaller tracts of land. The RRCC, which currently includes a certified mega site, is already considered to be a choice location for big industrial operations. Automotive assembly, engine manufacturing and assembly, metal processing, aircraft assembly and renewable energy facilities are all within the realm of possibility within the RRCC. The criteria for mega site certification lend themselves well to the future build out of the RRCC in that they give potential prospects piece of mind about their investment opportunities. Chief among these discriminating criterion, many of which are essentially a completion of the due-diligence process to say, "We are open for business! We have taken a lot of the risk off of the table by completing some of the prerequisites for development." These criteria can be summed up[10] has having:

- Clear ownership title (i.e. property that is immediately available for purchase)
- Size and configuration of the site (i.e. 1,000 or more contiguous, developable acres)
- Utility availability
- Transportation availability
- Favorable environmental assessment(s)
- Engineering studies
- Delineation of wetlands
- Topography data/maps
- An established price that has or can be quoted

There are emerging terms for super sites that industries are increasingly considering: bluefields and brightfields.[11] Bluefields are major sites that are

either near water or feature water resources and capacity. More germane to the RRCC, brightfields are sites with renewable energy installation potential. With credits still available and solar costs down by 80 percent, “the economics are there even without incentives.” Many industrial parks should consider cordoning off a percent of their available land for renewable power.

Competitive Analysis

The scale of the RRCC sets it apart, as does its location and connectivity in terms of highway, rail, air and water. The industrial business park boasts a total of 6,000 acres. It offers not only the capacity to grow and expand within the same business park, but the added opportunity to centralize ones operations in one location.

There is direct interstate access into the park, with rail service and nearby rail interchanges. RRCC has access to numerous large employers and corresponding opportunities for technology and supplier access for manufacturers given its proximity to the Greater Louisville area. River Ridge is accessible by the Ports of Indiana Jeffersonville, UPS Worldport and the Louisville International Airport in Louisville (Kentucky), and the Clark Regional Airport near Sellersburg, IN. The RRCC is highly-suitable for both manufacturing and distribution. Entire sections of the industrial business park have been reserved for professional office buildings, and commercial retail that caters to the day-to-day needs of employees within the park.

The business-friendly tax climate is evidenced by the TIF district, and UEZ. Proper zoning, a streamlined development review and approval process,

infrastructure improvements (existing and planned), and a protective set of covenants all managed by full-time professional staff makes locating in the RRCC a successful proposition.

The RRDA continues to work towards fulfilling several other objectives so as to further set itself apart from the competition. Dependent care, healthcare clinics, lodging, event space, dining, public transportation/shuttles, a career center are just some of the needs that the RRDA intends to address as part of their efforts to support business retention and expansion, as well as business attraction.

Target Industry Sectors

Informed in large part by the Market Assessment described on the previous pages, the following pages summarize the findings and recommendation of the Target Industry Study that was completed as part of the strategic planning process. Using data and information from various proprietary and public sources, the project team identified a number of industry sub-sectors and clusters that align with the overall vision for the RRCC. And, because one of the primary goals of the RRDA is to assist in increasing the average hourly wage across the 15-county region, the recommendations about which industries to target consider only those industries that pay an average wage of $22 per hour ($45,000 annually).

Preliminary findings identified four industries critical to the economic growth of the 15-county region.

Advanced Manufacturing >> With over 92,000 employed (13 percent of all employment in the 15-county region) in 2016, advanced manufacturing is the fastest growing sector and is projected to add over 12,000 new jobs over the next ten years. (LQ 1.59)

Transportation Logistics >> The transportation, distribution and logistics sector has the highest location quotient (LQ 2.06) within the region. Due in large part to the transportation assets, this will continue to be an important industry sector for the RRCC and surrounding 15-county region. Over 50,000 people (7 percent of all employment in the 15-county region) was employed in a TDL industry in 2016.

Finance and Insurance >> The finance and insurance sector is a major employer within the 15-county region. With a LQ of 1.38, this industry sector also pays higher than average wages. This industry sector has been growing and is projected to continue to grow.

Information and Technology >> The largest industry sector, the information and technology sector (specifically professional, scientific and technical services sector) is projected to add nearly 2,000 new jobs over the next ten years. RRCC's location within the Louisville MSA makes it a prime location for companies that serve customers in and around the City of Louisville.

Why this list required a closer look...

Target Industry Sectors METHODOLOGY

For the purposes of this plan, "the region" is defined as all areas within a 45-minute drive time from the River Ridge Commerce Center, which includes not only the Louisville Metropolitan Statistical Area, but also the more rural Indiana counties to the north. The nine Indiana counties include: Clark, Crawford, Floyd, Harrison, Jackson, Jefferson, Jennings, Scott, and Washington. The six Kentucky counties include: Bullitt, Henry, Jefferson, Oldham, Shelby, and Spencer. Defining the region in these terms is significant in that it is a better representation of the workforce populations available to RRCC. This approach is more accurate than simply using the Louisville/ Jefferson County, KY–IN Metropolitan Statistical Area (MSA), which would exclude several key counties with an available workforce.

Methodology continued...
Each of the sub-sector cluster that follows have shown to export more than they import, and therefore offer more opportunities for growth and development.

Clusters are industries that share common input and labor forces, and where: 1) the industries appear to be concentrated when compared to the national distribution of the same (as indicated by the Location Quotient); and 2) where job growth seems to be greater than what national or industry trends might suggest (as indicated by the Competitive Effect).

Location Quotient (LQ) measures the relative importance of an industry's employment to a particular region. LQs are one of the most common and important indicators of local economic characteristics where a LQ greater than 1.25 means that an industry is especially strong.

Used in conjunction with "Shift-Share Analysis" techniques that are used to determine how much of a region's job growth can be attributed to national trends and how much is due to unique regional factors, the Competitive Edge metric seeks to isolate the influence of local dynamics from the influence of non-local factors when determining whether or not an industry is growing. A positive number means that the study area experienced more growth within a particular industry than would have been expected elsewhere.

For the purposes of this plan, "the region" is defined as all areas within a 45-minute drive time from the River Ridge Commerce Center, which includes not only the Louisville Metropolitan Statistical Area, but also the more rural Indiana counties to the north. The nine Indiana counties include: Clark, Crawford, Floyd, Harrison, Jackson, Jefferson, Jennings, Scott, and Washington. The six Kentucky counties include: Bullitt, Henry, Jefferson, Oldham, Shelby, and Spencer. Defining the region in these terms is significant in that it is a better representation of the workforce populations available to RRCC. This approach is more accurate than simply using the Louisville/Jefferson County, KY–IN Metropolitan Statistical Area (MSA), which would exclude several key counties with an available workforce.

» Advanced manufacturing which has become a popular umbrella term for multiple industries. In order to effectively implement this strategic plan, the RRDA seeks to continue to define advanced manufacturing in terms of the desired end goal, which is to make the RRCC the country's premier industrial business park.

» Companies that are strictly warehousing and distribution facilities rarely, if ever, add value to the local economy. They exist solely to move goods and introduce truck traffic that needs to be mitigated (as opposed to truck traffic that needs to be managed). They don't help to move the needle on increasing the average hourly wage, which range from $12 - $36 per hour ($12 - $18 per hour for most jobs), and reduce the number of people who are underemployed. They are in a race to the bottom. So while the RRCC has the space to accommodate very large warehouses, they are counterproductive to the larger vision.

» Frequently higher levels of aggregation can hide important trends occurring at the industry sub-sector level. For example, strong growth within the manufacturing sector may conceal that there has not been strong growth in certain significant anchor industries (such as Other Motor Vehicle Parts Manufacturing). Reviewing detailed industry data reveals such important trends.

The following pages describe the target industry sectors that capitalize on existing industry clusters and which have the ability to place the RRCC ahead of the game in terms of its ability to:

» Attract industries that pay above average wages

» Attract emerging industries that are predicted to provide significant job creation, strong wages, and capital investment

» Accommodate a mix of industries that will enable employees at these businesses opportunities to skill-up

» Take advantage of the dual integration of objective labor market and cluster data that business prospects and site selectors will consider

» Ultimately bring value to the property and surrounding region through a combination of capital investments and high-wage jobs.

Target Industries, by Sub-Sector

After analyzing the projected growth of various sub-sectors, the initial list of target industries was narrowed down to a specific set of industry sub-sectors to include:

Advanced manufacturing >> automotive manufacturing, machinery, metals, pharmaceuticals and medical devices, food and beverage manufacturing.

For the purposes of this plan, ***ADVANCED MANUFACTURING*** *means the use of innovative or cutting edge technology for precision control of the manufacturing process combined with the application of advanced processes used throughout the value chain to reduce costs, where the focus of the industry is on the processes that boost productivity and achieve higher levels of customer service, characterized by dynamic workplace setting for business, incubators for new technologies, and employment centers that contribute to the economic life of many communities. Traditional industrial manufacturing, by comparison, is the manufacturing of products by way of a proven and widely used processes that focused primarily on the product lines: one that require no further ideation. Examples of advanced manufacturing span traditional industrial terms to include: computer technologies, high-performance computing, high-precision technologies, information technologies, biotechnology, medical device manufacturing, robotics and other intelligent production systems, automation (unimaginable even to Henry Ford), control systems to monitor processes, sustainable and green technologies, and brand new industrial platform technologies. A competitive edge in advanced manufacturing means: enabling innovation in all manufacturing industries, securing the talent pipeline that possess the technical skills that are essential to the future of advanced manufacturing, and improving the overall business climate through regionalism, the development and attraction of skilled talent, fostering high-impact clusters comprised of suppliers, service providers, and academic institutions; and simplifying and streamlining the tax and regulatory structure.*

Transportation and logistics >> select transportation, distribution and logistics

Finance and insurance >> direct life, health, and medical insurance carriers

Information and technology >> professional, scientific, and technical services

The following table lists the top growing industries over the past five years that pay an average industry wage of at least $45,000 or greater. The top industries include: automobile and light duty motor vehicle manufacturing; major appliance manufacturing; and motor vehicle seating and interior trim manufacturing.

Automotive Manufacturing

The automotive industry is strong within the 15-county region as there are several automotive original equipment manufacturers (OEMS) within less than two hours, which include Ford, Toyota, and Honda, as well as major Tier 1 suppliers such as Cummins. Thus, there are several automotive-related industries that are well positioned within the 15-county region that also include suppliers. These include:

- Automobile and Light Duty Motor Vehicle Manufacturing
- Motor Vehicle Seating and Interior Trim Manufacturing
- Motor Vehicle Transmission and Power Train Parts Manufacturing
- Motor Vehicle Metal Stamping
- Motor Vehicle Body and Trailer Manufacturing

All have high concentrations of employment within the 15-county region, with automobile and light duty motor vehicle manufacturing leading the way with a Location Quotient of 12.52. This sub-sector has also experienced significant growth over the past five years with over

text continued on page 42

INDUSTRY GROWTH BY WAGES GREATER THAN $45,000 PER YEAR, 2011 - 2016

Industry	'16 Jobs	'11-'16 Change	CE '11-'16	'16 LQ	'16 Estabs.	'16 Avg. Wages
Automobile and Light Duty Motor Vehicle Manufacturing	10,306	6,844	5,735	12.52	6	$90,100
Major Appliance Manufacturing	5,805	2,329	1,764	24.69	3	$86,116
Motor Vehicle Seating and Interior Trim Manufacturing	2,292	1,821	1,594	6.96	14	$49,984
Motor Vehicle Transmission and Power Train Parts Manufacturing	3,304	887	(10)	8.88	8	$49,799
Motor Vehicle Metal Stamping	1,672	828	520	4.30	4	$56,103
Motor Vehicle Body and Trailer Manufacturing	1,059	738	643	1.51	6	$46,739
Material Handling Equipment Manufacturing	1,630	511	339	4.48	27	$58,032
Distilleries	1,668	343	(370)	30.57	13	$137,719
Ornamental and Architectural Metal Products Manufacturing	1,255	329	187	1.32	38	$49,879
All Other Food Manufacturing	1,029	327	141	2.85	14	$46,647
Ship and Boat Building	1,170	317	218	1.84	3	$57,570
All Other General Purpose Machinery Manufacturing	1,107	257	185	1.78	19	$56,409
Nonferrous Metal Foundries	653	249	201	2.53	6	$50,821
Metalworking Machinery Manufacturing	1,195	249	172	1.42	57	$51,641
Pharmaceutical and Medicine Manufacturing	488	248	236	0.37	9	$68,277
Ventilation, Heating, Air-Conditioning, and Commercial Refrigeration Equipment Manufacturing	1,151	227	231	1.93	13	$45,581
Machine Shops	1,318	192	151	1.00	91	$49,465
Tire Manufacturing	239	192	191	0.95	3	$75,498
Engine, Turbine, and Power Transmission Equipment Manufacturing	615	191	186	1.34	4	$75,274
Plastics Pipe, Pipe Fitting, and Unlaminated Profile Shape Manufacturing	515	182	166	2.20	5	$47,891
Forging and Stamping	1,124	178	148	2.49	15	$56,237
Wood Container and Pallet Manufacturing	936	174	74	3.18	30	$46,817
Snack Food Manufacturing	849	174	82	3.39	4	$53,936
Commercial and Service Industry Machinery Manufacturing	327	164	168	0.79	8	$50,398
All Other Chemical Product and Preparation Manufacturing	233	122	127	0.76	9	$66,399
Electric Lamp Bulb and Part Manufacturing	800	119	208	22.33	1	$64,068
Nonferrous Metal (except Copper and Aluminum) Rolling, Drawing, Extruding, and Alloying	176	106	107	1.63	1	$61,705
Motor Vehicle Brake System Manufacturing	186	104	91	1.59	2	$45,312
Toilet Preparation Manufacturing	132	104	102	0.54	4	$47,293
Ferrous Metal Foundries	356	102	127	1.19	6	$48,222

(Source: Thomas P. Miller and Associates - Emsi, 2017.1)

INDUSTRY GROWTH

Hourly wages aside, and because the RRDA will continue to be approached by businesses from a number of industry sectors, we offer the following overview of industries that are experiencing growth within the 15-county region.

Manufacturing makes up the largest industry sector in the River Ridge region, with over 92,000 jobs, or 13% of all employment in the region. Rounding out the top five industry sectors are Government (87,173, 12%); Health Care and Social Assistance (84,919, 12%); Retail Trade (73,037, 10%); and Accommodation and Food Services (61,743, 9%)

Over the past five years, most of the sectors grew, with manufacturing leading the way at 26%. Other industry sectors experiencing high growth include: Arts, Entertainment, and Recreation (20%); Administrative and Support and Waste Management and Remediation Services (18%); and Transportation and Warehousing (17%). Those adding the most jobs over the period include: Manufacturing (19,187); Transportation and Warehousing (7,453); Administrative and Support and Waste Management and Remediation Services (7,448); and Accommodation and Food Services (7,329).

The Transportation and Warehousing, Manufacturing, and Finance and Insurance industries each had 2016 LQ that indicate a higher concentration of jobs within these sectors than the national average. Transportation and Warehousing had a LQ of 2.06, Manufacturing was 1.59, and Finance and Insurance was 1.38. Put another way, Transportation and Warehousing is 106% more concentrated than would be expected on the national average, while Manufacturing and Finance and Insurance are 59% and 38% more concentrated, respectively.

Thirteen industry sectors had a negative CE. This means one of two things, either a) job growth in these industries was less than what would be expected based on national and industry trends; or b) decline in these industries was greater than what would be expected based on national and industry trends. Of the thirteen sectors, three of them are among the top five employing sectors. In other words, three of the top five industry sectors in the region actually decreased in national competitiveness over the past five years. This includes Government; Health Care and Social Assistance; and Accommodation and Food Services. Manufacturing had a large growth due to CE, along with Finance and Insurance and Retail Trade. Growth in these industries was larger than expected, suggesting that the region may have a unique competitive advantage in these fields.

Looking at industry growth for the next ten years, most of the industry sectors are projected to grow. Manufacturing is projected to add the greatest number of jobs, with nearly 12,000 new jobs by 2026, followed closely by Health Care and Social Assistance, with nearly 11,500 new jobs. Other sectors projected to add at least 5,000 new jobs include: Administrative and Support and Waste Management and Remediation Services (9,258 jobs); Accommodation and Food Services (6,362 jobs); Finance and Insurance (6,262 jobs); Transportation and Warehousing (5,682 jobs); and Retail Trade (5,351 jobs).

Source: Emsi, 2017.1

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6,800 new jobs. Motor vehicle seating and interior trim manufacturing added over 1,800 new jobs over the same period. Average annual wages range from $46,739 for motor vehicle body and trailer manufacturing to $90,100 for automobile and light duty motor vehicle manufacturing. Based on an analysis of the supply chain for the overall manufacturing sector, there are a few additional targets to consider that may support existing businesses within this sector. These sub-sectors can be found in the supply chain targets for manufacturing section. Future technologies and targets to consider for the automotive industry are numerous and include:

- Hybrid technologies;
- Fuel efficiency;
- Composite materials;
- Autonomous cars; and
- Automation and robotics.

The move towards higher fuel efficiency over the past few years brings increased demand in hybrid fueled technologies that included both gasoline and battery based engines. One way to make cars more fuel-efficient is to make them lighter so there will be increased demand for new composite materials that are both strong and light-weight. **However, the most significant trend and future target within the automotive sector is the move towards autonomous, or self-driving cars.** Almost every automotive manufacturer is focused on developing this technology now. While forecasts differ amongst analysts, most predict that the first autonomous cars will appear around 2021, and by the 2030's they will have made significant market penetration. One key market trend is that public transportation companies, such as Uber, will likely first use autonomous cars. This may impact future automotive sales, as consumers may no longer drive demand.

Machinery

The machinery industry largely includes major appliance manufacturing, which employs over 5,800 within the 15-county region. Employment concentration is quite high, as it has one of the highest Location Quotients at 24.69. Over the past five years over 2,300 new jobs were added and over 1,800 are projected to be added through 2026. Other important machinery industries include:

- Material Handling Equipment Manufacturing (over 1,600 jobs)
- All Other General Purpose Machinery Manufacturing (over 1,100 jobs)
- Metalworking Manufacturing (nearly 1,200 jobs)
- Ventilation, Heating, Air-Conditioning, and Commercial Refrigeration Equipment Manufacturing (approximately 1,150 jobs)
- Engine, Turbine, and Power Transmission Equipment Manufacturing (approximately 600 jobs)
- Commercial and Service Industry Machinery Manufacturing (over 300 jobs)

These sectors have both demonstrated growth and are projected to grow over the next ten years. Average annual wages range from

$45,581 for ventilation, heating, air-conditioning and commercial refrigeration equipment manufacturing to $86,116 for major appliance manufacturing.

Companies within this industry supply the automotive sector, as well as the general consumer market. Thus, future trends and targets within the automotive sector will impact future opportunities for companies operating within this industry. On the consumer side, a key trend to monitor is the continued development of the "Internet of things." The Internet of things refers to machine-to-machine communication through the Internet. An example of this includes consumer appliances such as refrigerators that have Internet connectivity. A possible application is refrigerator technology that monitors the supply of basic good such as milk. The refrigerator will monitor the supply of milk and send a reminder to a consumer to purchase milk as they enter a grocery store.

Metals

The metals industry includes companies whose products and services often serve as inputs for many of the industries within the advanced manufacturing cluster. Industries include:

- Ornamental and Architectural Metal Products Manufacturing (approximately 1,250 jobs)
- Machine Shops (over 1,300 jobs)
- Spring and Wire Product Manufacturing (approximately 450 jobs)

Average annual wages range from $49,465 or machine shops to $62,360 for spring and wire product manufacturing. These sectors are projected to grow over the next ten years.

Many of the companies within the metals industry are part of the automotive supply chain. However, other sectors drive demand for metal products, including the aerospace and medical device industry. Thus, future technologies and targets within these industries will also impact companies within the metal industry. A target and trend to monitor is the continued development of light-weight, composite materials that the automotive and aerospace industries will require, due to the trend for increased fuel-efficiency.

Pharmaceuticals and Medical Devices

This industry includes companies that manufacture drugs and medical devices. Sub-sectors include pharmaceutical and medicine manufacturing (488 jobs) and medical equipment and supplies manufacturing (922 jobs). Both are projected to add 214 new jobs over the next ten years. Wages range from $50,432 for medical equipment and supplies manufacturing to $68,277 for pharmaceutical and medicine manufacturing. This industry sector is largely driven by the overall, aging population. As the population continues to age, there will be increased demand for new drugs and medical devices.

One technology that shows particular promise is the advent of 3D Printing. Currently, 3D Printing technology is primarily used to develop prototypes within the medical sector. However, the technology behind

3D Printers is increasing at a fast pace. Scientists have recently been able to replicate a functioning human heart through the use of a 3D printer. Trends towards new prototypes and advanced technologies through the use of 3D Printers is projected to continue.

Food and Beverage Manufacturing

This industry includes all other food manufacturing (over 1,000 employees) and distilleries (over 1,650 employees). Companies categorized as all other food manufacturing typically produce processed food, such as fresh pasta, baking powder, popcorn, sweetening syrups, etc. Average annual industry wages range from $46,647 for all other food manufacturing to $137,719 for distilleries.

Food and beverage manufacturing tends to be a stable industry, as it represents basic projects that are required by consumers in both growth and recessionary periods. However, future trends and targets to consider include the increased demand for organic foods, as well as the demand for healthy, yet quick food preparations. For distilleries, rising disposable incomes will drive demand. One area for growth is the craft distilling movement, which focuses on producing high-quality spirits.

Select Transportation, Distribution, and Logistics

The select transportation, distribution and logistics (TDL) industries selected are those that tend to pay higher average wages. This is a strong target for the RRCC as there are several transportation assets within the 15-county region that include: road (several north-south/ east-west routes: I-65; I-64; and I-71); air (Louisville International Airport);

water (Ohio River and river ports); and available rail. In particular, the new Lewis and Clark Bridge, which spans the Ohio River and is within close proximity to the RRCC, makes this target even more attractive. Specific industries within this sector include:

- Wholesale Trade Agents and Brokers (over 3,000 jobs)
- Drugs and Druggists' Sundries Merchant Wholesalers (over 1,700 jobs)
- Couriers and Express Delivery Services (over 18,500 jobs)
- General Freight Trucking, Long-Distance (over 7,000 jobs)
- Medical, Dental, and Hospital Equipment and Supplies Merchant Wholesalers (1,250 jobs)
- Specialized Freight (except Used Goods) Trucking, Local (over 1,300 jobs)
- Beer and Ale Merchant Wholesalers (475 jobs)

Average annual wages range from $46,197 for specialized freight trucking (with the exception of used goods[1]) to $91,924 for medical, dental, and hospital equipment and supplies merchant wholesalers. All sectors are projected to grow over the next ten years through 2026.

The aging population will continue to drive demand for the distribution of drugs and medical devices. While the impact of Amazon's recent acquisition of Whole Foods on the grocery distribution market is still largely unknown, there will likely be increased demand on the TDL industry to distribute grocery products in new ways, such as drone delivery.

Direct Life, Health, and Medical Insurance Carriers

The Finance and Insurance sector is a strong one within the 15-county region with a Location Quotient of 1.38, which indicates a high concentration of industry employment. This sector has grown over the past five years and is projected to grow through 2026. Another attractive aspect to this sector is that companies tend to pay relatively higher wages. Development opportunities for the RRCC include global shared service centers, other office, and/or call centers. The best opportunity is within Insurance, specifically direct life, health, and medical insurance carriers; insurance agencies and brokerages; and other insurance related activities. Together, they employ over 24,000 and have added nearly 5,600 new jobs since 2011. Over 74,000 new jobs are projected through 2026. Average annual wages range from $63,287 for other insurance related businesses to $83,041 for direct life, health, and medical insurance carriers.

Professional, Scientific, and Technical Services

Recommendations for this industry include two sectors: computer systems design and related services, and research and development in the physical, engineering, and life sciences. Companies within this sector tend to locate within urban areas to best serve their customers who are in similar locations. The 15-county region includes the Louisville MSA, and while the RRCC is located across the Ohio River in Southern Indiana, it still is a good, potential location for companies within the sector that

1 The exclusion of used goods trucking is due to the federal governments NAICS categorization system. Used Goods trucking is categorized separately in NAICS 484210: Used Household and Office Goods Moving.

need to serve customers and universities within the 15-county region. Computer systems design and related services industry employs over 6,800, and is projected to add nearly 2,000 new jobs over the next ten years. Research and development in the physical, engineering, and life sciences industry employs around 390, and is projected to add another 135 jobs over the next ten years. Average annual industry wages range from $71,848 for computer systems design and related services to $75,188 for research and development in the physical, engineering, and life sciences.

An important future target for companies within the computer systems design and related services is cyber security. Companies within this industry often provide cyber security solutions for other companies, including those operating within the finance and insurance industry. The trend for increased security is likely to continue for some time. Future targets for companies within research and development in physical, engineering, and life sciences will include those using 3D printing technology to develop more-and-more sophisticated medical prototypes, as well as those developing new drug technologies.

This input-output analysis was done specifically for the Manufacturing sector because it tends to have similar inputs across all geographies, and the cost of moving manufactured goods across space can be a legitimate factor in business location decisions.

Supply Chains

An input-output analysis of the selected target industries[2] was used to determine the purchasing patterns of manufacturers within the 15-county region and further identify potential ancillary industries to consider. The analysis considered the total value of goods and services required by manufacturers in the region, and whether these goods are purchased locally or imported. Goods and services that are imported from outside the region are said to cause economic leakage. Producing or providing the same locally would have the effect of increasing the economic impact to the region.

The following industries represent those in which a significant amount of imports are being brought in from outside of the region, and thus represent an opportunity for manufacturers within the region. Companies that appear to be missing from the OEM supply chains include:

- Motor Vehicle Stamping
- Motor Vehicle Transmission and Power Train Parts Manufacturing
- Motor Vehicle Gasoline Engine and Engine Parts Manufacturing
- Other Engine Equipment Manufacturing
- Motor Vehicle Steering and Suspension Components (except Spring) Manufacturing
- Motor Vehicle Electrical and Electronic Equipment Manufacturing.

All told, the value of imported products from the Automotive Manufacturing

2 The sectors listed include those: 1) where the total annual purchases are over $61.5 million; 2) where over 80% are purchased outside of the region; and 3) most likely to be able to expand or relocate to the region based on product type.

sector are worth $5.9 billion.[3] As companies look for ways to shorten their supply chains, RRCC can accommodate any tiered manufacturer in the supply chain of regional OEM manufacturers.

2025 EMPLOYMENT PROJECTIONS

The following pages summarize the projected changes in population and jobs through the year 2025. The following occupations are growing and are critical in terms of the previously identified target industry sectors.

Occupational Analysis

Unlike a target industries analysis, an occupational analysis recognizes that people of a particular occupation can be employed across many different industries. For example, a registered nurse can be employed any industry from a hospital to a correctional institution. Hence, it is important to note that the following data refer to occupations in totality, regardless of industry. If the wage or growth statistics that follow differ from expectations, it could be due in part to the fact that growth trends and wages by industry can differ considerably than overall trends for that occupation.

Top Occupations

At the broadest level, the top occupations in the 15-county region include:

- Office and Administrative and Support Services - Office and Administrative Support is the largest occupation, employing over 108,000 workers in 2016. Over the next five years, it is projected to add over 5,000 new jobs. Production Occupations added the most jobs over the past five years (16,166), and is projected to add the most through 2021 (5,990).
- Production Occupations (around 72,500 jobs)
- Transportation and Material Moving Occupations (70,100 jobs)
- Sales and Related Occupations (68,300 jobs)
- Food Preparation and Serving Related Occupations (6,600 jobs)

It should be noted that not all of the top growing occupations align with the goal of providing high-paying jobs. Their inclusion herein is conducive to a holistic occupational growth strategy. RRCC is an economic ecosystem that provides career mobility and latitude for a range of skilled workers. Supportive jobs that do not hit the wage targets directly complement the career opportunities of others. Once in the economic ecosystem, there are opportunities for new training and skill development that provides future economic opportunity to these workers. This also is known as a worker's ability to skill-up.

Generally speaking, the manufacturing and transportation, distribution, and logistics (TDL) sectors are well represented by production and transportation and material moving occupations. Over the past five years, these two occupations have added over 25,000 new jobs. Through 2021, they are projected to add another 10,600 jobs.

Top Growing Occupations

Since 2011, miscellaneous assemblers and fabricators added nearly 8,000 new jobs, more than doubling its employment. This occupation is relatively concentrated within the 15-county region with a Location Quotient of 3.27. Rounding out the top five growing occupations are:

3 Number is derived from totaling the value of "Imported from Outside the River Ridge Region" for industries listed.

- Laborers and Material Movers, Hand (4,100 new jobs)
- Fast Food and Counter Workers (3,000 new jobs)
- Personal Care Aides (nearly 1,900 new jobs)
- Industrial Truck and Tractor Operators (1,800 new jobs)

Notably, laborers and material movers, hand and industrial truck and tractor operators are relatively concentrated within the 15-county region with a Location Quotient of 1.76 and 2.86, respectively. Along with miscellaneous assemblers and fabricators, these three occupations tend to be employed by the manufacturing and TDL sectors.

Occupations required of the Target Industries

Within the **advanced manufacturing sector**, the top ten occupations required to staff regional employers have all experienced growth over the past five years. The largest occupation is miscellaneous assemblers and fabricators with nearly 12,000 jobs (22% of all occupations in advanced manufacturing) in 2016. It also was the fastest growing and added the greatest number of jobs over the past five years, 129% and over 6,700 jobs, respectively. It is projected to add over 3,300 new jobs. Median wages range from $12.28 per hour for miscellaneous production workers to $26.38 per hour for first line supervisors of production and operating workers. Growing occupations that pay high median hourly earnings include:

- Machinists ($22.08 per hour)
- Industrial Machinery Installation, Repair, and Maintenance Workers ($24.61 per hour)
- First-Line Supervisors of Production and Operating Workers ($26.38 per hour)

The top occupations by number of jobs for the **TDL** sector are laborers and material movers, hand and driver/sales workers and truck drivers, with over 10,000 and 8,300 jobs, respectively. Median wages for the top TDL occupations range from $13.21 per hour for laborers and material movers, hand to $30.84 per hour for sales representatives, wholesale and manufacturing. Over the next ten years, the largest TDL occupations projected to add the most jobs include:

- Driver/Sales Workers and Truck Drivers (approximately 650 new jobs)
- Sales Representatives, Wholesale and Manufacturing (over 600 new jobs)

Median wages within the growing TDL occupations range from $12.08 per hour for stock clerks and order fillers to $43.93 per hour for marketing and sales managers. High wage occupations within this industry tend be within sales and marketing and include:

- Sales Representatives, Wholesale and Manufacturing ($30.84 per hour)
- General and Operations Managers ($37.58 per hour)
- Marketing and Sales Managers ($43.93 per hour)

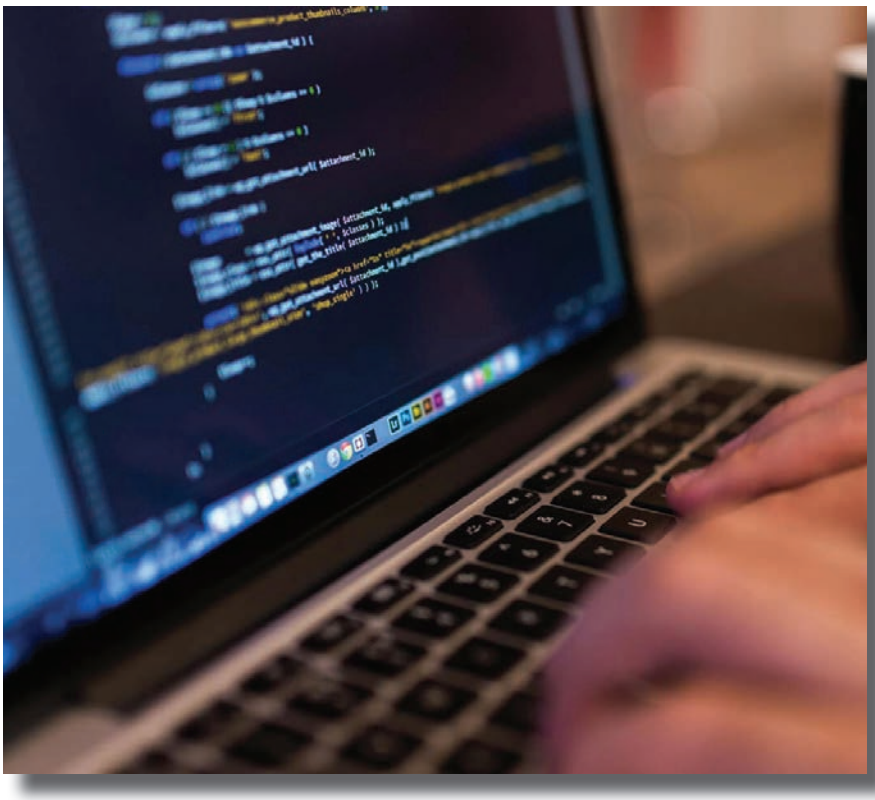
Customer Service Representatives is the largest occupation category within **finance and insurance** with nearly 2,600 jobs. It is projected to add over 1,100 new jobs over the next ten years. This is followed by:

- Insurance Claims and Policy Processing Clerks (over 700 new jobs)
- Insurance Sales Agents (over 700 new jobs)
- Claims Adjusters, Appraisers, Examiners, and Investigators (over 500 new jobs).

Median wages for growing finance and insurance occupations range from $16.01 per hour for customer service representatives to $34.84 per hour for software developers and programmers. Occupations that pay high wages include:

- First-Line Supervisors of Office and Administrative Support Workers ($24.29 per hour)
- Claims, Adjusters, Appraisers, Examiners, and Investigators ($27.63 per hour)
- Miscellaneous Business Operations Specialists ($29.48 per hour)
- Registered Nurses ($29.88 per hour)
- Computer and Information Analysts ($32.76 per hour)
- Management Analysts ($32.98 per hour)
- Software Developers and Programmers ($34.84 per hour)

The largest occupations by number of jobs within the 15-county



region include **professional, scientific, and technical services** (over 2,000 jobs), where software developers are a specific occupation, and professional, scientific, and technical services is an occupational group. Over the next ten years, the greatest occupational growth within this sector is projected to be within:

- Software Developers and Programmers (nearly 600 new jobs)
- Computer and Information Analysts (approximately 226 new jobs)
- Computer Support Specialists (nearly 200 new jobs)
- Database and Systems Administrators and Network Architects (over 130 new jobs)

Median wages for the top growing professional, scientific, and technical services occupations range from $16.01 per hour for customer service representatives to $52.37 per hour for computer and information systems managers. Many of the growing occupations for this industry pay high wages and include:

- Miscellaneous Sales Representatives, Services ($22.03 per hour)
- Sales Representatives, Wholesale and Manufacturing ($30.84 per hour)
- Computer and Information Analysts ($32.76 per hour)
- Management Analysts ($32.98 per hour)
- Database and Systems Administrators and Network Architects ($34.12 per hour)

- Software Developers and Programmers ($34.84 per hour)
- General and Operations Managers ($37.58 per hour)
- Computer and Information Systems Managers ($52.37 per hour)

Workforce Development Implications

There are a number of demographic and labor force characteristics that will result in an uphill battle when it comes to attract more jobs; better jobs. Population in the 15-county region is projected to remain flat, and the projected decrease in workers between the 20 and 34 and 35 to 54 is expected to decrease; two factors that will make it difficult to attract employers. With a relatively lower percentage of the 15-county region obtaining an associate degree or higher (compared to the US averages), businesses seeking employees with higher education may continue to struggle to do so. On the other hand, unemployment for the 15-county region is near the low-end of what is considered to be a normal unemployment rate. Meaning that current unemployment numbers will neither help nor hinder the 15-county region's ability to attract businesses. The unemployment rate is a statistic that reflects the number of unemployed people as a percentage of the labor force. The labor force is the number of people who are either working or actively seeking work.[12]

Transportation Implications

The Occupational Analysis completed as part of the strategic planning process revealed a number of job related transportation implications to consider now and in the future. In 2014, the 15-county region had over 120,000 workers commuting in and nearly 100,000 commuting out, making the region a net importer of workers.[13] The largest contributor of in-commuting workers in the region is Hardin County, KY (15 percent of the region's workforce), followed by Fayette County, KY (2 percent of the region's workforce). By comparison, Marion County, IN makes up 1.6 percent of the workforce in the 15-county region.

In 2014, Clark County had over 28,000 workers commuting in and over 35,000 commuting out, making the county a net exporter of workers.[14] The number of people who both live and work in the county is over 19,000. With 35,000 workers commuting out of the county, from a workforce perspective, there may be an opportunity for the RRCC to attract talent that already resides in Clark County. The largest contributor of in-commuting workers to the county is Jefferson County, KY (14.9 percent of the Clark County workforce), followed by Floyd County, IN (13.9 percent of the Clark County workforce).

Similar to Clark County, Floyd County, IN had over 17,500 workers commuting in and over 26,000 commuting out, making Floyd County a net exporter of workers as well.[15] The number of people who both live and work in Floyd County is over 9,000. With 26,000 workers commuting out of Floyd County (18.2 percent of which already commute to Clark County to work), the opportunity for the RRCC to attract talent that already resides in Clark County is compounded by the opportunity to attract talent that already resides in Floyd County.

Land Use Implications

The growth of employee intensive operations such as call centers and data processing centers increase not only the intensity of the development, but also the demand for on-site retail/services and park amenities.

PROPERTY DEVELOPMENT

Use this chapter to gauge progress over time, and to test the various assumptions that were needed to advance the project from the project development phase into the financial analysis and economic impact phases.

This chapter includes the site analyses, development concepts, and full build-out scenarios developed as part of the strategic planning process. It is important to note that the final build out of the RRCC is likely to look considerably different than either of the development concepts presented on the following pages. The value of the development concepts and resulting build out scenarios lies in their ability to make this long-term plan when there are some many variable currently at play. They should not be construed as being a preferred or alternate set of scenarios. Nor should they be used in the defense of an argument that runs contrary to the stated vision and mission of the RRDA.

Site Analysis
METHODOLOGY

The property development component used the types, sizes, location and intensities of the land uses that are consistent with the target industry sectors, transportation alignments, circulation, travel lands and truck routes, type, size, location and capacity of utility infrastructure, first to generate a set of land use typologies, and then to establish: land use categories, individual land uses, level of improvement for sidewalks, trails and buffer areas, development cost estimates, road maintenance cost estimates, utility capacity needs (including possible extensions and expansions), revisions to the CC&Rs. We developed a more concise description of the character of the Gateway District and remaining planning areas; refined the list of permitted uses to be consistent with the overarching vision; devised a way in which to break up the larger planning areas into developable parcels; developed a hierarchical motorized and non-motorized transportation network; considered rail, road and trail access and connectivity beyond the boundaries of the RRCC; and established a place and purpose for the various natural features and amenities that stand to differentiate the RRCC from all others.

SITE ANALYSIS

An initial site analysis was developed to illustrate the existing conditions. The site analysis produced the rationale basis for the need to create, revisit and refine two distinct development concepts. The site analysis was used to test, or otherwise confirm, the existing conditions, assumptions, vision, priorities, and desired features and amenities. Of particular importance was:

» The need to set aside land and accommodate a potential grade separation for rail connectivity between the Ports of Indiana Jeffersonville and the mega site where the alignment for the future rail connectivity to the port is currently unknown, but where the RRDA would prefer for the new rail to come off of the CSX mainline.

» The increased desire and importance of a "Commerce Connector" extending the River Ridge Parkway across SR 62 to provide a direct route between the RRCC and SR 60 to the east.

» The potential to accommodate residential housing - estate homes - within the cliffs that overlook the Charlestown State Park.

» Consideration of the benefits of opening up vehicular access to adjacent residents of Quarry Bluff and Long View Beach.

» The ability to achieve the highest and best uses throughout the RRCC

» The need to simplify the planning elements and language describing the various components of the RRCC and the Gateway District

» The long-term costs associated with operating and maintaining the road infrastructure at the level that the internal roadways are being constructed

» The ability to easily discern between private property and common areas in terms of who owns it, who constructs it initially, who uses, who fixes and who pays for the long-term operation and maintenance

» The opportunities and challenges as a result of having not one, but two municipalities with jurisdictional control within the RRCC

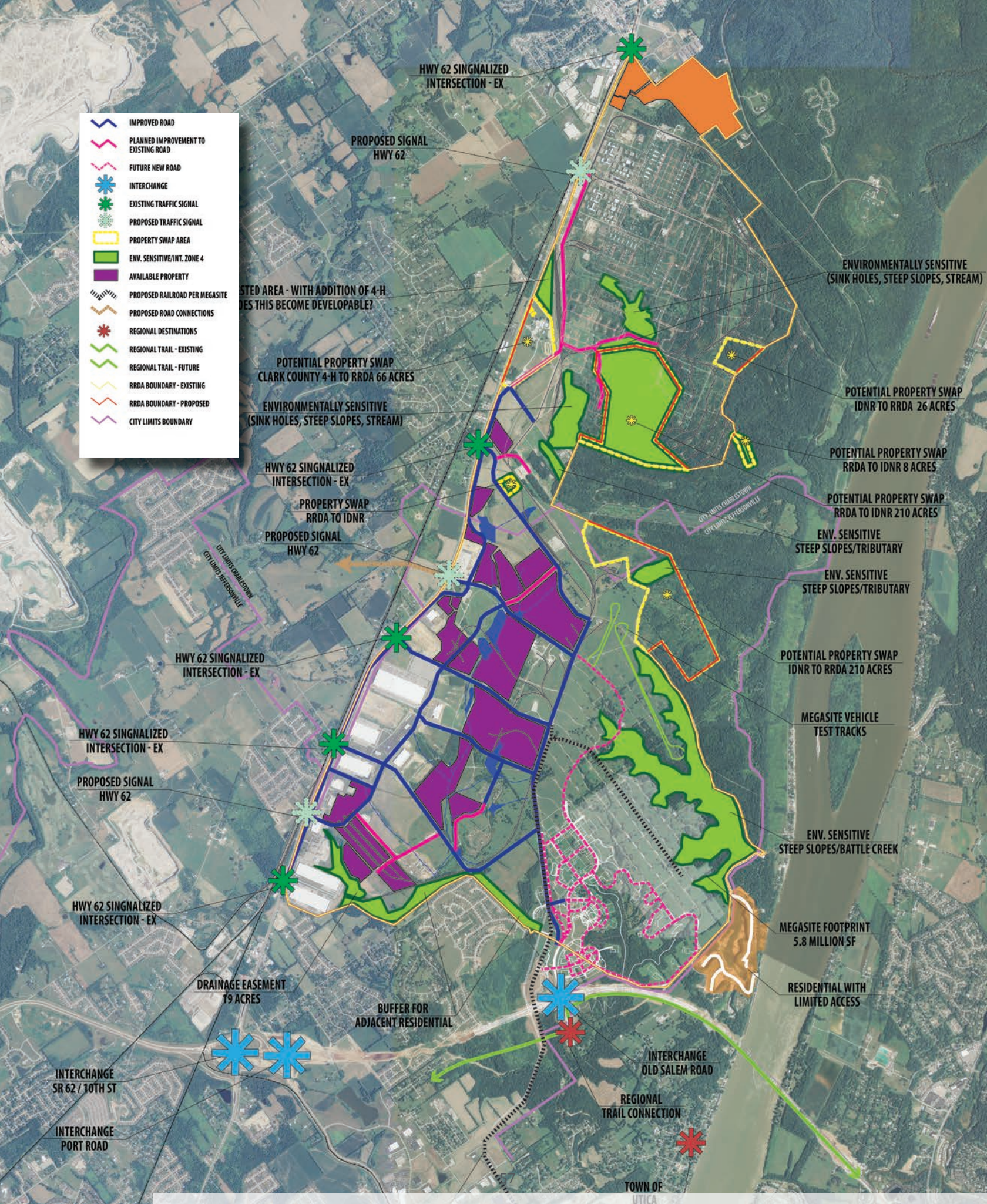
» The ever-evolving role of the RRDA

» Technological advancements that are likely to have an impact on development now and in the future

» The long-term application and enforcement of the Covenants, Conditions and Restrictions

» The desire to allow access to and from the Charlestown State Park directly from the RRCC

» The benefits (monetarily and otherwise) of both the RRDA and the RRCC to the local, regional, and state economy



SITE ANALYSIS MAP // Large format maps are available in the offices of the RRDA

Planning Areas

The natural environment present across all three planning areas is unique; a real differentiator. Situated next to the Charlestown State Park, the RRCC offers an attractive setting in which to build and grow a business. The change in elevation is over 110' and there are slopes greater than 25% in many places. Limited to approximately 1,000 acres in total, steep slopes will play a significant role in contributing to the natural environment, without severely limiting the amount of developable land in any of the defined planning areas.

Current land uses include: agricultural land for grazing, conservation areas for environmentally sensitive features (which are currently only present in the north end), light industrial warehousing and distribution facilities, business offices, and some commercial uses. Environmentally sensitive features include: streams and karst features, wooded areas along streams, and the former landfill near the southern end of the property, just west of the entrance to the Gateway District.

An environmental assessment required by the US Department of the Army Regulation (AR 200-3) limits earth moving activities within 100 feet of a karst feature or within the drainage area of a karst feature.

The **NORTH END** of the RRCC is located entirely within the Town of Charlestown's jurisdictional boundary and is further characterized by:

- Multiple watersheds that drain north to Lick Creek, a tributary of the Ohio River
- Relatively flat land, but also some steep ravines
- Karst features that will need to be preserved or mitigated
- An extensive railroad network that will require updates to accommodate modern rail usage
- Significant quantities of asbestos containing building materials that will require abatement
- Remnant buildings and structures
- Equal parts developed land, forested areas and woodlands, and agricultural or open space areas; some of which could be transferred to the Indiana Department of Natural Resources and incorporated into the Charlestown State Park
- An inundation of invasive plant species that will require significant cost to clear

The **SR 62 CORRIDOR** of the RRCC along the SR 62 corridor includes land that falls under the City of Jeffersonville's jurisdiction and is further characterized by:

- A stormwater conveyance system (natural and otherwise) that drains toward the center of the park, eventually reaching the Lentzier Creek watershed to the south
- Relatively flat land and less steep ravines

PLANNING AREAS MAP // Large format maps are available in the offices of the RRDA

- Remaining segments of the former rail system that traversed the entire area
- New construction and some examples of adaptive reuse of former INAAP structures
- Over 1,000 acres that have been developed
- Approximately 500 acres that are currently ready for development
- Other areas that are undergoing development, especially along the SR 62 corridor
- Some agricultural/open space areas

The **GATEWAY DISTRICT AREA** of the RRCC abuts the Town of Utica's jurisdiction and includes the area referred to as the Gateway District and the mega site. The entire area is further characterized by:

- A stormwater conveyance system wherein the northern end of the planning area drains north to the Ohio River and the southern end of the planning end drains south to the Lentzier Creek watershed
- Grasslands that abut tree lined creeks
- An expansive field of "igloo" bunkers where bags of munitions and powdered were stored before they were shipped out
- Significant grade changes that offer unique views of the East End Bridge and the Louisville skyline
- Direct access to the new IN-265 interchange and gateway

Mobility throughout the Region

Existing municipal, county and regional planning documents provide little guidance on the transportation enhancements or improvements at or around the RRCC. A county trail network exists south of the new IN-265 extension. The development concepts propose a regional trail connection within the Gateway District. The Transit Authority of River City (TARC) provides public transportation in the Greater Louisville area with bus routes in Clark and Floyd counties in Indiana that directly serve the RRCC. Past planning efforts show a new railroad extending from the Ports of Indiana Jeffersonville through the Gateway District along the International Drive and into the mega site. Each of these factors was considered in the development of the development concepts on the following pages.

Water and Wastewater Infrastructure

Within the RRCC, a number of improvements have been made to the water and wastewater distribution/collection systems that were originally put in place to serve the former INAAP continue to be modernized. Three new 700 gallon per minute wells; a two million gallon per day treatment plant; over three miles of 16” supply main; a 100’ tall, 750,000 gallon ground storage tank; a 3,000 gallon per minute booster station; and over 2 miles of 16” distribution main were constructed by IDNR within the last several years to ensure that existing and future businesses will continue to have an adequate supply of water.

Water

The RRDA is said to own the physical water distribution system that was on-site at the time that the Army transferred the property to the RRDA. In 2001, the State of Indiana financed and installed new wells, a treatment plant, 16" supply mains, a ground storage tank and booster pump station to supply water to users within the RRCC. These recent improvements are still owned by the State.

As the operator of the water system at the RRCC, the RRDA is the water provider for the mega site. As per the certification letter, a 12-inch line located on-site and an 8-inch line along the southern property boundary are capable of providing the 1,500,000 million gallons per day required for a certified mega site. As of April 2015, the RRCC/Charlestown State Park Water Treatment Plant has a capacity of 2.0 mgd, and a peak utilization of 0.175 mgd. The water treatment facility was designed to accommodate an expansion to 4.0 mgd in a relatively short amount of time. The current plan for servicing a mega site user is to install 7,200 linear feet of 12-inch water main at an estimated cost of approximately $600,000 and seven months for completion. There are currently 500,000 gallons of elevated storage in the vicinity of the mega site.

Wastewater

There are two separate sewer systems that serve the RRCC; which have replaced the former P&E Plant and LAP Plant. The wastewater collection systems throughout the RRCC are owned and maintained by the cities of Charlestown or Jeffersonville, depending on location. Currently, the RRDA finances and installs the sewer extensions required for new development. Should the need arise to upgrade one or both of the wastewater treatment facilities, the respective municipality would assume responsibility for capacity upgrades in order to continue to serve users within the RRCC.

The City of Jeffersonville is the wastewater provider for the mega site. At the time of this study, the mega site lacked wastewater infrastructure. The City, in cooperation with the RRDA, will provide wastewater service of adequate capacity to pump, convey, and treat the wastewater from the site. It is anticipated that the site would be served by a new 1.5 mgd lift station, a new 18-inch force main connecting to the headworks of the Jeffersonville North Wastewater Treatment Facility, and new gravity sanitary sewers to collect wastewater which will flow to the new lift station. The estimated schedule and cost for the improvements and upgrades is seven to eight months, and over $3,000,000.

Site Limitations

Some of the limitations and constraints that the RRDA is able to address include:

- Infrastructure improvements, specifically roads, utilities, regional stormwater conveyance systems, and other amenities
- Mitigation of potential conflicts between motor vehicles and tractor trailers in anticipation of a marketed increase in both over the next several decades. Through careful planning and design as a part of the RRCC Gateway Master Plan, the RRDA established a way to separate

heavy-haul, truck traffic from vehicular and pedestrian traffic entering the RRCC through the Gateway District through the construction of a separate heavy-haul truck route know as International Drive.

- Stewardship of the State's newest gateway. The RRDA worked with the City of Jeffersonville to establish an overlay district to ensure that the future development and redevelopment of the 100 acres of privately owned land that separates the Gateway District and the new IN-265 Interchange is complimentary to the uses anticipated for the Gateway District.

Appointing authorities and other area partners/agencies continue to advance efforts and initiatives aimed at ensuring that the RRCC is highly successful. Some of these efforts include:

- Continuation of the UEZ, both in terms of revenues and the ability to issues bonds, as a critical path strategy to realizing the stated vision
- Implementing programs and initiatives aimed at increasing the employability of the local labor force, ensuring that employees have opportunities to skill up, all while attracting new talent to the region
- Addressing the short supply of higher-end housing and other "trailing spouse" issues
- Advancing opportunities for dependent care, on-site, during all three shifts
- Providing public transportation for both choice and dependent riders, and/or a toll stipend for people that commute by car

» Monitoring, and when necessary, lobbying against legislative changes that would weaken, or eliminate the current tax increment finance district

There are a few remaining limitations/constraints – in the form of geological and topographic features that have the potential to hinder development in some areas – are more or less external in nature. These include:

» **Construction limitations** – In the **NORTH END** only, earth moving is prohibited within 100 feet from a karst feature, or within the drainage area of the karst feature, and unless and until further dye trace studies are completed to demonstrate that construction activities will not have an adverse impact on the habitats of endangered species, the areas that have been identified as environmentally sensitive areas will remain as such.

» **Steep slopes** - Slopes greater than 20 percent, while they provide some of the views unique to the RRCC, are likely to impede some development activities.

» **Multiple (municipal) governing authorities** - The RRCC overlaps two municipalities, each with their own set of policies, procedures and requirements in addition to those of the RRDA

DEVELOPMENT CONCEPTS

Mega site or no mega site? The clearest distinction that the strategic planning process sought to make between just two possible build out scenarios was one in which the mega site is reserved for a large, single-user/ primary building and where the same area of land is allowed to be developed as smaller parts of a whole, such is the case with a Research and Development ("R&D") park or some other campus type user. All of the other discernible differences between the two scenarios stem from this one distinction. Both development concepts benefit from the same set of assumptions.

Both an interim deliverable and part of this final deliverable, the development concepts are –figuratively speaking – part of the infrastructure that needed to be built in order to complete the strategic planning process to the extent that we could see if the framework with which the RRDA is making its decision today will yield sustainable results in the future – and to what extent. Without preference for once concept over the other, the development concepts described herein are themselves a set of assumptions.

» The RRDA can secure the roughly $400M needed to: raze the former INAAP structures and the old/aging roadway, rail and utility infrastructure; clear away the overgrown vegetation; and make the capital improvements that will be necessary to attract potential buyers to the north end.

» Through the established memorandum of understanding, the City of Jeffersonville will upgrade and expand the City of Jeffersonville North Waste Water Treatment Plant to accommodate growth and development throughout the southern portion of the RRCC.

» As kart features continue to be inventoried and studied, future groundwater connectivity studies may show that the environmental restrictions imposed by the United States Fish and Wildlife Services ("USFWS") can be lifted from the north end, resulting in more developable acres than there are currently.

RESEARCH & DEVELOPMENT PARK

A R&D park is a property-based venture that includes the following characteristics:

Private and public R&D facilities, high-tech and science-based companies, and support services

A formal or informal ownership or operational relationship with one or more universities or other institution of higher education in scientific research

An industry-led, university supported role in creating new ventures and promoting economic development and job creation

A reciprocal responsibility for transferring technological advancements by and between industry tenants and university partners

- The Covenants, Conditions, and Restrictions will be updated and then recorded so as to be made applicable to all properties within the RRCC.
- Enforcement of the RRCC restrictive covenants as they pertain to properties that have been sold can be strengthened to ensure that property owners continue to comply with the provisions without the RRDA having to litigate any issues that may arise.
- The RRDA will move its headquarters to the Gateway District.
- The RRDA will continue to prepare land for development by removing old roads and rail, and constructing new roads and rail, when necessary.

The desired character, including the overall design, scale, types and mix of uses, viewsheds (where applicable), amenities, and stormwater management, for each of the planning areas is as follows:

GATEWAY DISTRICT

- 300 acres (± 3 acre site)
- Highest design aesthetic in terms of materials and architectural design
- High-profile, multi-story structures set relatively close to one another
- Headquarter and commercial office buildings in a campus-like setting

» Featuring lakes and ponds and other natural areas or features, sidewalks and trails, wayfinding signs, monument signs, and special lighting

» Regional or on-site stormwater management, including the strategic placement of bioswales to slow and treat stormwater runoff

BUSINESS PARK

» 5,000+ acres (individual sites up to 1,500 acres in size)

» Enhanced design aesthetic to the extent that the materials and architectural design are superior to that of competing business/ industrial parks

» Low-profile sprawling structures

» Manufacturing, flex industrial and office buildings

» Natural areas, sidewalks and trails, wayfinding signage, gateways, and lighting features

» Regional or on-site stormwater management, including the strategic placement of bioswales to slow and treat stormwater runoff

COMMUNITY COMMERCIAL NODE

» Approximately 30 – 80 acres between Concepts 1 and 2, respectively; preferably as a master planned development

» Enhanced design aesthetic to the extent that the materials and architectural design are consistent with that of the Gateway District

» Multi-story, multi-use structures set relatively close to one another

» Community commercial retail uses that are located and oriented to give preference to the pedestrian, rather than the automobile

» Bioswales and other stormwater infrastructure that has been tied to the regional system or otherwise handled off-site

The list of individual uses was simplified by eliminating the subtle difference between desirable land use categories, individual land uses, and desirable industries that have the potential to introduce confusion or conflicts across documents or planning efforts. The resulting list (below) includes the types of uses that can reasonably accommodate the target industries described on previous pages, and those commercial retail uses that employers/employees within the RRCC would be likely to frequent to fulfill their day-to-day needs.

Past planning efforts had amassed a laundry list of common elements, natural features and park amenities. In keeping with the desire to accommodate growth and economic development in the form of a business park, the list of common elements has been determined to include: paths (i.e. sidewalks and trails), interpretive signage/stations, native planting areas, (where applicable) regional stormwater detention and retention areas, and the Gateway District. The Gateway District is intended to be the most accommodating to pedestrians and bicyclists. Features that private property owners can continue to expect the RRDA, or its successor, to operate and maintain, long-term include: rights-of-way, natural areas, trails, streams, forested areas and directional, gateway and wayfinding signage.

DESIRED LAND USES

Industrial
Manufacturing
Warehousing
Distribution
Research facility
Laboratories
Flex industrial

Commercial Office
Business and professional offices

Commercial Retail
Lodging
Personal or professional services
Dining establishments
Financial institution
Dependent care facility

Institutional
Secondary education institutions
Early childhood institutions
Training facility

Natural Area//Amenities
Recreational area
Environmentally sensitive area
Buffer area

Civic or quasi-public
Utility
Career center
Police and/or fire station
EMS

A set of land use typologies was developed to serve as proxies for the types of businesses offered by the target industries. These typologies were used in determining the size of each parcel, site layout and design, and road configurations, and include:

» Manufacturing (small, large)
» Warehouse Distribution (large, larger)
» Cross-Dock Distribution
» Freight Facility (ground, truck)
» Fulfillment Center (large)
» Flex-Office (small, medium, large)
» Commercial Office (conventional, modern)
» Commercial Retail (conventional, modern)

Concepts I and II offer two possible futures for planning purposes only; it is anticipated that the full build out will look different from either concept. Both concepts anticipate the need to accommodate civic uses, specifically police, fire and/or emergency medical services facilities, in the near-term future. Both concepts have the potential to accommodate a systems-level approach to stormwater management; however, Concept II is more true to this guiding principle. Concept II also allows for a greater separation of truck and vehicular traffic. As was previously mentioned, the biggest difference between the two concepts is in the area of the mega site, where the types and mix of land uses vary, and limited residential housing becomes a suitable option under Concept II.

Land Use Mix

The development concepts were organized to, among other things:

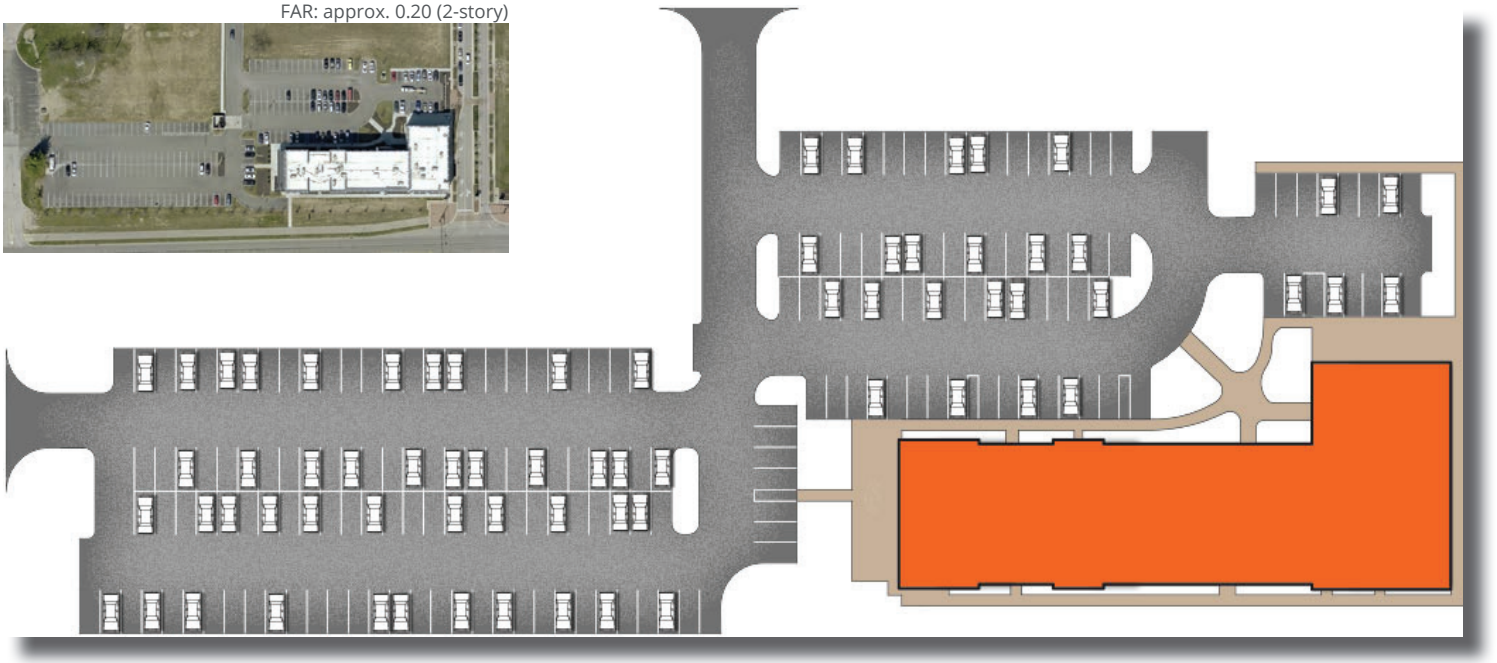
- Achieve a scale of development within the Gateway District and throughout the rest of the RRCC to convey the importance and significant of the RRCC as a "World-Class business park and employment destination"
- Illustrate the highest and best uses for the park
- Preserve natural areas.

While the RRCC restrictive covenants and the applicable municipal zoning regulations (as amended from time to time) serve as the official source of permitted and (expressly)

For the purposes of this plan, **natural areas** *include: 1) environmentally sensitive areas; 2) recreational areas; and 3) buffer areas. Where environmentally sensitive areas are to remained undisturbed, recreational areas can accommodate regional stormwater conveyance systems as well as trails and other features or amenities, and where buffer areas are intended to allow for a transition between the industrial business park and the neighborhood state park. In these three instances, the property remains under the control of the RRDA or its successor. When it comes to private property, the more commonly referred to terms of front, side and rear yards apply. A trail easement, and/or a natural area easement may be required to achieve the overarching goal of preserving – to some degree – the natural environment offered at RRCC.*

MODERN COMMERCIAL RETAIL // OFFICE SPACE TYPOLOGY EXAMPLE

Bldg Footprint: 70' x 260'
Site: 270' x 660' (approx. 4 acres)
FAR: approx. 0.20 (2-story)



(Source: American Structurepoint)

prohibited land uses, the strategic planning process revealed the need to pare down the list of uses to more accurately depict the desired mix and type of uses.

In keeping with the highest and best uses, a series of land use typologies were developed and then used to "fill-in" the development concepts. Each concept conveys the types, mix, sizes, location and intensities of land uses – and which are otherwise consistent with the target industries identified above – throughout the RRCC.

The largely undeveloped planning areas were divided into smaller parcels to create more manageable parcel sizes and establish a proposed transportation network for truck and rail, vehicular traffic, pedestrian access and circulation, as well as a place and purpose for the various natural features and amenities.

Both concepts illustrate a natural buffer along the boundary separating the RRCC from the Charlestown State Park. And both concepts illustrate the desire to make the Charlestown State Park accessible from within the industrial business park.

Placemaking principles were applied to both development concepts to ensure that the public realm – the transportation network, and the recreational areas that house the trail network – continue to serve as the unifying elements throughout the park.

text continued on page 80

LAND USE TYPOLOGIES MATRIX

LAND USE TYPOLOGY	EXAMPLE Building Footprint, Land Area, FAR	BUILDING SIZE (square feet)	LAND AREA (acres)	FAR
MANUFACTURING				
Small	10890 Bennett Pkwy, Zionsville 160' x 300' (48,000 sq ft) 240' x 410' (2.3 ac) 0.49 FAR	28,000 – 75,000 SF	<1 – 10 acres	0.10 - 0.85
Large	999 Gerdt Ct., Greenwood 250' x 540' (135,000 sq ft) 540' x 700' (8.7 ac) 0.36 FAR	100,000 – 250,000 SF	7 – 35 acres	0.10 - 0.38
WAREHOUSE DISTRIBUTION				
Large	300 Hilton Dr. Jeffersonville – RRCC 520'x 980' (509,600 sq ft) 900' x 1250' (25.8 ac) 0.45 FAR	250,000 – 500,000 SF	12 - 35 acres	0.23 – 0.59
Larger	500 Family Dollar Pkwy, Ashley 450' x 1670' (751,500 sq ft) 2330' x 1450' (77.6 ac) 0.22 FAR	700,000 – 800,000 SF	25 – 114 acres	0.15 – 0.69
Crossdock	750 Decatur Blvd, Indianapolis - FedEx 100' x 1600' bldg. 1 (160,000 sq ft) 80' x 480' bldg. 2 (38,400 sq ft) 950' x 2100' (45.8 ac) 0.10 FAR	200,000 - 550,000 SF	11 - 46 acres	0.28 – 0.46
FREIGHT FACILITY				
Ground Freight	3747 W. Morris Rd, Indpls - UPS Ground, Ameriplex 100' x 500' bldg. 1 (50,000 sq ft) 280' x 260' bldg. 2 (72,800 sq ft) 470' x 1300' (14 ac) 0.20 FAR	120,000 – 200,000 SF	25 – 35 acres	0.09 - 0.14
Truck Depot	5858 Decatur Blvd, Indianapolis - Pepsi-Co 800' x 1600' (1.28M sq ft) 1500' x 2300' (79.2 ac) 0.37 FAR	800,000 – 1,000,000 SF	80 acres	0.34
FULFILLMENT CENTER				
Small	1050 Patrol Road, Jeffersonville – RRCC 260' x 300' (117,000 sq ft) 800' X 850' (15.6 acre) 0.17 FAR (1.5 stories)	100,000 – 250,000 SF	6 - 36 acres	0.13 – 0.47
Medium	1250 Patrol Road, Charlestown – Knipper & Co. 640' x 510' (326,400 sq ft) 1240' x 940' (26.8 ac) 0.28 FAR	250,000 – 350,000 SF	15 - 30 acres	0.21 – 0.49
Largest	900 Patrol Road, Jeffersonville 560' x 1760' (985,600 sq ft) 1680' x 2040' (78.7 ac) 0.29 FAR	1,000,000+ SF	55 acres	0.43
FLEX INDUSTRIAL				
Small	6802 Hillsdale Court, Indianapolis 120' x 520' (62,400 sq ft) 300' x 680' (4.7 ac) 0.31 FAR	25,000 – 65,000 SF	2 – 6 acres	0.06 - 0.67
Medium	6801 Hillsdale Court, Indianapolis 160' x 520' bldg. 1 (83,200 sq ft) 160' x 520' bldg. 2 (83,200 sq ft) 650' x 600' (9 ac) 0.43 FAR	65,000 – 100,000 SF	6 - 10 acres	0.19 - 0.29

(Source: American Structurepoint)

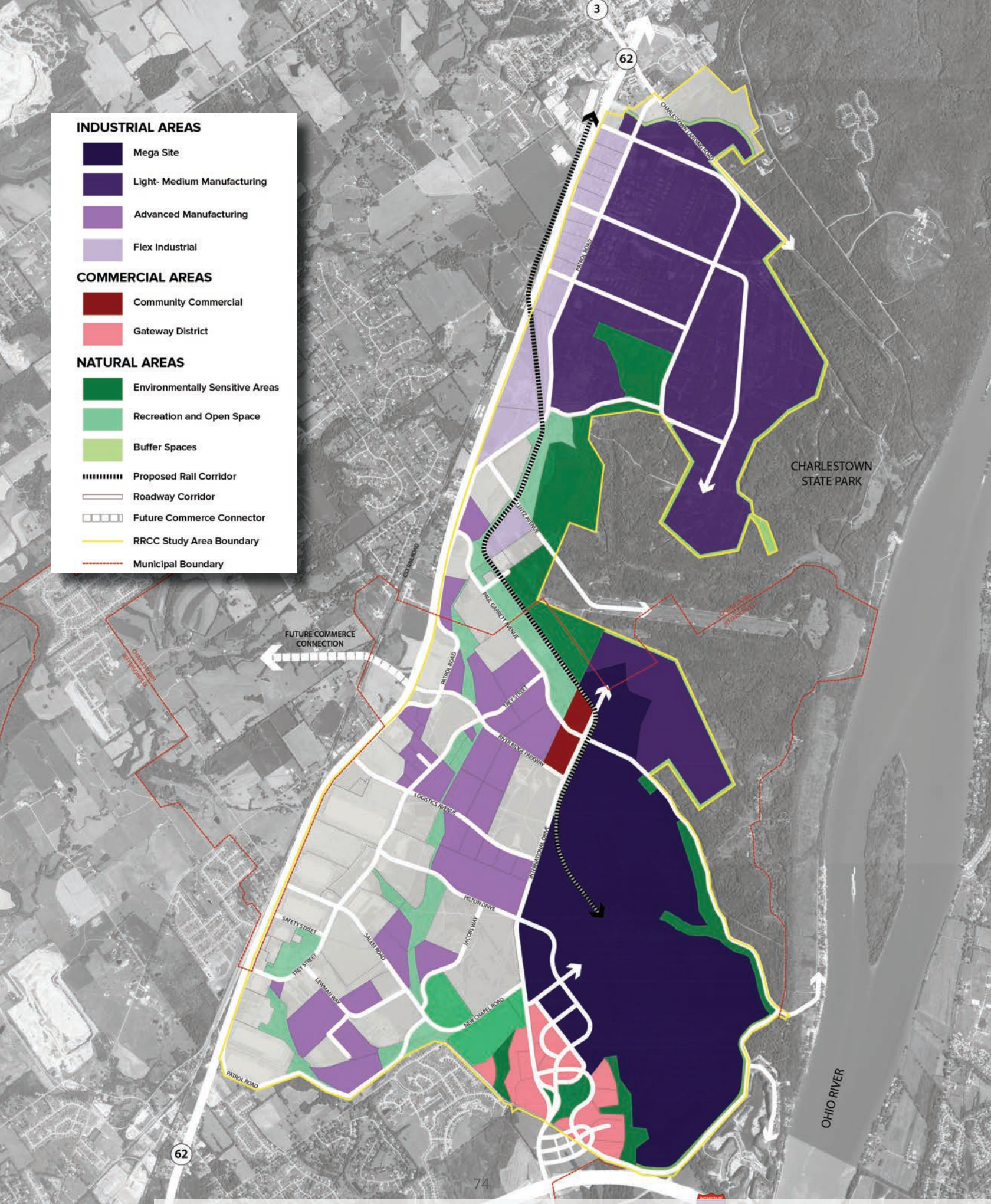
CEILING HEIGHT (feet)	**USERS // DEVELOPMENT TYPE**	**LOADING // UNLOADING** (truck impact)	**VEHICLE PARKING**	**TRUCK, TRAILER, CONTAINER PARKING**
12' - 24' (one-story)	Single or multi-tenant; Light manufacturing, assembly, wholesale businesses	0 -12 docks Box Trucks, in moderation	20 – 80 spaces (0.48 - 1.10/1,000 SF)	Limited
18' - 24' 32' - 60' (one-story)	Single, owner-occupied or multi-tenant occupancy; dry cleaners to steel rolling	0 - 49 docks No truck wells	35 - 600 spaces (0.28 - 2.95/1,000 SF)	Limited
24' - 32' (1- to 2-story)	Highly automated systems with computerized cranes and standardized racks	14 – 52 docks High ratio of loading docks with significant truck traffic	40 - 675 spaces (0.11 - 1.61/1,000 SF)	15 - 50 trailer spaces Greater need
30' – 36' (one-story)		35 - 98 docks	153 - 480 spaces (0.29 - 1.02/1,000 SF)	70 - 300 trailer spaces Even greater need
24' – 32' (one-story)	Products from a supplier or manufacturing plant are distributed directly to a customer or retail chain with marginal to no handling or storage time	36 – 87 docks	75 – 390 spaces (0.30 – 1.12/1,000 SF)	54 trailer spaces Some truck tailer parking
16' - 18' (one-story)	Truck terminal, logistics	160 - 223 docks	200 - 250 spaces (1.25 - 1.58/1,000 SF)	Considerable truck parking
30' (one-story)	Not a fulfillment center; modest office build-outs; considerable rack storage inside	Many docks	Minimal employee parking	
18' – 32'	Single-tenant occupancy typical; a mix of industrial and office space; typically no more than 10% office)	5 - 18 docks	20 - 350 spaces (0.18 – 2.52/1,000 SF)	Some truck trailer parking
32' - 36' (one-story)	Single-tenant occupancy typical; racking and conveyors throughout the building, more than likely includes an office component (usually about 10%)	30 - 75 docks	100 – 208 spaces (0.11 – 0.61/1,000 SF)	More truck trailer storage
36' (one-story)	Amazon is the exception, rather than the rule	92 docks	3,500 spaces (0.47/1,000 SF)	
14' – 26' (1 – 2-story)	Multi-tenant office (anywhere from 20% - 50%) Distribution, light manufacturing, showrooms, laboratories, or other R&D	2 - 24 docks	45 – 150 spaces (1.01 – 3.48 /1,000 SF)	Limited
14' - 26' (1-2 stories)	Multi-tenant office (usually just 25%), distribution, light manufacturing, showrooms, laboratories, or other R&D	0 – 6 docks	75 - 283 spaces (1.00 – 3.13/1,000 SF)	Limited

LAND USE TYPOLOGIES MATRIX CONTINUED

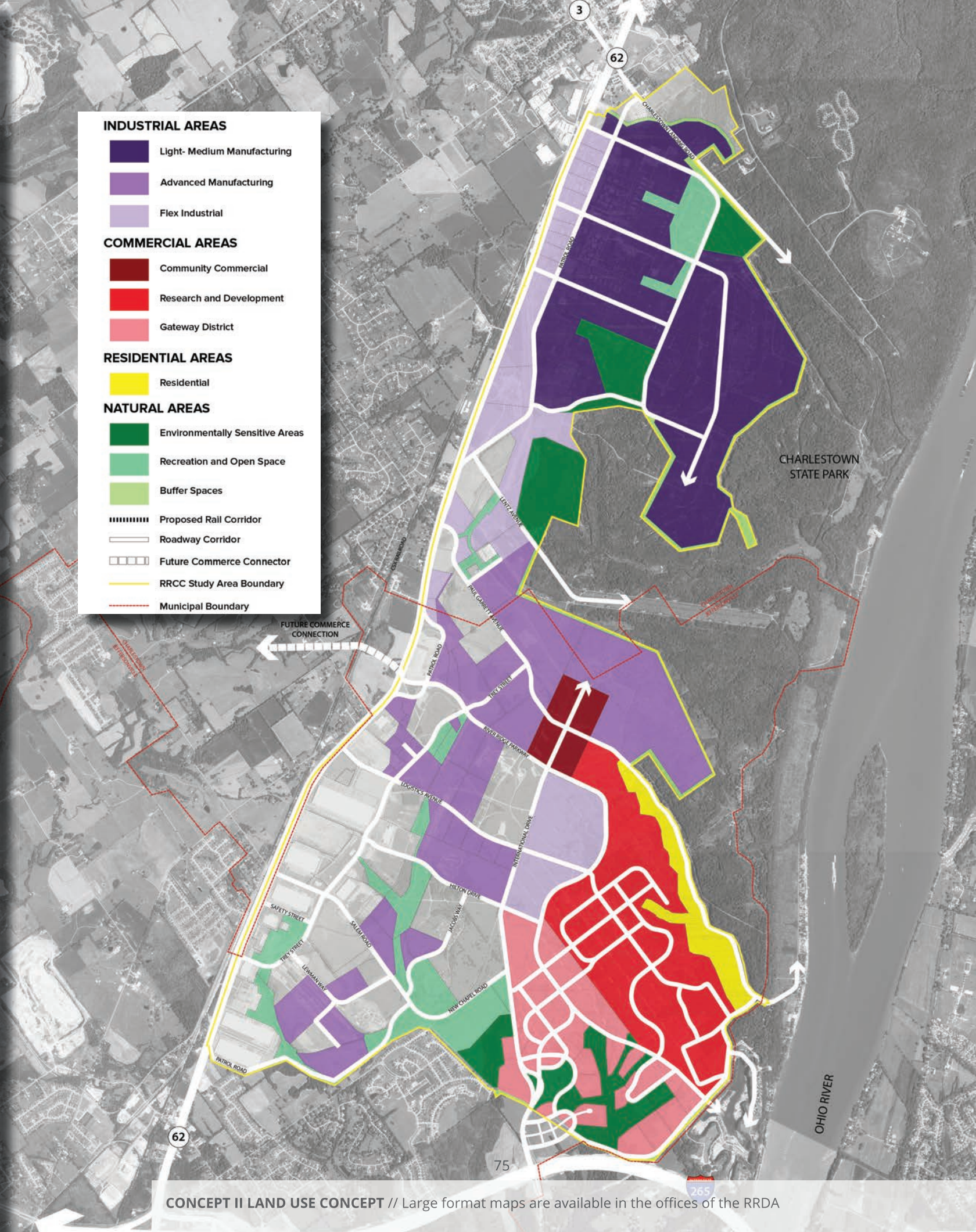
LAND USE TYPOLOGY	EXAMPLE Building Footprint, Land Area, FAR	BUILDING SIZE (square feet)	LAND AREA (acres)	FAR
FLEX INDUSTRIAL cont.				
Large	6826 Hillsdale Court, Indianapolis 180' x 430' (77,400 sq ft) 600' x 430' (5.9 ac) 0.30 FAR	100,000 – 150,000 SF	5 - 20 acres	0.06 – 0.21
RESEARCH & DEVELOPMENT				
Small	310 W Cook Rd, Fort Wayne 150' x 105' (15,750 sq ft) 380' x 280' (2.4 ac.) 0.14 FAR	15,000 - 30,000 SF	1.5 – 4 acres	0.18 – 0.32
Medium	1033 – 1075 3rd Ave SW, Carmel – Kirby Park North 80' x 450' bldg. 1 (36,000 sq ft) 80' x 450' bldg. 2 (36,000 sq ft) 425' x 580' (5.7 ac) 0.29 FAR	30,000 - 50,000 SF	3 - 5 acres	0.17 – 0.44
Large	207 S West Street, Auburn – Cooper Engineered Products 245' x 200' (49,000 sq ft) 690' x 340' (5.4 ac) 0.21 FAR	50,000 - 75,000 SF	1 – 5 acres	0.15 - 1.57
Research Park	n/a	100,000 – 500,000 SF	18 - 22 acres	0.25 – 0.56
COMMERCIAL OFFICE				
Modern Office, small - medium	12900 N. Meridian, Carmel 300' x 100' (90,000 sq ft) 610' x 480' (6.7 ac) 0.31 FAR (3-story)	18,000 – 100,000 SF	<1 – 10 acres	0.26 – 2.47
Modern Office, large	1250 Eddy St, South Bend – Eddy Street Executive Suites 120' x 250' (120,000 sq ft) 485' x 290' (3.2 ac.) 0.85 FAR (4-story)	100,000 – 200,000 SF	2 – 10 acres	0.28 - 2.76
Conventional Office, small	5250 E US Highway 36, Avon – Prestwick Point 300 200' x 125' (25,000 sq ft) 370' x 330' (2.8 ac.) 0.20 FAR	18,000 – 50,000 SF	1 – 9 acres	0.07 - 0.93
Conventional Office, large	12772 Hamilton Crossing, Carmel 360' x 470' (169,200 sq ft) 540' x 720' (8.9 ac) 0.44 FAR	50,000 – 150,000 SF	5 acres	0.16
COMMERCIAL RETAIL				
Modern Retail Center	9165 Otis Ave, Indianapolis – The Post (AKA 9165 E 56th St – Lawrence Village at The Fort) 70' x 260' (36,400 sq ft) 270' x 660' (4.0 ac) 0.20 FAR (2-story)	35,000 – 50,000 SF	2 – 6 acres	0.18 – 0.75
Conventional Strip Plaza	5414 & 5420 Highway 62, Jeffersonville 60' x 250' bldg. 1 (15,000 sq ft) 70' x 135' bldg. 2 (9,450 sq ft) 320' x 400' (2.9 ac) 0.19 FAR	25,000 – 45,000 SF	3 – 9 acres	0.10 - 0.33

(Source: American Structurepoint)

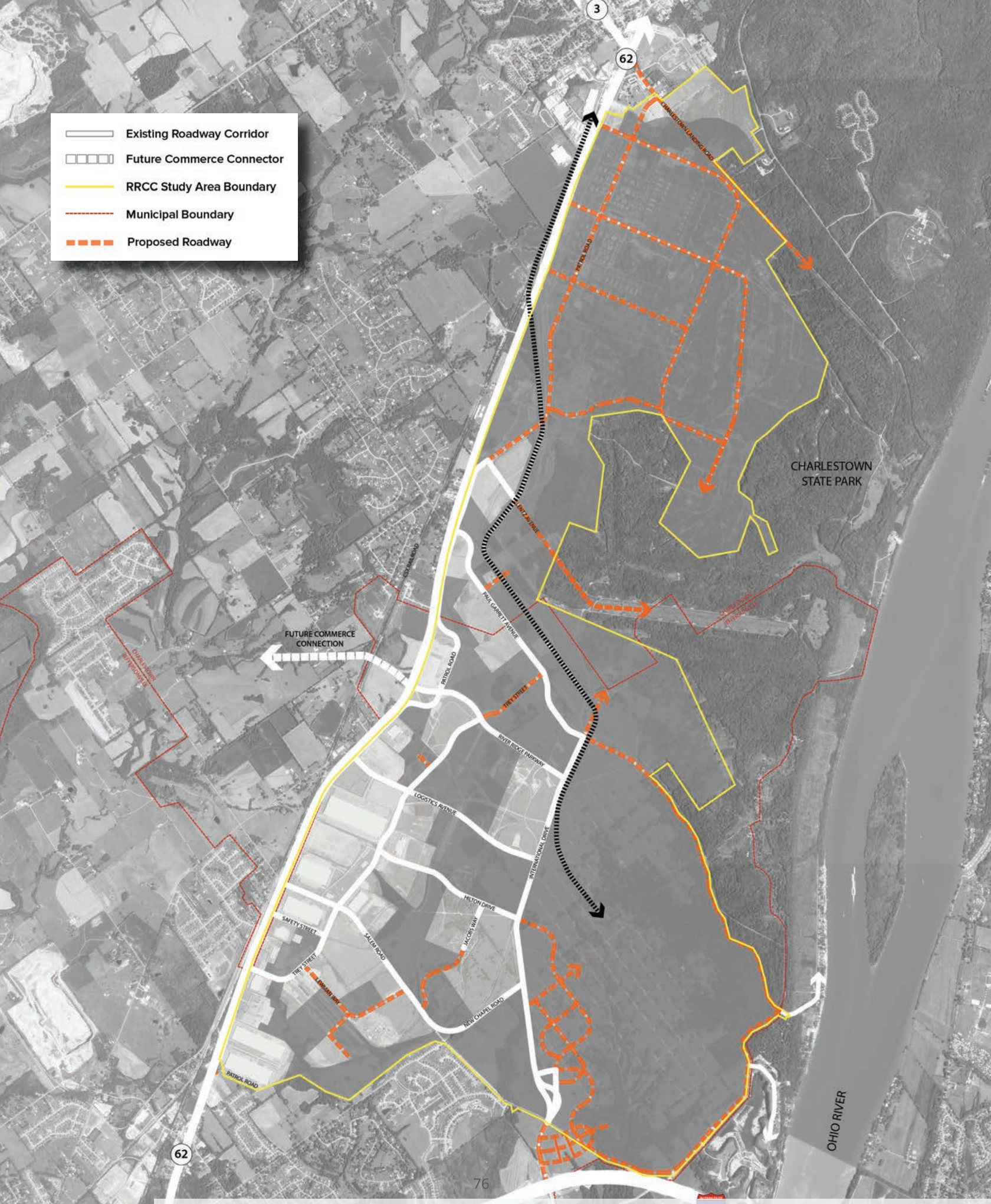
CEILING HEIGHT (feet)	USERS // DEVELOPMENT TYPE	LOADING // UNLOADING (truck impact)	VEHICLE PARKING	TRUCK, TRAILER, CONTAINER PARKING
18' - 20' (One-story)	Multi-tenant office (usually just 25%), distribution, light manufacturing, showrooms, laboratories, or other R&D, as well as freight forwarders	10 – 24 docks	100 - 250 spaces (0.95 - 1.21/1,000 SF)	Some
22' – 24' (1 - 2 stories)	Security systems, laboratories, automotive	0 – 1 docks	25 - 85 spaces (1.51 - 2.75/1,000 SF)	n/a
18' – 22' (1 – 2 stories)		7 - 8 docks	80 - 100 spaces (1.71 - 1.89/1,000 SF)	
22' – 24' (2 stories)		0 docks	100 – 275 spaces (1.70 - 3.82/1,000 SF)	
28' (2 stories)	Diagnostics, often includes on-site amenities like a conference facility or courtyard	5 docks	100 – 1,000 spaces (1.82/1,000 SF)	
3-5 stories	Multi-tenant commercial office, university, financial institution, medical, dining, executive suites, possibly retail on the first floor of these multiple story buildings	Few	50 – 200 spaces (2.78 – 5.43/1,000 SF)	n/a
3-5 stories			150 - 720 spaces (2.92 – 5.74/1,000 SF)	
One-story	Single or Multi-tenant commercial office, fitness, medical, car rental, investment, staffing, IT		100 – 174 spaces (2.49 - 5.56/1,000 SF)	
One-story			160 spaces (5.45/1,000 SF)	
2-3 stories	Multi-tenant commercial office, dining, law, taxes, medical/dental, investment, mortgage	Few	45 - 350 spaces (3.00 – 8.75/1,000 SF)	n/a
One-story	Multi-tenant retail, automotive, music, beauty/barber salon, yoga studio, pharmacy, training, you name it		125 - 648 spaces (3.31 – 9.04/1,000 SF)	



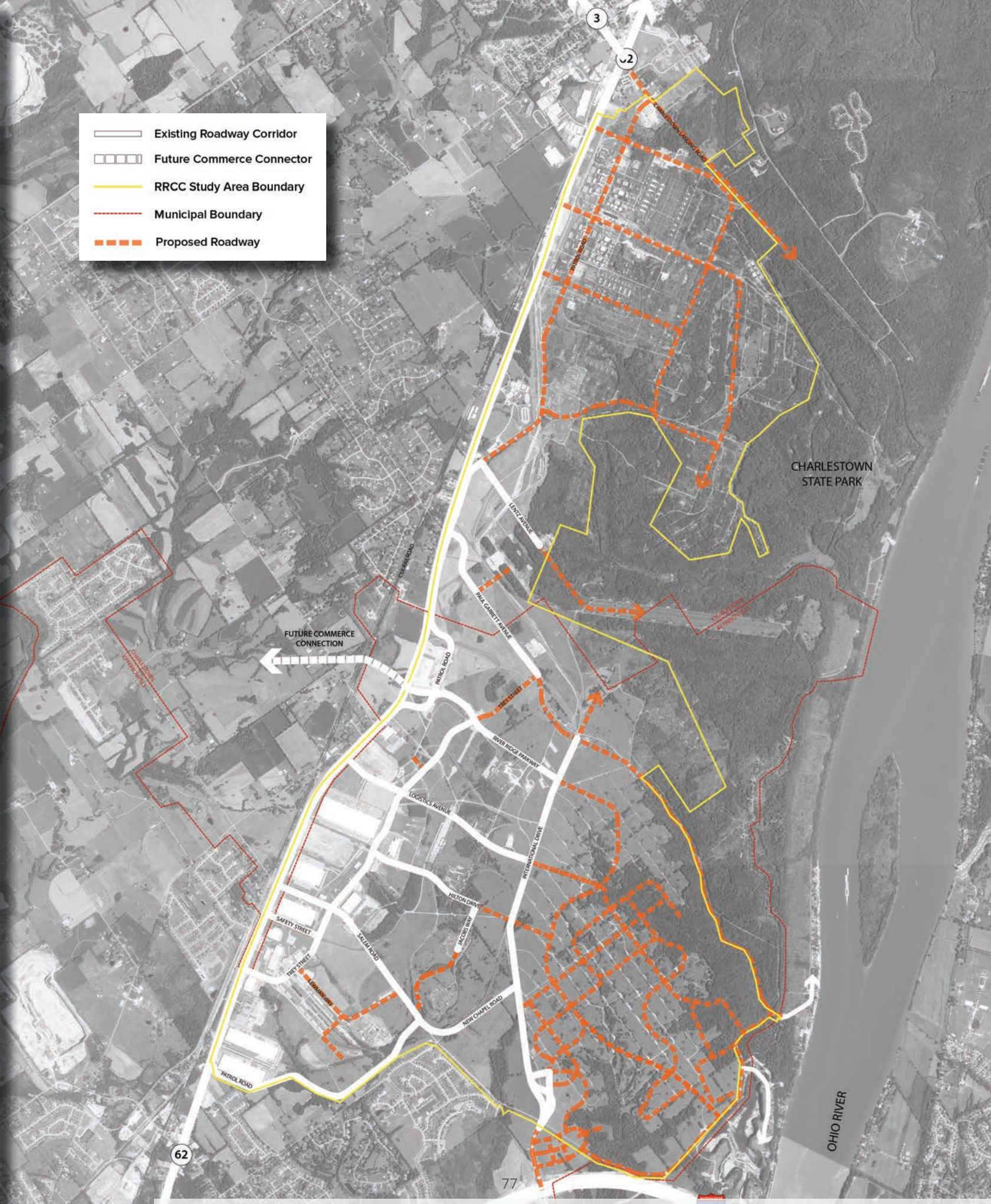
CONCEPT I LAND USE CONCEPT // Large format maps are available in the offices of the RRDA



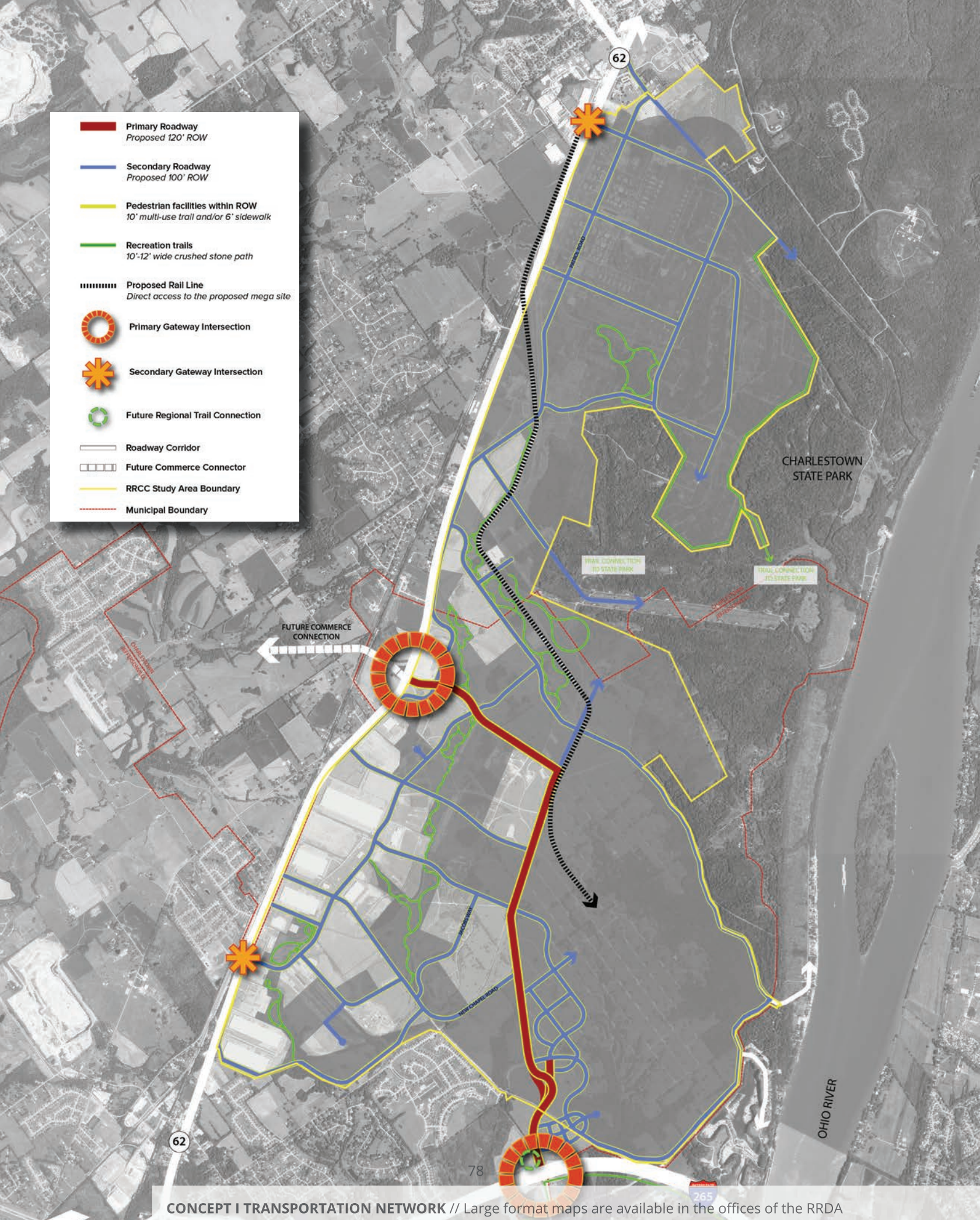
CONCEPT II LAND USE CONCEPT // Large format maps are available in the offices of the RRDA



CONCEPT I EXISTING VS. PROPOSED ROADWAYS // Large format maps are available in the offices of the RRDA



CONCEPT II EXISTING VS. PROPOSED ROADWAYS // Large format maps are available in the offices of the RRDA



CONCEPT I TRANSPORTATION NETWORK // Large format maps are available in the offices of the RRDA

CONCEPT II TRANSPORTATION NETWORK // Large format maps are available in the offices of the RRDA

RRCC PLANNING AREAS

PLANNING AREA	CONCEPT I		CONCEPT II	
	Gross Acres	Developable Acres	Gross Acres	Developable Acres
Gateway District	228	135	557	332
Mega Site	1,336	1,189	n/a	
Contiguous	*1,175*	*1,043*	*n/a*	
Non-contiguous	*161*	*146*		
Potential R&D Park //Campus area	n/a		723	688
North End	1,964	1,302	1,964	1,315
Balance	2,401	729	2,638	1,097
Retail	43	34	90	81
Sub-Total	**5,972 ±**	**3,389 ±**	**5,972 ±**	**3,513 ±**

(Source: American Structurepoint)

ADJACENT PLANNING AREAS

PLANNING AREA	CONCEPTS I & II	
	Gross Acres	Net Acres for RRCC Use
Land to give with IDNR	(203)	--
Land to receive from IDNR	242	201
Fairgrounds	61	61
Land adjacent to the Gateway District	84	84
Sub-Total	**180**	**346**

(Source: American Structurepoint)

text continued from page 69

Both concepts allow for some combination of regional and on-site stormwater management; however, Concept II embraces the notion of a systems-level approach to stormwater management. These are just some of the features and amenities of the larger business park that will likely differentiate RRCC from other industrial business parks elsewhere in the country.

In Concept I, the stream corridors are cut off and inaccessible from the rest of the development because of the nature and presence of the mega site user. In Concept II, the stream corridors may present a non-residential opportunity for a master planned R&D park//campus development; but the nature of the R&D park//campus development could lend itself well to accommodating both residential and non-residential areas on the same area of land.

Site Circulation

Concepts I and II were developed to accommodate a network of highly functional streets that, in the aggregate, can accommodate everything from pedestrians, to heavy-haul trucks. River Ridge Parkway, a multi-lane, heavily planted, tree-lined boulevard with pedestrian accommodations, higher-end lighting, and monumental / gateway / wayfinding signage serves as the "spine" of the transportation network of each concept. All proposed roadways are expected to be built to heavy haul standards and will resemble the secondary roadway cross-section. A third, tertiary, roadway cross-section was developed to assist with future planning efforts.

SCENARIO I WATER CAPACITY NEEDS

PRIMARY LAND USE CATEGORY	WATER DEMAND AVE. DAILY FLOW (GAL/DAY)	PEAK DEMAND (Average Flow x 2) (GAL/DAY)
Light - Medium Manufacturing	561,000	1,122,000
Advanced Manufacturing	952,000	1,904,000
Flex Industrial	214,000	428,000
Gateway District (Institution, Office, Campus)	170,000	340,000
Community Commercial	32,000	64,000
Mega Site (Heavy Industrial)	2,302,000	4,604,000
Existing Development	1,501,000	3,002,000

(Source: American Structurepoint)

SCENARIO II WATER CAPACITY NEEDS

PRIMARY LAND USE CATEGORY	WATER DEMAND AVE. DAILY FLOW (GAL/DAY)	PEAK DEMAND (Average Flow x 2) (GAL/DAY)
Light - Medium Manufacturing	506,000	1,012,000
Advanced Manufacturing	1,192,000	2,384,000
Flex Industrial	635,000	1,264,000
Gateway District (Institution, Office, Campus)	386,000	772,000
Community Commercial	79,000	158,000
Research & Development	1,085,000	2,170,000
Residential	*70,000*	*140,000*
Existing Development	1,501,000	3,002,000

(Source: American Structurepoint)

Pedestrian access and connectivity is accommodated by a system of paths. Concrete sidewalks are intended to accommodate pedestrians within the roadway right-of-way, while primitive multi-use trails offer opportunities within the parks (improved) natural areas; natural areas that will be designed, constructed, operated and maintained in such a way as to contribute to the functional stormwater management system throughout the business park.

The Impact of Rail

The preferred rail alignment would have the rail extend from the CSX main line towards the northern end of SR 62 somewhere near the existing 4-H fair grounds, provides a grade separation across SR 62, and then comes back to grade by the time it enters the mega site. Both the type of elevation change required and the path that the rail line would need to take to arrive at the mega site will have a significant impact on the amount of developable land within the RRCC, as evidenced by the discrepancy of the figures include within the financial analysis on the following pages.

Concept I illustrates the preferred route of a new rail line capable of directly serving a future mega site user. The cost estimates for which are as described in the mega site certification letter which states that, "A CSX main line runs parallel to Indiana Highway 62 across from the Commerce Park. A letter from Jeff Wagoner with CSX dated August 12, 2013 states that they welcome the opportunity to work with the site. The estimated cost to provide rail service across Indiana Highway 62 to the mega site is $5,248,750 and it is expected to take approximately eleven months to complete."

CONCEPT I WASTEWATER CAPACITY NEEDS

PRIMARY LAND USE CATEGORY	WASTEWATER FLOW ASSUMPTION (GAL/DAY)	WASTEWATER AVE. DAILY FLOW, ADF (GAL/DAY)	WASTEWATER PEAK FLOW (GAL/DAY)
Light - Medium Manufacturing	390	435,000	1,436,000
Advanced Manufacturing	1,000	738,000	2,276,000
Flex Industrial	1,000	166,000	605,000
Gateway District (Institution, Office, Campus)	930	132,000	491,000
Community Commercial	750	25,000	103,000
Mega Site (Heavy Industrial)	1,500	1,784,000	4,821,000
Existing Development	1,000	1,163,000	3,360,000

(Source: American Structurepoint)

CONCEPT II WASTEWATER CAPACITY NEEDS

PRIMARY LAND USE CATEGORY	WASTEWATER FLOW ASSUMPTION (GAL/DAY)	WASTEWATER AVE. DAILY FLOW, ADF (GAL/DAY)	WASTEWATER PEAK FLOW (GAL/DAY)
Light - Medium Manufacturing	390	392,000	1,310,000
Advanced Manufacturing	1,000	924,000	2,762,000
Flex Industrial	1,000	490,000	1,594,000
Gateway District (Institution, Office, Campus)	930	299,000	1,030,000
Community Commercial	750	61,000	240,000
Research & Development	1,400	841,000	2,547,000
Residential	*460*	*54,000*	*214,000*
Existing Development	1,000	1,163,000	3,360,000

(Source: American Structurepoint)

Utility Upgrades and Expansions

Using the primary land use categories and the proposed transportation networks described on the previous pages, both the long-term sewer plan and the long-term water plan were reviewed for their ability to adequately serve the anticipated growth and development throughout the RRCC, over time.

The water demand was based on a flow factor of 400 gallons per day (gpd) of water per 310 gpd of wastewater generated. Three hundred and ten gallons per day (310 gpd) wastewater is known as one Equivalent Dwelling Unit (EDU), or one single family home, and is a commonly used factor for wastewater planning. Four hundred gallons of water per single family home is based on usage of 100 gallons per day per person. Peak water demand is double the average daily demand.

For both development Concepts I and II, the acreage of each proposed land use matched with flow factors (gallons per day per acre) to determine the projected wastewater flow. The flow factors are based on historical data for similar developments in Indiana, and are consistent with the flow factors described in the 2010 Long-Term Sewer Plan.

Relying primarily on conventional stormwater management practices, green and greywater infrastructure may also be incorporated into the site layout, design and construction techniques as a way to maintain and enhance the natural hydrology. Some combination of natural areas, vegetated swales, and regional detention / retention features will be used to help slow stormwater runoff using.

FULL BUILD-OUT SCENARIOS

There are a handful of objectives that have been carried over from the development concepts to the extent that they apply to both build-out scenarios. Both remaining scenarios are flexible in their ability to accommodate a mix of users. They maximize the RRDA's ability revisit and refine the RRCC Master Plan and are easily adaptable. The form and function offered by both scenarios should continue to be responsive to changing market conditions over time. Both scenarios extend (just) beyond the boundary of the RRCC to connect to existing and future county and/or regional trail systems and take into account possible improvements to some of the region's major transportation thoroughfares. They accommodate current vehicular access for the residents of Quarry Bluff and Long View Beach, which in turn should improve mobility throughout the Town of Utica. It is expected that both scenarios will need to account for some commercial retail. A commercial node designed to accommodate a more modern type of commercial retail development (as opposed to a conventional strip commercial center with out lots) has been strategically placed along the primary roadway near the center of the industrial business park. Two primary gateway entrances bookend the River Ridge Parkway to create a strong sense of place.

The renderings serve as a graphical representation of the long-term development, infrastructure, and natural areas throughout the entire RRCC. Plantings, whether located within the right-of-way or on private property, is intended to look natural. All environmentally sensitive areas are connected by green spaces, the added benefits to this approach are: 1) creating and

FULL BUILD-OUT SCENARIO I // Large format maps are available in the offices of the RRDA

FULL BUILD-OUT SCENARIO II // Large format maps are available in the offices of the RRDA

maintaining wildlife corridors; and 2) establishing and maintaining a natural buffer between land uses (and in some instances between the RRCC and the Charlestown State Park).

Reserving area for bicyclist and pedestrian trail connectivity and further add to the amenities that make the RRCC a highly attractive location for employers, employees and future investors.

To aid in the financial analysis, the planning areas were further broken out by developable and undevelopable land, and assumptions about when an area might develop were applied throughout. Building and site development cost estimates were generated, as were cost estimates for the roadway and trail cross-sections. The development scenarios were then used to develop a set of recommendations pertaining to the RRDA's long-term water and sewer plans.

Phasing

It has been assumed that, with the exception of the mega site, the full build out of the RRCC will be primarily a function of: a) demand for developable property, b)the amount of demolition/mitigation/site preparation needed, and c) the rate and speed in which the RRDA can extend roadway and utility infrastructure to an area.

The following phases explain how – as currently planned – the RRCC might conceivably reach a full build out scenario. However, there is nothing that would preclude the RRDA from deviating from this plan. The RRDA has the ability to allocate and reallocate both its resources and priorities to accommodate a development project anywhere within the RRCC.

Phase One: Early and Fast (0 to 3 years) where the property is more or less development ready and there is little to no demolition, investigation, or mitigation required.

Phase Two: Early and Slow (0 to 10 years) where the property is more or less development ready but where some demolition, investigation, mitigation is required.

Phase Three: Late and Fast (5 to 10 years) where the property is currently lacking the planned infrastructure investments, but where there is little to no demolition, investigation, mitigation required.

Phase Four: Late and Slow (10 to 20 years) where the property is currently lacking the planned infrastructure improvements, and there are demolition, investigation, or mitigation efforts that need to occur.

Mega Site: For the purposes of this plan, the mega site is treated as a binary "on/off" development and is therefore not subject to phasing.

Building & Site Cost Estimates

Concept I is true to the information provided in the mega site certification letter, the illustration of the mega site concept on the RRCC website, and the land use master plan that shows the gateway district as being just over 140

Building & Site Cost Estimates METHODOLOGY

Design Cost Data (DCD), the cost estimating magazine for design and construction and largest provider of historical construction cost for the purpose of preliminary cost estimating and cost modeling in America, was used to determine the building and site construction cost estimates. Established in 1958, DCD is unique among publications servicing the construction marketplace as architects, specifiers, builders, and developers use DCD and the actual construction costs it publishes as benchmarks for preliminary cost estimating.

DCD subscribers can access over 1,500 actual projects, as seen in DCD, in the DCD Archives™ for early construction budgets, cost modeling, estimate validation and more. Subscribers select a similar project to the one they are building and re-target to their new bid date and location. A new cost model is created reflecting an updated square foot cost.

Using the list of land uses described on previous pages, a series of archived projects were identified through the DCD files and used to create a blended set of costs for both buildings and site infrastructure costs.

All cost estimates compiled are an average of the year completed. Inflation, at this stage, would have drastically skewed the financial analysis conducted by Policy Analytics, LLC.

CONCEPT I PHASING // Large format maps are available in the offices of the RRDA

developable acres. As illustrated, Concept I is able to accommodate over 1,100 developable acres for a single user mega site (just over 1,000 of it being contiguous, developable land), and just over 14.0 developable acres for the Gateway District.

The proposed rail is the preferred rail alignment. Past studies estimate the cost to be $5.2 million and the projected timeline for completion to be 11 months, provided the area is relatively free of obstacles. Regarding the wetlands and endangered species, this first development concept reflects these limitations as mapped/certified – nothing more; nothing less. In this scenario, the most intense land uses would occur at the mega site. In this scenario, the most intense land uses would occur at the mega site.

The cost for site improvements to accommodate a mega site is assumed to be $13 per square foot[1], which is consistent with other industrial manufacturing site costs. It includes an escalation rate to account for the terrain and environmental constraints that are present, but excludes the demolition costs for the igloo bunkers and antiquated roadway infrastructure.

By replacing the mega site with some combination of a research and development park or some other campus master development and a larger Gateway District as envisioned in the Gateway District Master Plan. The north end of the RRCC allows for light to medium manufacturing in both development concepts.

Concept II is able to accommodate a 300+ acre Gateway District, which is still less than what is describe in the Gateway District Master Plan; but which is otherwise consistent with the physical layout illustrated in the Gateway District Master Plan. Concept II includes a relatively large area that offers a lot of possibilities, including: expanding the Gateway District; accommodating a unified development campus; and/or accommodating some residential housing in the stream corridors that overlook the Charlestown State Park.

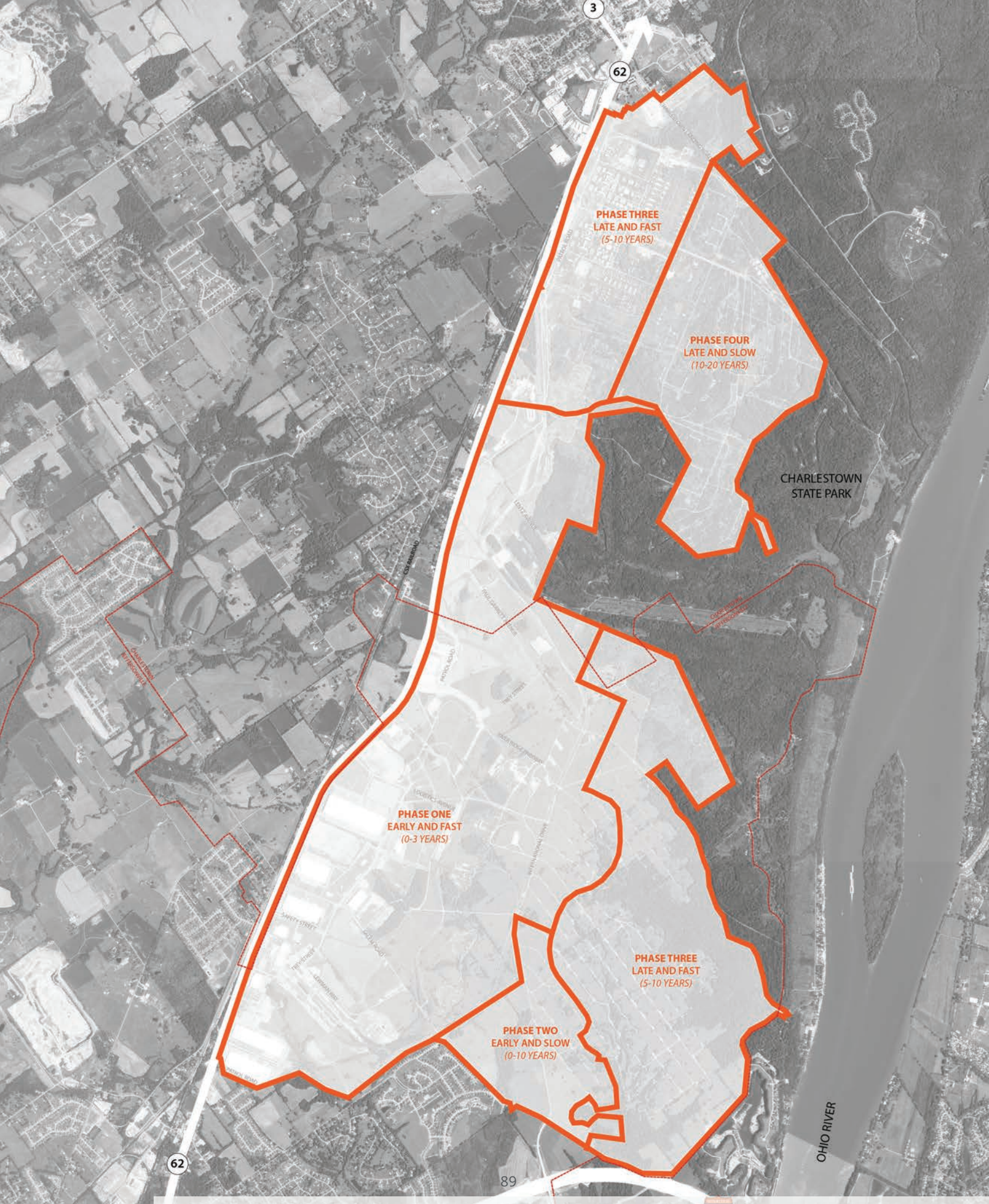
The table above illustrates the (net) acreages that were used as inputs for the cost estimates described above (and illustrated in the *Property Development Cost Estimates* tables on the following pages), and for the financial analysis on the following pages. All primary land use categories are considered to be areas of land that have been set aside or reserved for a specific set of land uses prescribed by the current CC&Rs.

ROW // Trail Costs Estimates

The roadway and trail cross-sections illustrate what the entire right-of-way can accommodate; however, not every section of road is intended to include every element exactly as it appears in the cross-section. Rather, the right-of-way should be constructed to include clusters of plantings, rather than rows of plantings spaced evenly throughout. The cost estimates reflect the fact that these elements will take on an organic, natural look, rather than a uniform look.

The cost for improving some of the natural areas is assumed to be $2 per square foot[2], which would allow for fine grading, seeding, planting, the construction of a segment of the primitive trail network, and/or additional

1 The $13 per square foot covers site improvements only (grading, parking, utilities, landscape etc.). The building area is $58 per square foot.
2 The $2 per square foot calculated as land area



CONCEPT II PHASING // Large format maps are available in the offices of the RRDA

RRCC DEVELOPABLE LAND

PRIMARY LAND USE CATEGORY	CONCEPT I (acres)	CONCEPT II (acres)	DIFFERENCE (acres)
Natural Area	934	806	128
Conservation areas	*586*	*466*	*120*
Recreation areas	*348*	*340*	*8*
Retail	34	81	47
Office (Gateway District)	141	321	180
Industrial	2,013	2,412	399
Flex-industrial	*166*	*489*	*323*
Advanced manufacturing	*738*	*924*	*186*
Light-Medium manufacturing	*1,109*	*999*	*110*
Civic//Quasi-Public	under consideration		
Future Mega site	1,189	n/a	n/a
Potential R&D Park//Campus	n/a	585	n/a
RRCC Total	**4,311**	**4,321**	**10**

(Source: American Structurepoint)

Natural areas also include the small strip of land that serves as a buffer between the River Ridge Commerce Center and the Charlestown State Park, but which is otherwise owned by the adjacent private property owner(s).

The RRDA continues to work with local public safety agencies to advance efforts to site one or more public safety facilities within the RRCC.

Approximately 100 acres of land that makes up the potential research and development//campus could be used for the construction of residential structures. However, this area is not currently being reserved for residential development at this time.

Concept II neither plans for nor accommodates a new rail line, whereas Concept I does both. As a result, Concept II results in approximately 600 more acres of developable land.

BUILDINGS & SITE IMPROVEMENT ENGINEERING ESTIMATES BY PRIMARY LAND USE CATEGORY

PRIMARY LAND USE CATEGORY	COST EXAMPLES	BUILDING COST ESTIMATES				SITE COST ESTIMATES			
		AVE. BUILDING SIZE (SF)	AVE. BUILDING COSTS (2017 $)	PRICE PER SF	PRICE/SF 10% CONTINGENCY	AVE. SITE AREA	AVE. SITE COSTS	PRICE PER SF	PRICE/SF 50% CONTINGENCY
Commercial Office	5	98,650	12,945,670	70.88	**$78**	248,820	1,1369,560	4.58	**$7**
Commercial Retail	6	56,900	5,408,640	64.99	**$71**	122,650	783,050	6.38	**$10**
Flex Industrial	5	61,470	5,515,330	52.75	**$58**	200,490	874,840	4.36	**$7**
Manufacturing	6	144,540	11,644,640	48.81	**$54**	610,470	1,538,360	2.52	**$4**
Research & Development	6	45,235	12,623,000	129.09	**$142**	244,210	814,040	3.33	**$5**
Warehouse Distribution	6	154,700	6,913,920	24.34	**$27**	614,680	1,926,200	3.13	**$5**

(Source: American Structurepoint)

BUILDINGS & SITE IMPROVEMENT ENGINEERING ESTIMATES, BY PHASE

PHASE	STRUCTURES (SF)	SITE AREA (SF)	TOTAL COSTS (2017 $)
CONCEPT I			
Early and Fast (0-3 years)	4,025,560	57,435,720	**$1,107,393,680**
Early and Slow (0-10 years)	1,861,670	11,407,950	**$283,262,790**
Late and Fast (5-10 years)	8,347,480	48,412,010	**$1,139,951,860**
Late and Slow (10-20 years)	9,036,940	53,265,750	**$753,457,500**
CONCEPT II			
Early and Fast (0-3 year)	5,906,350	49,425,440	**$946,023,670**
Early and Slow (0-10 years)	2,569,770	11,673,320	**$344,573,610**
Late and Fast (5-10 years)	5,262,680	50,217,700	**$1,004,837,040**
Late and Slow (10-20 years)	9,036,940	52,334,100	**$746,580,300**

(Source: American Structurepoint)

recreational/trail amenities in these areas. Trails are assumed to be $8 per linear foot, which would accommodate the limited earth work and material needed to achieve the desired end result.

The takeoffs for the road miles includes existing roads. This is important in that all existing roads are likely to need to be reconstructed prior to reaching full build-out of the park, and in the event that the RRDA continues to exist in perpetuity, any point in time thereafter.

ROW & Trail Cost Estimates METHODOLOGY

Using the RRDA's historical costs data to calculate the costs for the recently constructed travel lanes, we developed additional costs to account for: sod, topsoil, street trees, 6' concrete sidewalks and/or 10' crushed stone trails (where applicable), pavement, stormwater drainage (regional detention and retention), compacted aggregate base, common excavation, utility conduit, and lighting.

Note that existing sidewalks within the RRCC are 5', consider that for the Gateway District and (in the case of development scenario 2) the R&D Park//Campus would benefit from having 6' sidewalks. A 5' sidewalk may be suitable for other planning areas within the RRCC.

Concept I includes approximately 5 miles of primary roadway, more than 30 miles of secondary roadway, and nearly 20 miles of trails. By comparison, Concept II illustrates more than 5 miles of primary roadway, almost 40 miles of secondary roadway, and approximately 20 miles of trails.

Utility, Open Space & Infrastructure Management

Below are the recommended changes to the long-range water and sewer plans developed as a part of the RRCC Master Plan, and last updated in 2010. These adjustments would ensure that the RRDA's long-range water and sewer plans account for the anticipated users and development pattern offered by the future build out scenarios.

The projections at this time are based on other similar developments in Indiana. As sites are developed, the water demand and wastewater discharge flows will be solidified and the projections will become more refined. The water and sewer

CROSS-SECTIONS

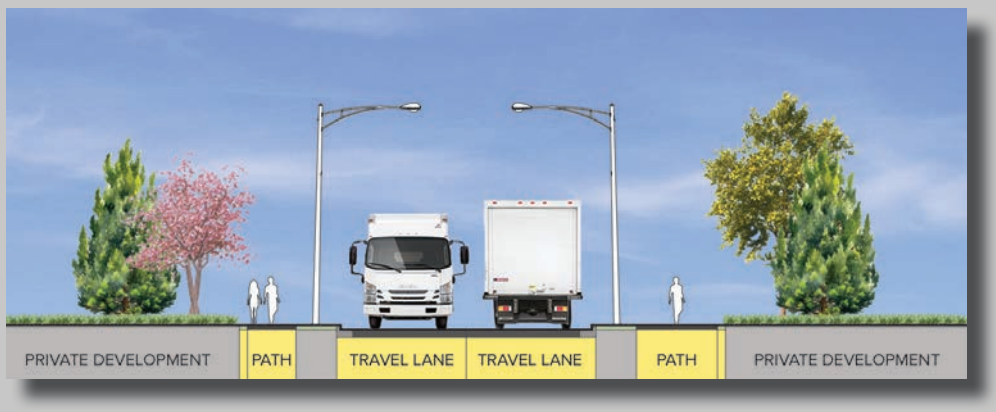
(Source: American Structurepoint)

master plans completed in 2010-2011 were based on land uses of Retail, Office, Industrial, Light Industrial/Warehouse, and Light Industrial/Office. These land uses are similar to the land uses selected in Concepts 1 and 2, with the exception of the Mega Site (Heavy Industrial), and a Research and Development Park. These two land uses were designated a higher wastewater and water flow projection, which increased the overall estimates as compared to the long term water and sewer plans developed in 2010-2011. Changes in the numbers of acres for each land use type have also been changed over the past seven years to reflect updated priorities of the RRDA. The long-term sewer plan, last updated in 2010, estimates a total flow of 1.02 mgd flowing to Charlestown and 2.3 mgd being sent to Jeffersonville. The long-term water plan, last updated in 2010, estimated a total water demand of 4.3 mgd with a peak of 8.6 mgd.

As illustrated by the tables below, Scenarios I and II will require an expansion of the Jeffersonville Wastewater Treatment Plant will be required in order to adequately serve future users. Also, to meet water demand, additional wells will be needed in the existing wellfield beyond the planned expansion to 4mgd. The expansion of the Jeffersonville Wastewater Treatment Plant and the need for additional water capacity was also needed for the 2010 long-term water and sewer study.

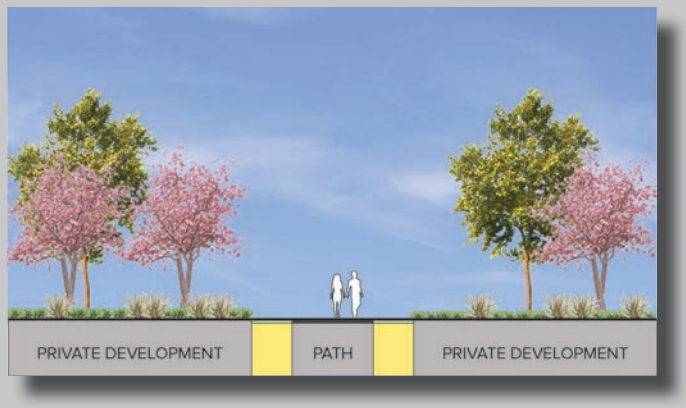
Therefore, both the water and wastewater long-term master plans should be updated to reflect: 1) increases in wastewater flow, particularly from the area where either the Mega Site or R&D center is proposed; and 2) increases in water demand beyond the capacity of the existing wellfield.

Primary Roadways
ROW Width: 120'
Price/LF: $855 total
Concept I: 4.71 miles
Concept II: 5.13 miles



Tertiary Roadways
ROW Width: 60'
Price/LF: $455 total
Concept I: n/a
Concept II: n/a

Secondary Roadways
ROW Width: 100'
Price/LF: $685 total
Concept I: 32.89 miles
Concept II: 39.27 miles



Trails
ROW Width: up to 10'
Price/LF: $8 total
Concept I: 18.62 miles
Concept II: 19.20 miles

TOTAL WASTEWATER FLOW BY BUILD OUT SCENARIO

Wastewater	Charlestown		Jeffersonville	
	Available at Plant (mgd)	Projected Average Daily Flow (mgd)	Available at Plant (mgd)	Projected Average Daily Flow (mgd)
Build-Out Scenario I	1	0.74	2.2	3.7
Build-Out Scenario II	1	0.9	2.2	3.3

(Source: American Structurepoint)

TOTAL WATER FLOW BY BUILD OUT SCENARIO

Water	Available from Existing Wellfield (mgd)	Available Growth from Existing Wellfield (mgd)	Projected Average Water Demand (mgd)
Build-Out Scenario I	2	4	5.7
Build-Out Scenario II	2	4	5.4

(Source: American Structurepoint)

Development Review // Land Use Policy

Planning, zoning and subdivision regulations determine the development capacity of the site. Changes necessary for the anticipated development, extra time and costs for securing entitlements, the desire to achieve the highest and best use, ability to establish an intensity that is both suitable for the park and which results in the most efficient and effective use of the property.

Covenants, Conditions and Restrictions (CC&Rs) are privately-held land use controls and standards for master-planned developments where most or all of the occupiers own their own building or have a long-term lease on the building. CC&Rs are in the form of a legally enforceable instrument filed with either the plat or each deed. They take the place of the applicable municipal zoning and development regulations, so long as they are more restrictive that what would otherwise be required by the base zoning district classification, and apply to nearly every aspect of the development and review process.

The RRCC's CC&Rs are uniquely suited to the overall vision for the park. Amended from time to time, the RRCC CC&Rs prescribe the various lease and sales terms for privately owned properties throughout the RRCC, and include site and building design and development and performance standards that are drafted in such a way as to promote the long-term viability of the park.

The RRDA exercises its right to review and approve development plans. The current CC&Rs allow for exceptions, which apply to instances where the consideration and sign-off of the full RRDA Board of Director's, in accordance with their rules of procedure, is required. Anything not requiring a conditional use can be approved administratively by staff. The RRDA's review and approval process is separate from, but completed as part of the municipal review and approval process.

Like any standard or regulation, the standards and regulations imposed by the RRDA's CC&Rs are only as good as the corresponding enforcement measures. In addition to strengthening the enforcement procedures available to the RRDA, the current CC&Rs could be revised to, among other things, place business uses at the top of the list of desirable land uses. A revised performance-based approach to property development and use could essentially remove the intensity requirements and facilitate the desired mix of uses illustrated by the development concepts and build out scenarios described on the previous pages.

FINANCIAL SUSTAINABILITY ANALYSIS

Use this chapter to understand the RRDA's major revenue streams and cost centers, and to view the financial implications of land use decisions at River Ridge.

This chapter describes the financial structure of the River Ridge Development Authority, and forecasts the potential financial implications of the two proposed development concepts. It compares projected revenues to operating and capital expenditures to evaluate the long-term fiscal sustainability of the River Ridge Development Authority.

The financial analysis on the following pages, evaluates the outcomes of the differential development patterns resulting from the development concepts described in the previous chapters. Included below is the future financial structure in comparison to the current financial structure.

Key findings of the fiscal impact of both future development concepts are:

- A large single use production facility located at the mega site, as described in Concept 1 would yield near-term benefits. However, this strategy carries a significant amount of risk due to the global competition for these investments. A denser, multi-use development of the mega site area has the potential to generate higher levels of long-term financial return with a lower overall level of risk .
- The demolition of the former manufacturing site on the north end will be a major financial undertaking for the RRDA. The ability to allocate revenues generated from other areas of the RRCC, including the mega site, to fund the cost of demolition and cleanup of the munitions plant will improve the feasibility of the project.
- Because of the aggressive incentives required by a competitive marketplace, the ability of a large, single use mega site development to fund capital investments throughout the RRCC is uncertain.
- The RRDA should pursue legislative changes to maximize UEZ revenue, and maintain the ability (and flexibility) for issuing development incentives.
- The RRDA should explore alternative long-term revenue options to diversify its revenue structure beyond TIF revenues, to increase flexibility in funding the ongoing operations of the RRDA.
- The full amount of TIF and UEZ revenue generated at River Ridge will be required to fund the capital infrastructure necessary for the full development of the RRCC. Once this capital build-out is complete, the potential exists for some TIF assessed value to be released to local taxing units.

Standard Inflation Assumptions
Revenues and expenses are shown in current dollars, determined by the inflation assumptions in the adjacent table.

The RRDA expends construction/capital dollars in pace with the development of the RRCC.

Except for the demolition of the production site, no financing costs are assumed.

The RRDA financial structure must fund depreciation to be considered long-term sustainable.

The RRDA achieves a policy solution to receive UEZ participation fees beyond 2023 from taxpayers that were granted deductions.

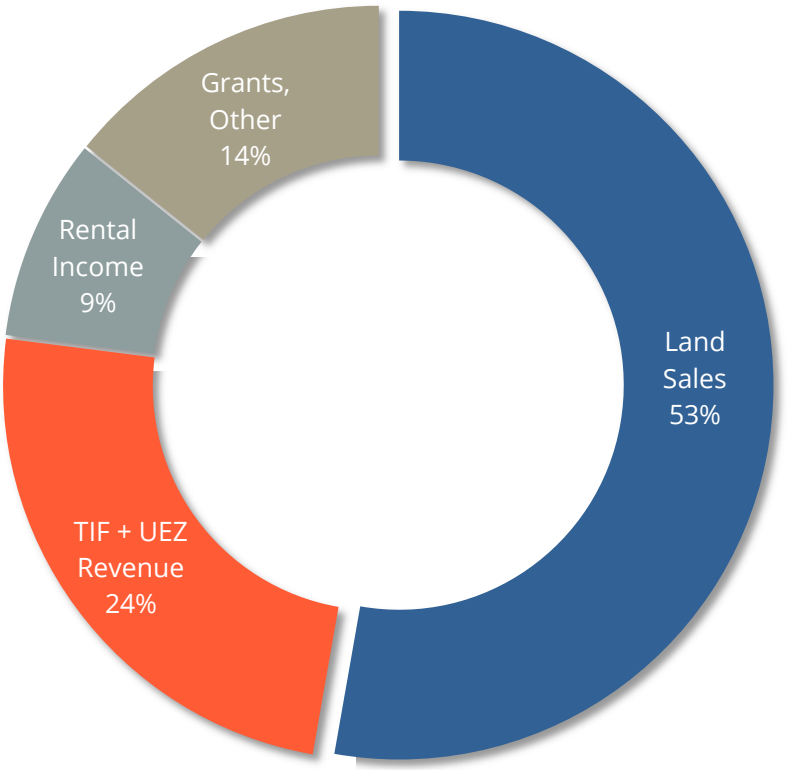
The RRDA continues to provide a 10 year, 50% property tax incentive, even after the discontinuation of the Enterprise Zone designation

Inflation is calculated as:
Global Inflation Assumption, 2%
Salaries and Wages, 4%
Price of Land, 2%
Assessed Value Trending, 1%
Road and Street Expenditures, 3%

CURRENT FINANCIAL STRUCTURE & EXPENDITURES

The RRDA is primarily funded by a combination of proceeds from land sales, urban enterprise zone (UEZ) participation fees and tax increment financing revenues. In addition, the RRDA generates supplemental

COMPOSITION OF CUMULATIVE RRDA REVENUES, 2012 - 2016



(Source: Policy Analytics)

revenues from various leasing activities and other miscellaneous revenue sources. The RRDA generated $22.0 million in total revenues from these sources in 2016.

RRDA Revenues

The following pages provide and overview of the current financial situation of the RRDA. Included are historical revenues from land sales, tax increment financing and other sources, as well as the RRDA's past operating and capital expenditures.

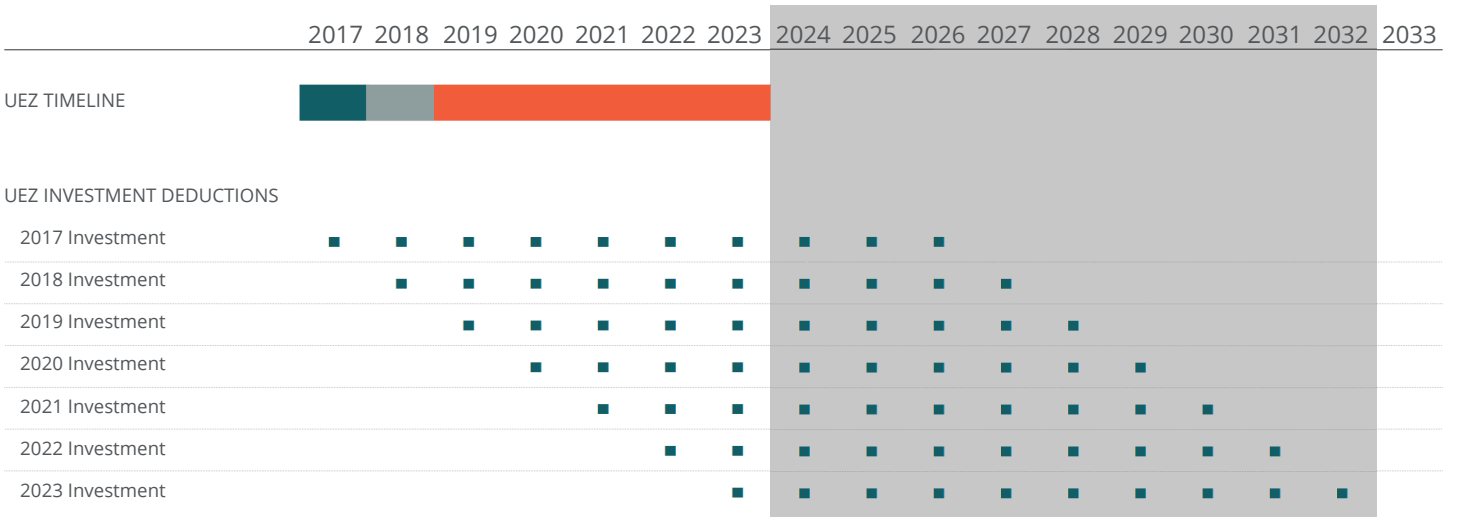
Land Sale Proceeds

The ownership of all land within the RRCC has been transferred from the United States Department of Defense to the RRDA, for the purposes of redevelopment. The RRDA subdivides the land and sells parcels to the private sector for development. The proceeds from the sale of land are then invested into the further development of capital infrastructure on going RRDA operating activities. In 2016, the RRDA completed $12.8 million in land sale transactions.

TIF Increment Revenue

The RRDA operates as a military base reuse authority under 36-7-30, and has designated the RRCC a TIF allocation area. TIF is an economic development tool that allows for the "capture" of property tax revenue produced by "incremental" investment within a defined geographic area. The River Ridge TIF captures revenue from real estate investment within the RRCC. TIF revenues can be used to pay for the construction of new facilities, ongoing maintenance and general operations of capital

RRDA URBAN ENTERPRISE ZONE TIMELINE



The RRDA's current urban enterprise zone designation expires in 2017, but options exist in current statute to extend the designation one year to 2018, and then another five years to 2023. There is no current option to extend the UEZ designation past 2023. The RRDA will not be able to receive UEZ participation fees beyond 2023 without statutory changes, even from taxpayer that were granted deductions prior to the expiration of the UEZ.

(Source: Policy Analytics)

facilities. TIF revenues may not be used to fund salaries and operating expenses directly related to general management, marketing, or the disposition of land. There is no sunset date for TIF allocation areas established under the military reuse statute. The RRCC generated $1.2 million in TIF revenues in 2016.

Urban Enterprise Zone Participation Fees

The RRCC is also designated as an Urban Enterprise Zone (IC 6-1.1-45), which is another mechanism to incentivize economic development. In its UEZ capacity, the RRDA is able to provide 10 year, 100% property tax deductions to qualifying real and personal property investments within the RRCC. Participating property owners pay an enterprise zone participation fee equal to 50% of the value of the property tax incentive (49% is allocated to River Ridge and 1% is allocated to the Indiana Economic Development Corporation). With the UEZ in place, the RRDA is able to capture 49% of the revenue from real and personal property investments for the first 10 years, and then 100% of real property investments in subsequent years. The RRDA does not capture revenue from personal property investment after the expiration of the 10 year UEZ designation.

The RRDA has the option to extend the UEZ designation to 2018 unilaterally, and then again to 2023 with approval from the IEDC. There is no option under current law to extend the UEZ designation beyond 2023.

It is the assumption of this plan that the RRDA will successfully exercise its options to extend the UEZ designation by one year to 2018, and then an additional 5 years to 2023. The UEZ, under current statutes, will be discontinued after 2023. **Current tax payers with UEZ deductions that continue beyond 2023 will be eligible for those deductions until the end of the 10-year term. Without statutory changes, the RRDA will not receive UEZ participation fees beyond 2023.**

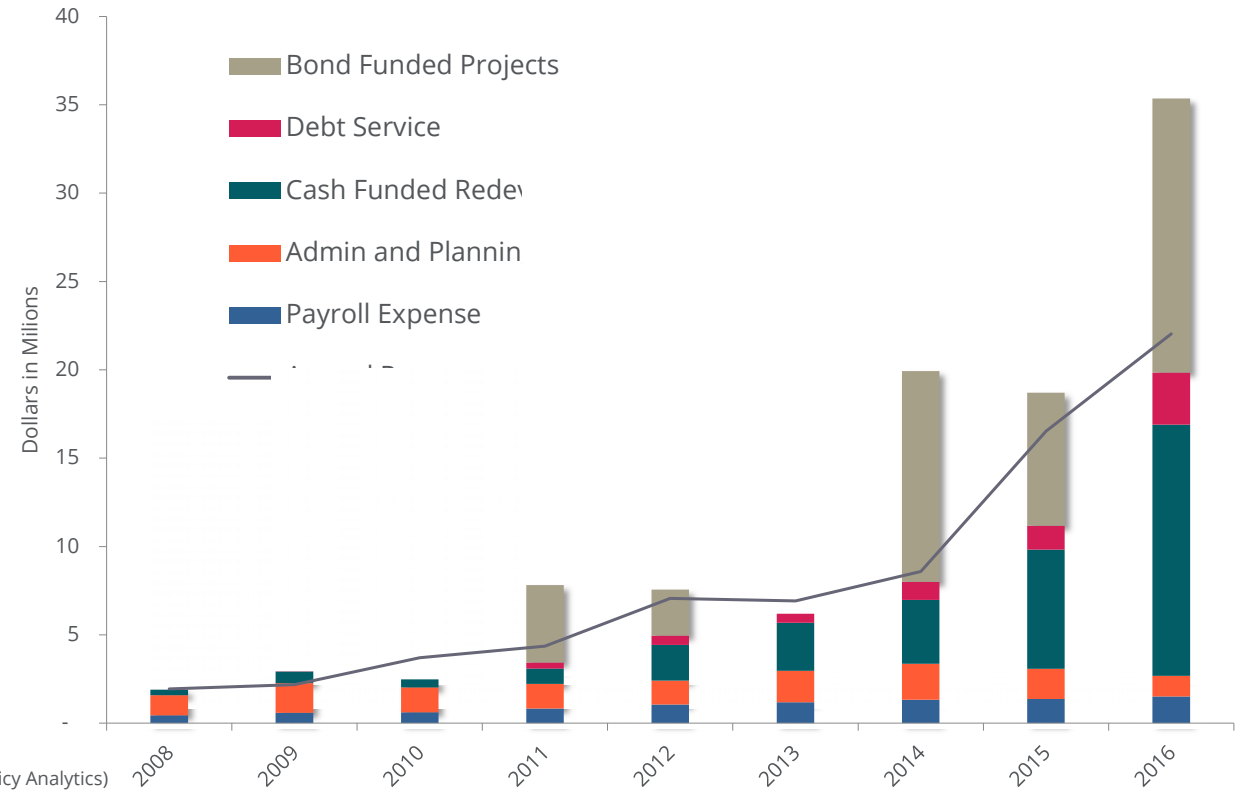
RRDA Expenses

The RRDA is responsible for the overall development of the RRCC and is obligated to fund the following items:

- Environmental cleanup, in the form of asbestos removal, and mitigation of any impacts to environmentally sensitive areas.
- The planning, design and construction of all new roads, water and sewer mains, open spaces (regional stormwater features), and trails.
- Signage, lighting and other amenities located within the common areas.
- Demolition of existing INAAP structures and obsolete infrastructure;
- Operating the water utility in accordance with the operating agreement with the Indiana Department of Natural Resources.
- Marketing and facilitating the sale of land to private developers.

Private property owners, in addition to funding site preparation

HISTORY OF RRDA OPERATING AND CAPITAL EXPENSES, 2008 - 2016



(Source: Policy Analytics)

and building construction, are responsible for the initial installation of sidewalks, on-site landscaping, utility connections, and on-site stormwater infrastructure where necessary.

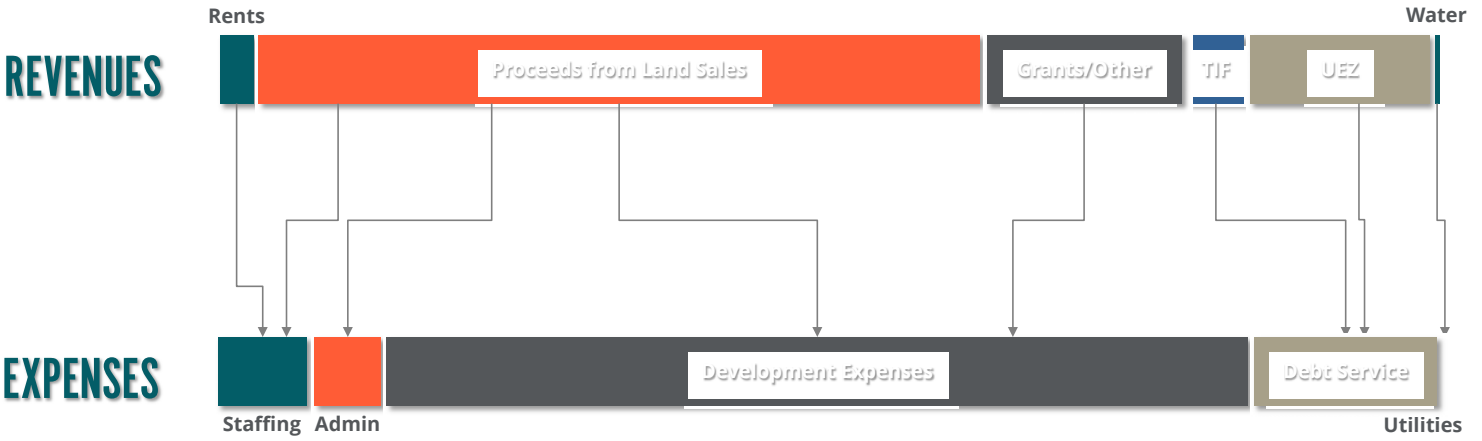
There are currently two planning areas within the RRCC that require demolition: the north end and the igloo field. The former munitions production site contains several existing structures that will require extensive demolition and cleanup. An estimated $138 million will be needed for the demolition of the remaining INAAP structures. The mega site area contains fewer than 170 igloos, previously used for the storage of explosive materials. Though these structures were certified to be free of environmental contaminants by the United States Army, each will cost approximately $25,000 ($4.4 million in total) to demolish.

The RRDA's annual expenditures consist of its operating and capital investment activities. The operating activities include salaries and benefits for its professional staff, in addition to other marketing, legal, planning and consultant activities. The RRDA maintains an annual operating budget of approximately $3 million for these activities, approximately half of which is used for payroll expenses.

The RRDA has already invested more than $75 million in road and street infrastructure, site preparation and utilities. Site development and infrastructure spending in 2016 totaled approximately $30 million.

Since 2014, sustained TIF and UEZ revenues have allowed the RRDA to use debt financing to implement its capital plan. The RRDA has issued

RRDA BUDGET COMPOSITION, CALENDAR YEAR 2016



(Source: Policy Analytics)

more than $50 million in debt service since 2014. In 2016, debt service payments totaled $2.9M. River Ridge's debt service coverage (revenues compared to payments) was approximately 155% in 2016. Consistent debt service payments of approximately $3.3 million are currently scheduled between 2017 and 2036.

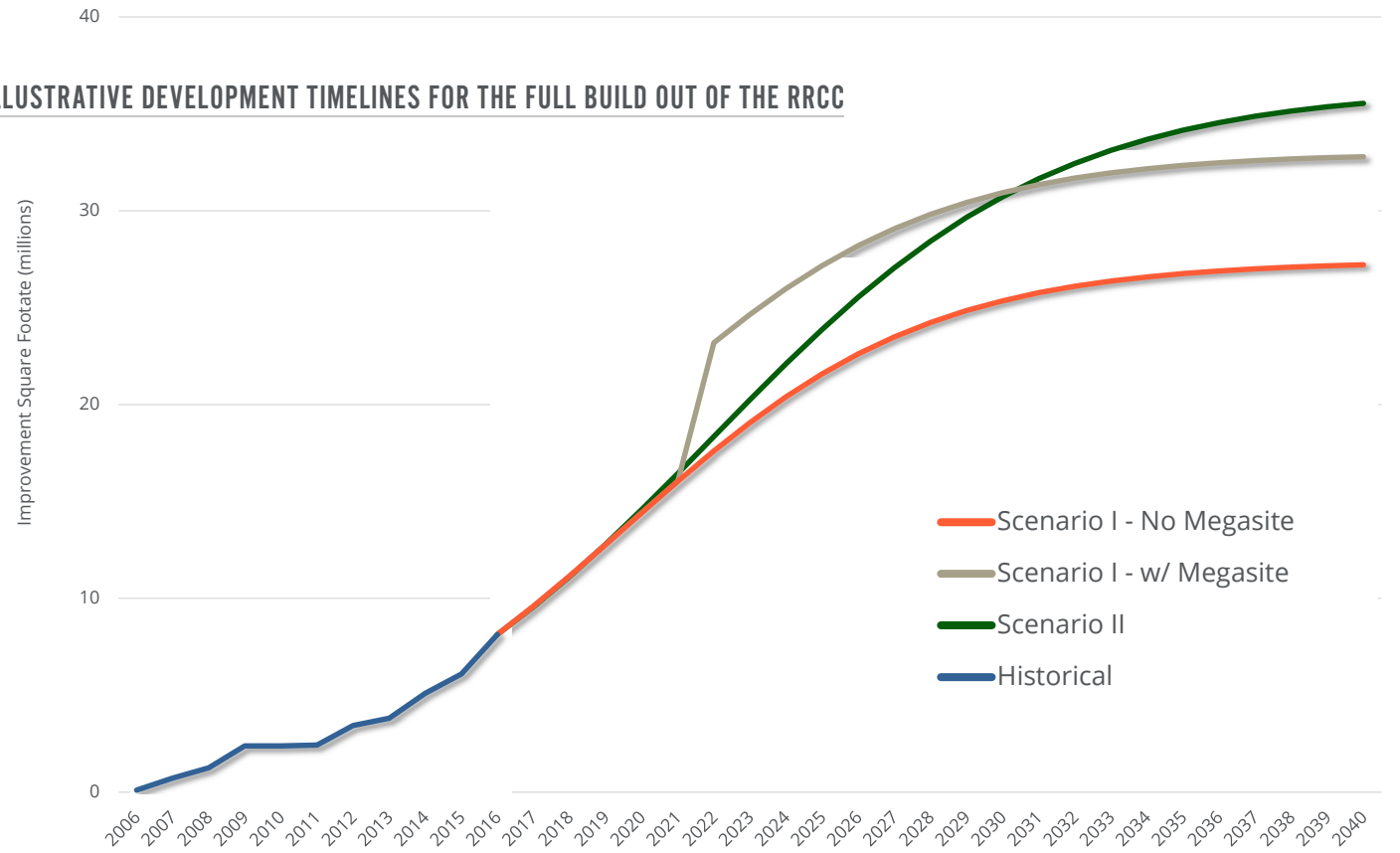
Development Timeline

Reasonable assumptions about the pace and nature of future investment at River Ridge are necessary to evaluate the revenue and expense implications for the RRDA.

The development projections for this process use a logistics model to relate the pace of development to the availability of remaining capacity, which in the case of the RRCC is the remaining land to be sold and redeveloped. The development forecasts are designed to evaluate the sustainability of the RRDA's fiscal structure as the RRCC develops. Actual revenues and expenses are contingent on a variety of market factors and will vary from these projections. *As was previously mentioned, the following phases explain how – as currently planned – the RRCC might conceivably reach a full build out scenario. However, there is nothing that would preclude the RRDA from deviating from this plan. The RRDA has the ability to allocate and reallocate both its resources and priorities to accommodate a development project anywhere within the RRCC.*

The development timeline on the following pages contain illustrative timeline that undergird the financial projections for Scenarios I and II described on previous pages. The projections are shown in terms of facility area. As

ILLUSTRATIVE DEVELOPMENT TIMELINES FOR THE FULL BUILD OUT OF THE RRCC



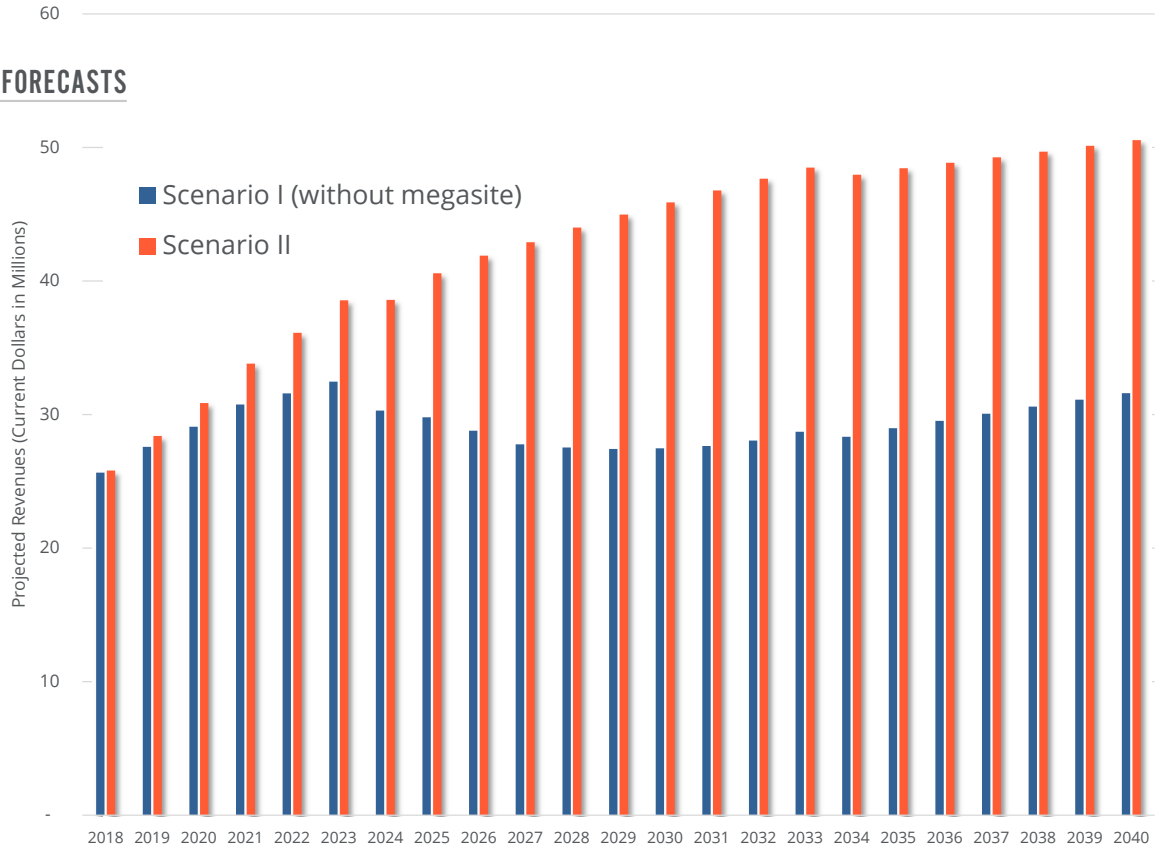
(Source: Policy Analytics)

described in detail earlier in the report, Scenario I includes a major single use investment in the mega site area, and a more limited Gateway development than what is envisioned in the Gateway Master Plan.

Scenario I >> The mega site development in Scenario I is modeled as a "binary" function, meaning that when developed, the site develops very quickly and all at once. In contrast, the development of the Gateway and Research and Development areas in Scenario II are modeled as linear developments that increase over time. This forecast assumes the mega site build-out is completed in 2022, though actual development could be accelerated or delayed, depending on market conditions.

The build-out scenario for Scenario I is modeled both with and without the mega site development for a number of reasons important to the financial analysis. First, large scale, single use commercial and industrial developments are relatively rare and highly competitive. Because the timing of such an investment is speculative, the RRDA cannot rely on revenues from the mega site development to fund its capital plan in other parts of the RRCC. Secondly, because of the competitive nature of these deals, states tend to offer very aggressive incentive packages to locating firms. The financial projections assume that in the event a mega site user locates to River Ridge, revenues from the mega site region will not be available to fund capital expenditures elsewhere at River Ridge.

Scenario II >> The development plans contain a maximum of five million square feet of development at the area occupied by the mega site in



(Source: Policy Analytics)

Scenario I. If fully built out, this scale of use would be larger than other major industrial entities such as the Honda, Toyota and Subaru plants located across Indiana.

Scenario II assumes the RRCC's mega site area includes an expanded Gateway district, and a multi-user research and development campus. Scenario II is designed accommodate the entire Gateway District as envisioned in the Gateway District Master Plan. In the place of the single-user mega site is an area intended for a research and development park, or some other type use in a campus setting. Due to an increased intensity of land, Scenario II has the potential to produce approximately 8% more capacity for development compared to what is projected for Scenario I, with a single, mega site development.

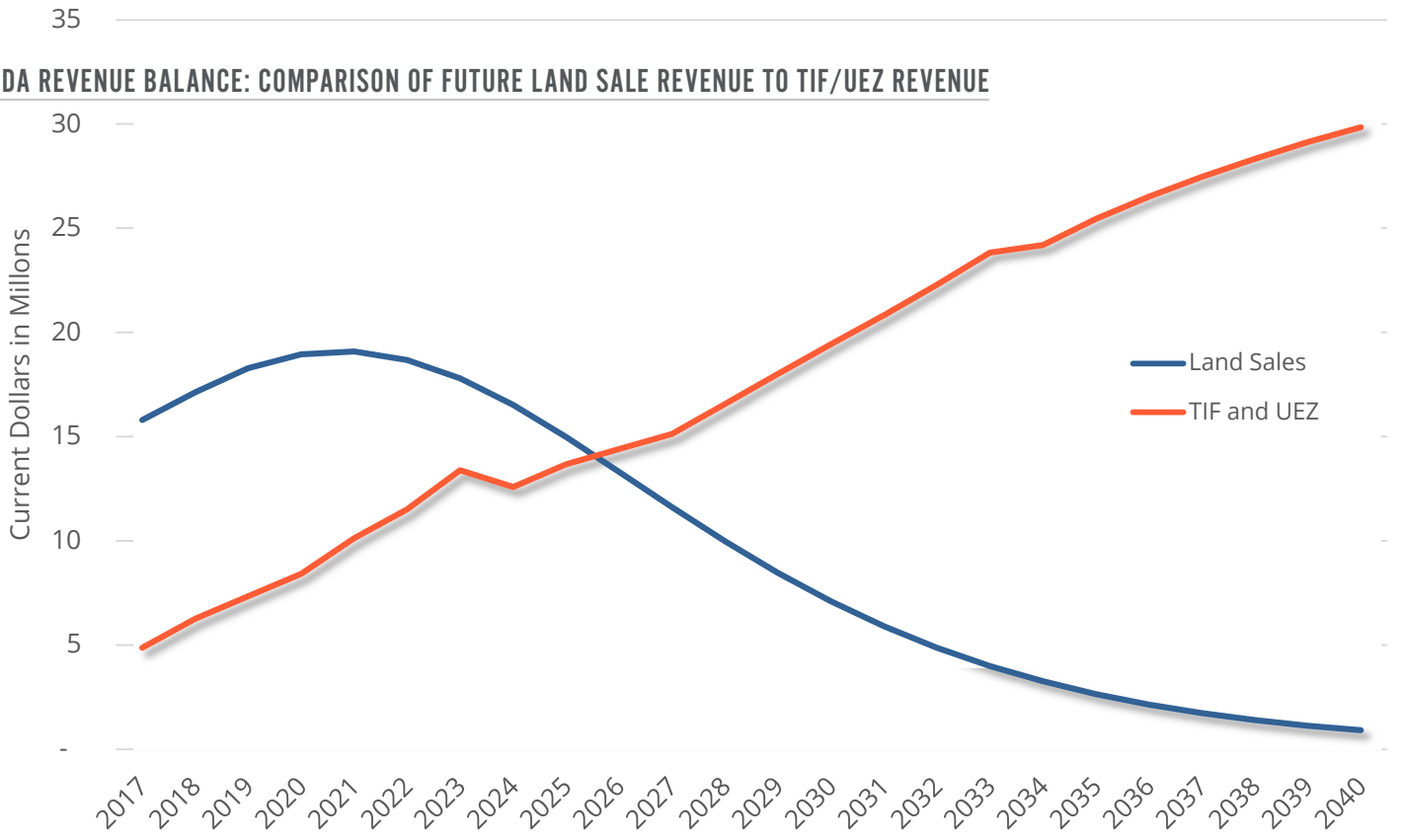
Long-Term Revenue and Expense Projections

The following pages include the revenue and expense projections used to evaluate the RRDA's long-term fiscal stability. Included are projections pertaining to revenue, operating expenses, and capital development costs.

Revenue Forecast

The development timelines were used to construct long term revenue forecasts for each development scenario. River Ridge revenues consist primarily of proceeds from land sales and property tax related (TIF and UEZ) revenues. Land sale proceeds were calculated using an estimated sale price of $80,000 per acre. TIF and UEZ revenues were forecasted by first converting invested cost into estimates of assessed value, and then calculating resulting TIF or UEZ revenue streams.

RRDA REVENUE BALANCE: COMPARISON OF FUTURE LAND SALE REVENUE TO TIF/UEZ REVENUE



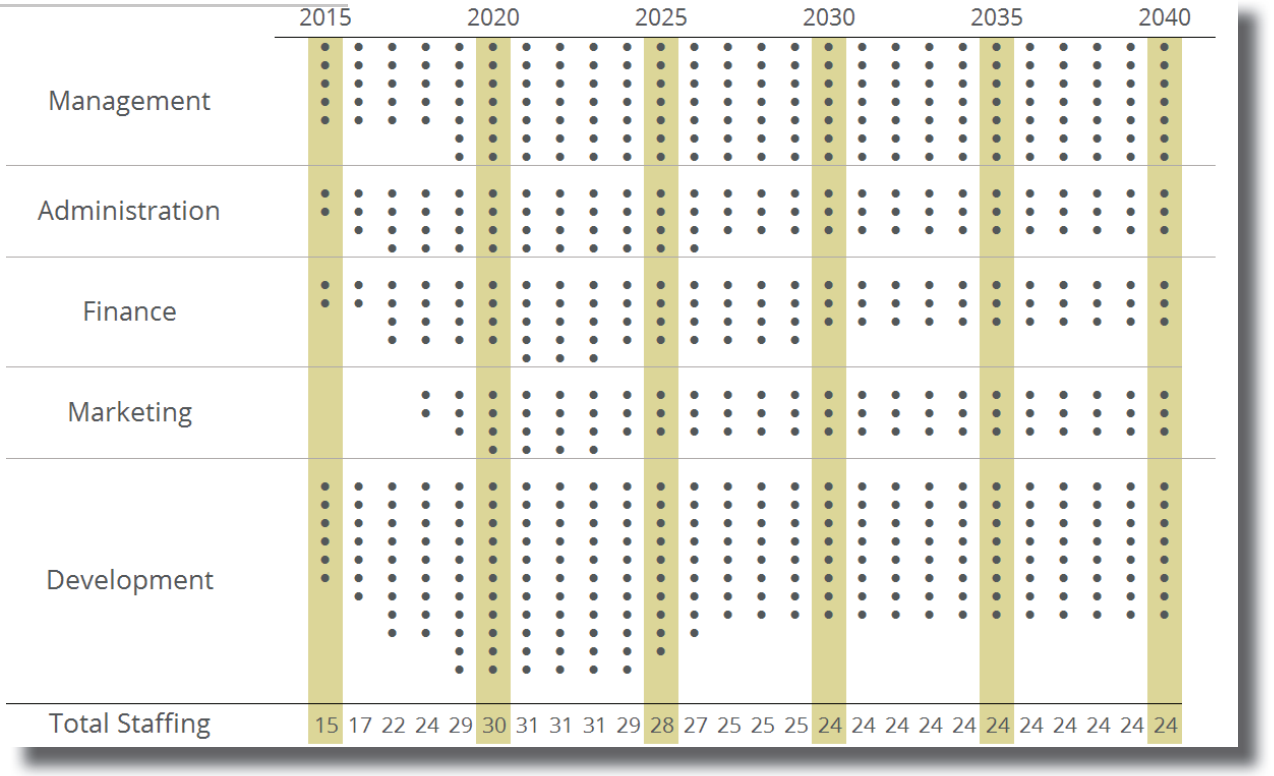
(Source: Policy Analytics)

The RRDA currently uses an effective 10 year, 50% property tax abatement to incentivize development at the RRCC. The revenue forecast is based on that structure continuing into the future. However, because the UEZ designation expires in 2023, the RRDA will need to develop an alternative solution in order to continue the practice of providing property tax incentives. The revenue projections assume that the RRDA does not generate revenue from personal property beyond 2023.

As shown in the charts above, RRDA revenues are projected to increase significantly through 2021. This revenue growth is driven primarily by the continued sale of land and increased TIF capture as the expiration of investment deductions move more assessed value into the TIF increment. Beginning in 2021 and 2022, the pace of development is projected to slow to the point that land sale proceeds will no longer be increasing on a year over year basis. In addition, the RRDA's ability to generate revenue from personal property investment ends with the expiration of the enterprise zone designation in 2023, further impacting revenues.

As development progresses, the balance of the RRDA's revenue composition will shift from the proceeds from land sales to become heavily reliant on TIF revenues. TIF revenues are a more stable ongoing revenue source than one-time cash infusions from the sale of property, however, the deployment of TIF dollars is limited to those uses explicitly

PROJECTION OF RRDA STAFFING LEVELS



(Source: Policy Analytics)

allowed in the Reuse Authority statute. It will be in the RRDA's interest to seek to diversify its revenue base in the future to provide the flexibility to fully fund all aspects of its operations.

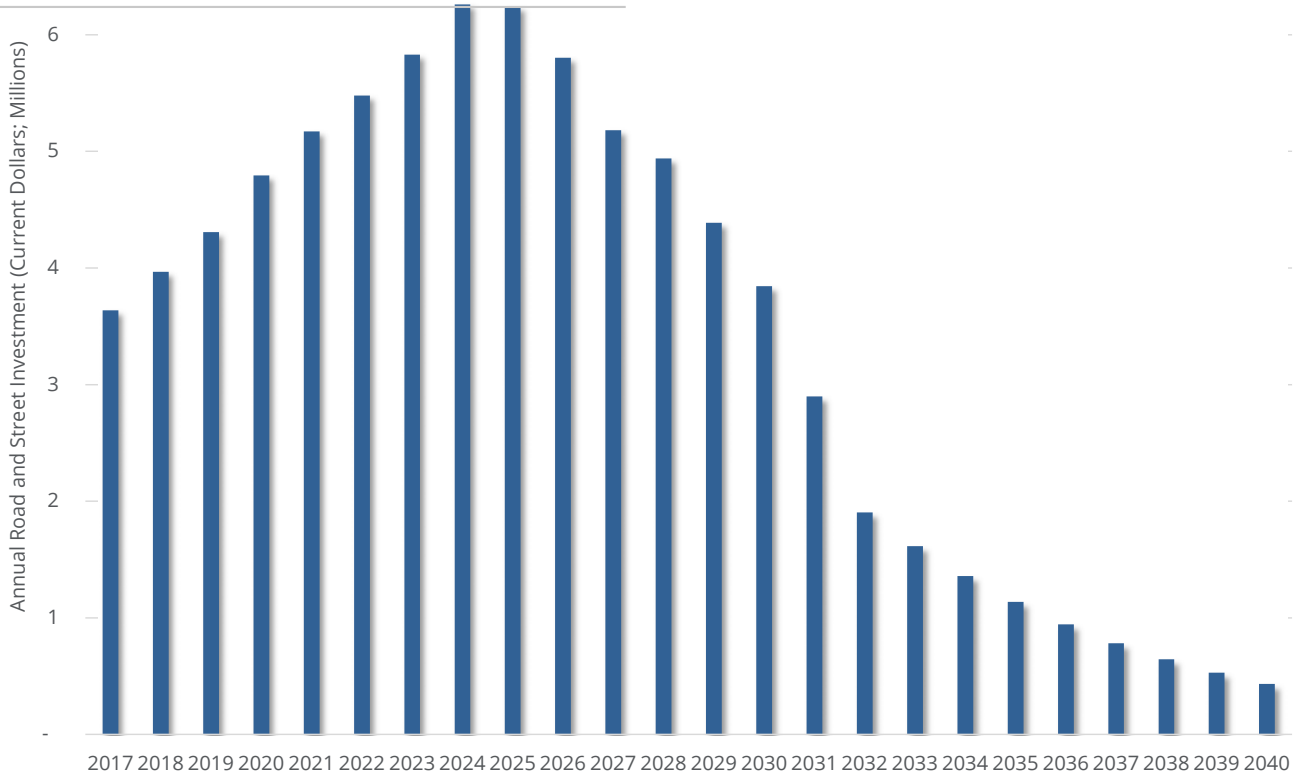
OPERATING BUDGET AND PERSONNEL REQUIREMENTS

The following pages explain the forecasts used to project long-term operating expenses, including personnel requirements for the RRDA.

Staffing Projections

Payroll expenditures comprise the majority of the RRDA's operating budget. A payroll and staffing forecast was produced to estimate the level of personnel required to accomplish the RRDA's development plans, and to model future operating expenses for RRDA. The staffing forecast assumes the addition of two management positions as development progresses. This increase will accommodate the workforce development recommendation to create a Workforce Development Director position within the RRDA. The number of staff level positions in the forecast is a function of scale of development at the RRDA. Staff level employment – including in house site development and construction jobs – are projected to increase from 15 in 2017 to 24 by 2021, before stabilizing at 18 as redevelopment activity slows. Payroll costs are projected to range from 10 percent to 17 percent of total annual revenues throughout the period of analysis.

ILLUSTRATIVE SCHEDULE FOR ROAD AND STREET IMPROVEMENTS



(Source: Policy Analytics)

Administrative Operating Expenses

In addition to personnel costs, the RRDA incurs administrative expenses to manage the marketing, legal, financial, and governance aspects of its mandate. These expenses are projected to scale with development, and range from 8% to 13% of total revenues.

CAPITAL EXPENDITURE AND FINANCING PLAN

The following pages describe the level of capital investment required to build out and maintain the infrastructure of the RRCC. The capital expenditure plan includes road and street infrastructure, demolition, and the ongoing maintenance costs of the RRDA's capital assets.

Road and Street Infrastructure

The RRDA is responsible for building the road and street network necessary to facilitate connectivity into and within the RRCC. The RRDA has already constructed more than 14 linear miles of roadways. These investments include International Drive, a heavy haul road connecting the RRCC to IN-265 and the East End Bridge, and major reconstruction to Patrol Road, Paul Garrett Avenue and River Ridge Parkway, among others.

The two development scenarios contain estimates of the additional road and street infrastructure necessary to serve future level of commercial and industrial activity. Scenario I requires an additional 23 linear miles of road construction, at a cost of $61 million to the RRDA. Scenario II requires nearly 29 linear miles of road and street construction, at a cost of $78 million (costs are denominated in constant 2017 dollars).

Site Development and Amenities

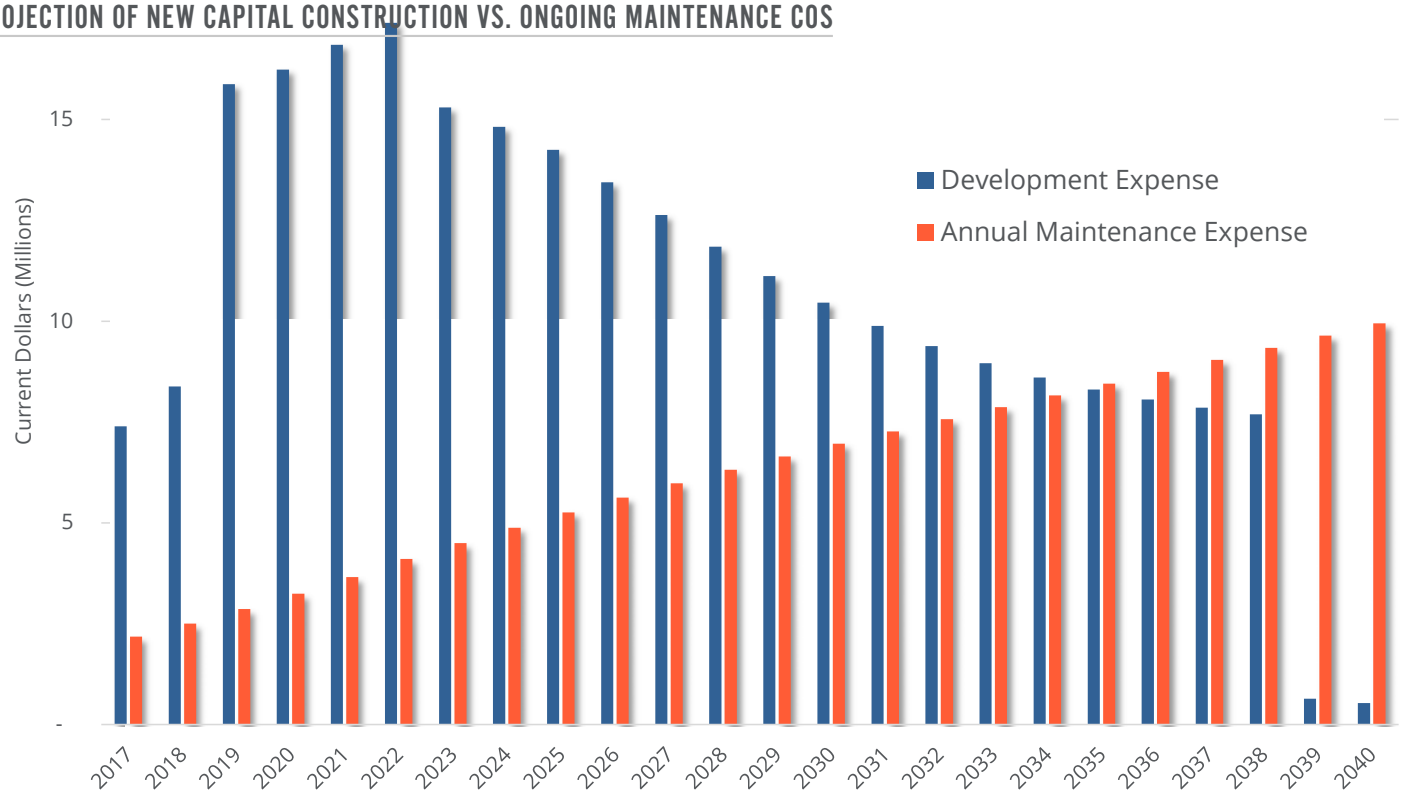
Though the RRDA is not responsible for site specific development expenses, it is responsible for regional improvements such as drainage and stormwater detention, the installation of certain wastewater infrastructure, and the development of open spaces and green spaces. In addition, the RRDA has maintained the intention to feature amenities such as trails and greenways within the RRCC. As illustrated in the *Building & Site Improvement Engineering Estimates, by phase* table on page 90, it is estimated that both full build out scenarios would require over $750 million (in 2017 dollars) in building and site construction costs, where the RRDA could be expected to invest $30-$40 million.

Demolition and Cleanup

Multiple derelict structures remain from the RRCC's previous use as a U.S. Army facility. The RRDA is responsible for the demolition and cleanup of these structures prior to the transfer of land for private use. The most intensive project is the demolition of the former munitions manufacturing site on the north end of the RRCC. This site contains a large number of intact structures and other detritus that the RRDA must contain and dispose of. The total cleanup cost of the site, including asbestos remediation, and debt service is estimated to be $140 million.

The second major demolition site is located in the mega site area. This region contains approximately 170 "igloos" that were formally used to store explosive material for the Army. The RRDA estimates that the demolition cost for each igloo is $25,000, for a total cost of $4.4 million.

PROJECTION OF NEW CAPITAL CONSTRUCTION VS. ONGOING MAINTENANCE COS



(Source: Policy Analytics)

The FOST certification from the U.S. Army stipulated that there were no known remaining environmentally hazardous materials (outside of known asbestos) within the RRCC at the time the ownership of the property was transferred to the RRDA. Relying on this certification, no additional environmental cleanup costs have been included in the financial analysis. The potential presence of unknown environmental contamination is a significant risk factor to the financial analysis that could delay the development timeline and result in cost increases.

Maintenance and Recapitalization

To date, the RRDA has been primarily focused on removing obsolete structures and antiquated infrastructure while investing in new capital infrastructure. As this new infrastructure ages, the RRDA (or its successor) will need to direct resources towards the maintenance and recapitalization.

Under current operating strictures, the responsibility to maintain road infrastructure constructed within the RRCC is not assumed by the local municipalities. Instead, the responsibility is carried by the RRDA or its possible successors. In addition to the road and street assets, maintenance and replacement costs must be managed for the RRDA's heavy equipment and vehicle fleet. The financial plan assumes that the RRCC's roads and streets have a useful life in 20 years. A long-term sustainable financial structure would allow the RRDA to fund its depreciation annually.

The RRDA has constructed more than 14 linear miles of 2 and 3 lane roadways throughout the RRCC. The annual ongoing recapitalization cost of the current road network and other RRDA assets is $1.9 million annually. As

development continues, the RRDA will be responsible for progressively more maintenance and recapitalization costs. By 2040, annual recapitalization costs are projected to average more than $5 million annually (in constant 2017 dollars).

As development within the RRCC matures, the focus of the RRDA will necessarily shift from constructing new assets to maintaining, repairing and replacing existing ones. The New Investment vs. Reinvestment Cost Comparisons chart demonstrates the changing share of new construction and ongoing maintenance throughout the period of analysis.

SUSTAINABILITY AND SENSITIVITY TESTING

The following pages test the comparative outcomes of the financial models given a range of input assumptions.

Using the standard inflation assumptions, Scenario I is marginally feasible from a sustainability perspective, but carries a high degree of operational risk. The projected annual net operating margin -- the degree to which revenues exceed (or fall short of expenses) – averages 2.1% between 2025 and 2035. This means there is a small margin of error preventing the RRDA from operating at an annual deficit for a significant portion of the forecast period. As a result, it is likely that capital investments and/or maintenance would be deferred to meet cash flow and debt financing needs. The feasibility of Scenario I is highly sensitive to changes in input costs and assessed valuation.

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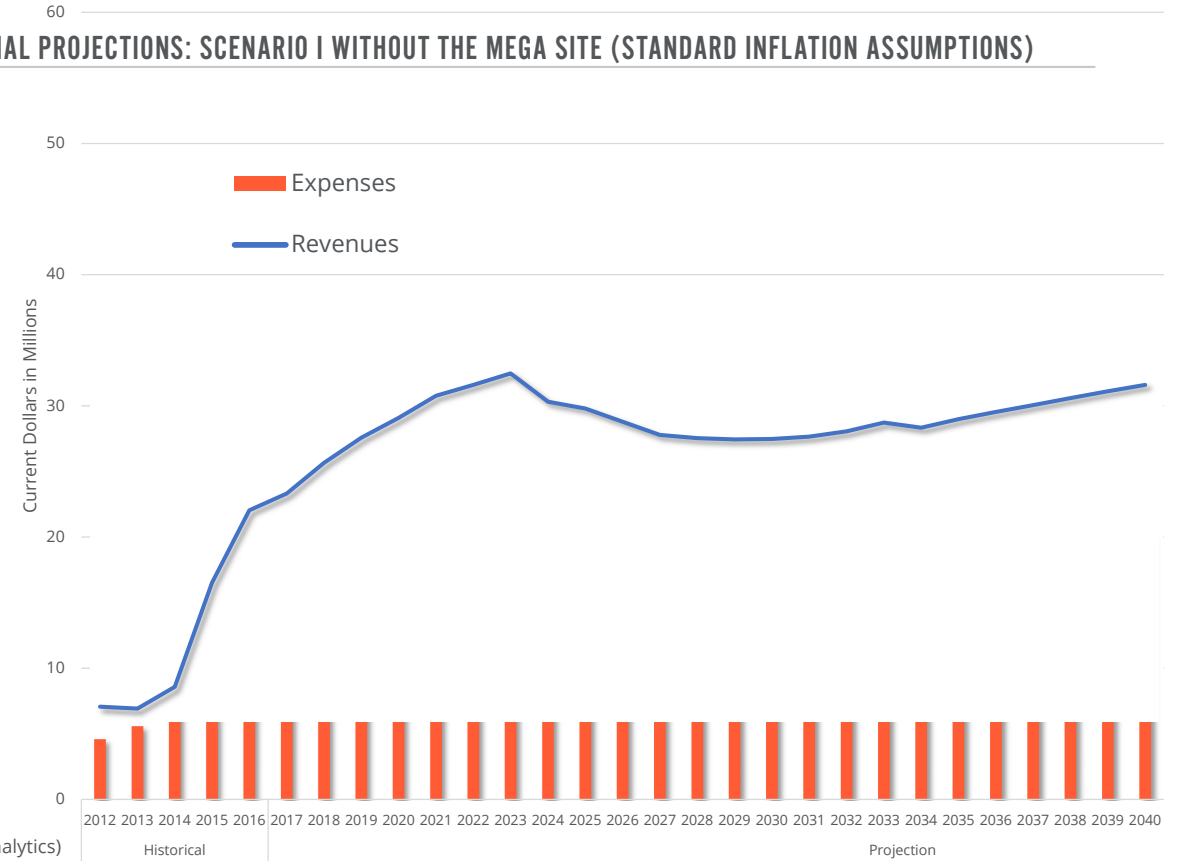
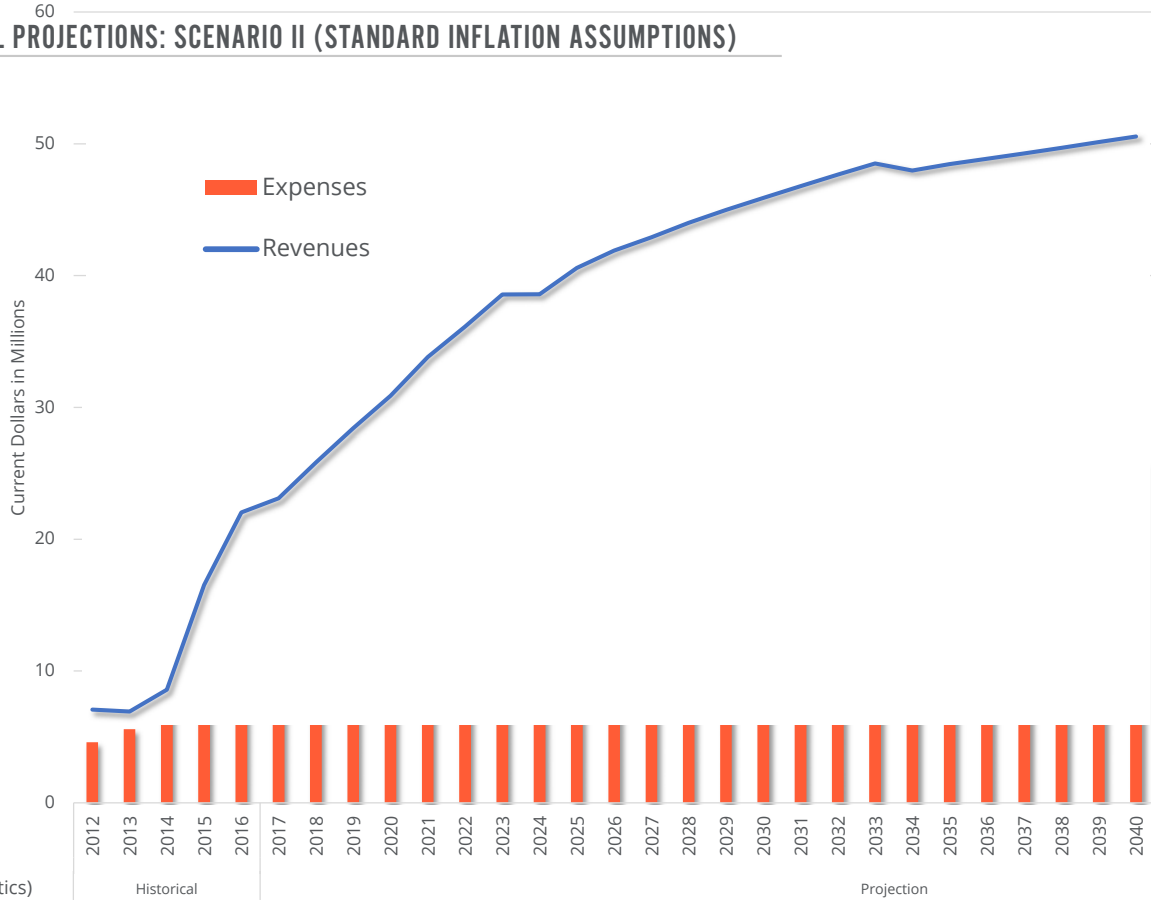
RRDA FINANCIAL PROJECTIONS: SCENARIO I WITHOUT THE MEGA SITE (STANDARD INFLATION ASSUMPTIONS)



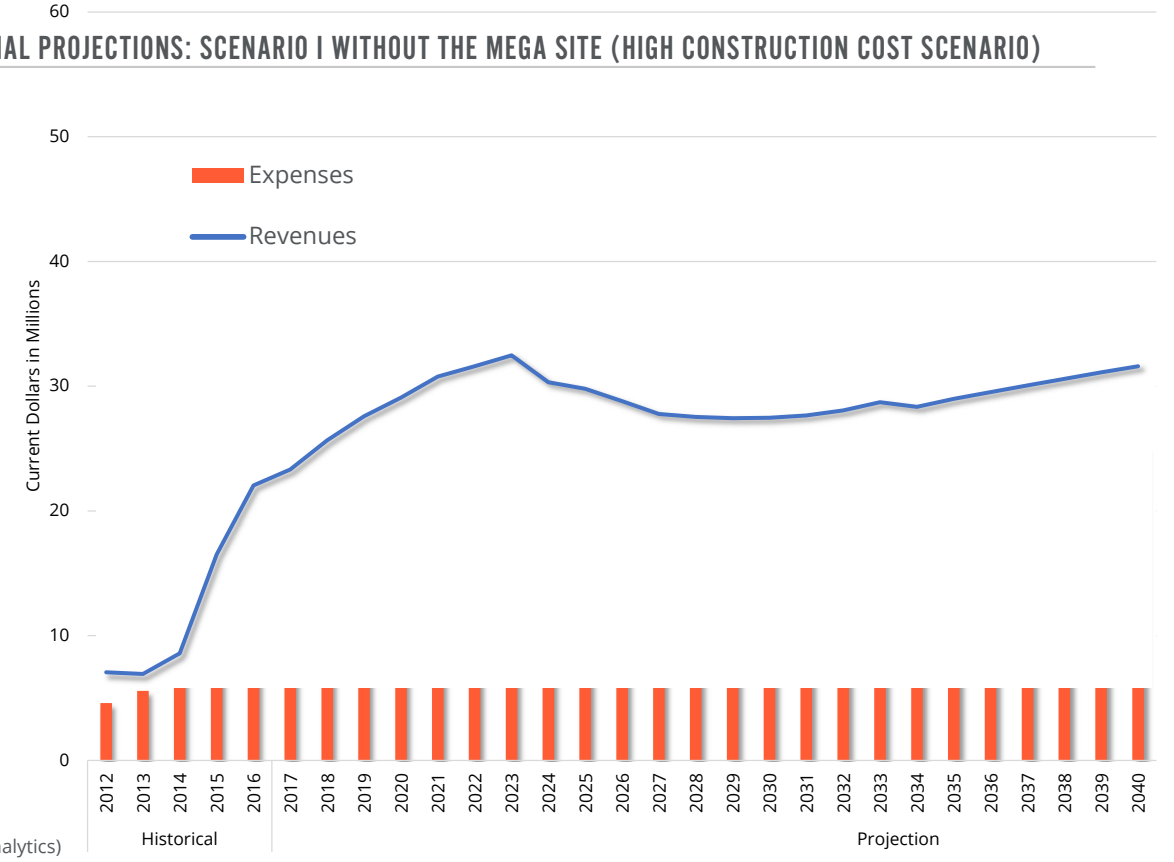
(Source: Policy Analytics)

RRDA FINANCIAL PROJECTIONS: SCENARIO II (STANDARD INFLATION ASSUMPTIONS)



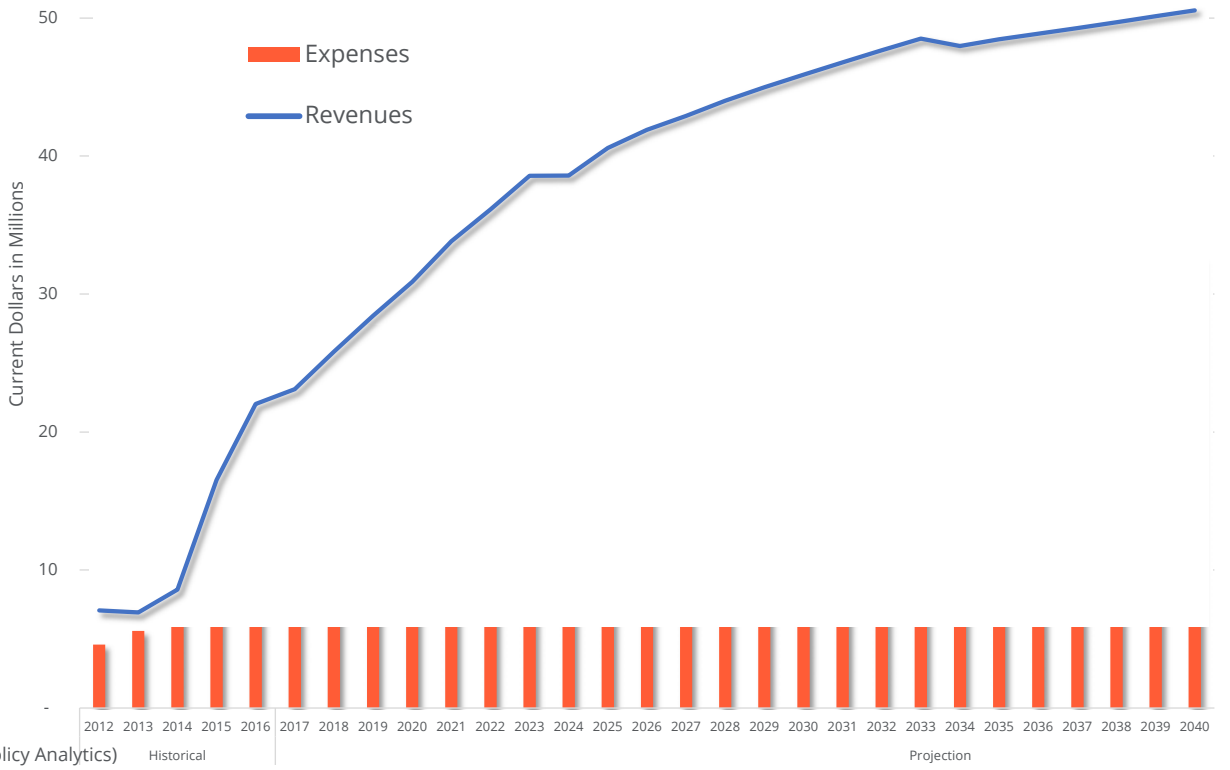
(Source: Policy Analytics)

RRDA FINANCIAL PROJECTIONS: SCENARIO I WITHOUT THE MEGA SITE (HIGH CONSTRUCTION COST SCENARIO)



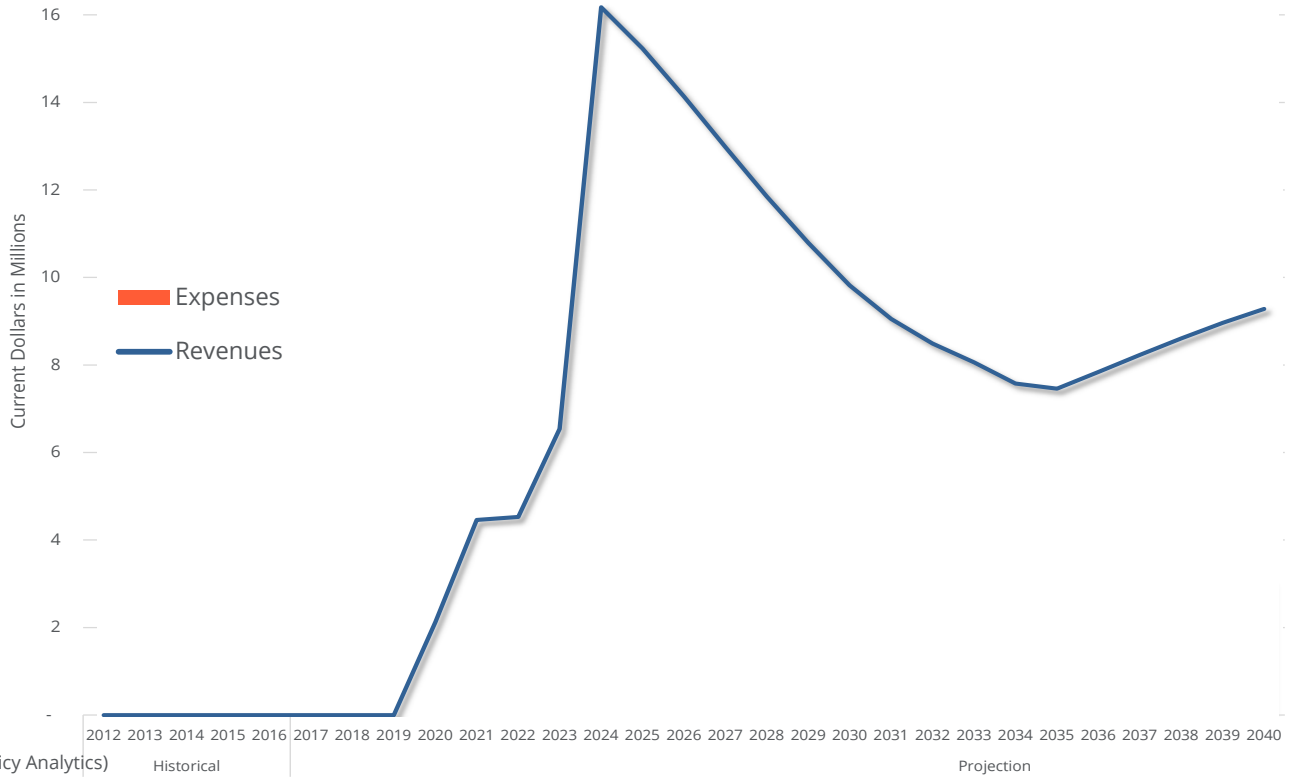
(Source: Policy Analytics)

RRDA FINANCIAL PROJECTIONS: SCENARIO II (HIGH CONSTRUCTION COST SCENARIO)



(Source: Policy Analytics)

NORTH END REDEVELOPMENT PRO FORMA ANALYSIS (STANDARD INFLATION ASSUMPTIONS)



(Source: Policy Analytics)

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The Scenario I financial structure becomes stressed if the annual inflation for construction inputs exceeds 3% annually, which is a possible outcome given recent changes in the price of construction inputs. According to the Bureau of Labor Statistics, cement prices have risen 4% annually since 2013. If annual construction costs are assumed to increase by 5% annually instead of 3% annually, the RRDA would experience an annual net operating loss of 6% between 2025 and 2035. Therefore, in a high cost scenario, the RRDA would need to defer the development of the RRCC, without relying heavily on new sources of revenue.

By comparison, Scenario II performs financially better than Concept I in both the short- and long-term horizon. Using the standard inflation assumptions, the annual operating margin averages 27% between 2025 and 2035. Unlike Scenario I, Scenario II provide the option to release tax increment to the local taxing units around the year 2026.

The stronger financial outcomes of Scenario II are achieved because the revenues generated in the mega site area of the RRCC are included in the revenue projections. Scenario I assumes that the 1,200 acre “mega site” area is reserved for a large single use commercial or industrial purpose (such as a major manufacturing plant). Attracting a user of this type is a nationally (or globally) competitive process, which will require an aggressive incentive package. It is unlikely that such an incentive package will allow the RRDA to generate revenues from a mega site use to offset development costs elsewhere in the RRCC. In comparison, Scenario II assumes that the mega site region is used to expand the Gateway district and to create a Research and Development campus. In this use, the RRDA will attract

multiple property owners over a larger timeframe using its current incentive structure. The potential revenues generated from the mega site uses in Scenario II exceed the infrastructure costs for that district, and can be used to offset development costs in other parts of the RRCC.

Scenario II remains sustainable even in the high construction cost scenario. The annual net operating margin averages 16% between 2025 and 2035, even when the growth rate for construction costs is increased from 3% to 5%. In this high cost scenario, the option to release tax increment through to the local taxing units becomes feasible by the year 2032.

FINANCIAL IMPLICATIONS

The following pages describe the outcomes of the financial analysis and the implications for the strategic direction of the RRDA. The narrative is further supported by the chart above.

The RRDA must offset the demolition cost of the former munitions production site with revenues from other areas of the RRCC. The total capital requirements for the redevelopment of the former munitions production site, including demolition, cleanup and new infrastructure, are projected to exceed $215 million. This exceeds the revenue capacity of the same area once redeveloped. Funding this cost through the revenues generated from other parts of the RRCC is critical to both the full build out of the RRCC and the long-term sustainability of the RRDA.

Due to global competition, the ability of a single use mega site development to fund infrastructure in other areas of the RRCC is uncertain. Concept I assumes that the 1,200 acre mega site area is reserved for a large single use commercial or industrial purpose (such as a major manufacturing plant). Attracting a user of this type is a nationally (or globally) competitive process, which will require an aggressive incentive package. It is unlikely that such an incentive package will allow the RRDA to generate revenues from a “mega site” use to offset development costs elsewhere in the RRCC.

The RRDA should explore legislative changes to maximize UEZ revenue, and allow for flexibility in incentives. Options exist in State statute for the RRDA to delay the expiration of its enterprise zone designation to 2023. Once the UEZ expires, the RRDA will no longer have the ability to unilaterally grant property tax incentives. In addition, the RRDA currently grants 10 year, 100% investment deductions to qualifying investments within the RRCC. In return, it receives UEZ participation fees equal to 49% of the value of the incentive. Participating owners will be eligible to receive this investment deduction for the full term granted at its inception, even if that term extends beyond the expiration of the UEZ. These taxpayers will no longer be obligated to pay participation fees to the RRDA once the UEZ designation expires.

The RRDA should explore alternative long-term revenue options to reduce its reliance on TIF revenues and fund ongoing operational activities. By 2025, RRDA revenues will be comprised mostly of TIF revenue. TIF is a stable source to fund investment and back debt service, but it is not well suited to fund operational activities. While the Reuse Authority language is more expansive than other TIF statutes in terms of allowable expenses,

OVERVIEW OF ALTERNATIVE REVENUE OPTIONS

ALTERNATIVE REVENUE SOURCE	DESCRIPTION	ADVANTAGES	DISADVANTAGES
Owner's Association	Institute a RRCC property owner's association as defined in the CC&Rs	• Option to create Owner's Association already contained in most land titles • Contains an established vehicle for infrastructure funding. • Moves the responsibility for maintenance and development off of the property tax roll to private entities.	• Questions surrounding transfer of property. • Uncertain governance structure and control over budget and fee decisions. • Incentives may not be aligned for all RRDA users.
Land Lease Transactions	Instead of liquidating all land assets, enter into long-term lease agreements for some parcels.	• Creates a long-term, reliable revenue stream. • Allows the RRDA to exert control over investment/materials decisions. • May be beneficial if master developer agreements are used.	• Untested potential for market. • The RRDA forgoes upfront revenue for a long term revenue stream. • The RRDA accepts a lesser total value in return for maintaining ownership.
Economic Improvement District	Institute an Economic Improvement District as defined by state statute.	• Structures already exist under current law. • Revenues are collected as part of the property tax collections process.	• Requires voluntary taxation by participants. • Increases property tax related cost load for prospective businesses.
Road and/or Developer Impact Fees	Require impact or availability fees prior to the installation of infrastructure.	• Makes up front funding available for infrastructure projects. • Does not add to the annual property tax burden of businesses.	• Upfront resource commitment may complicate location negotiations. • Fees often get waived as part of the incentives packages.

(Source: Policy Analytics)

it still contains restrictions on many operating activities. The RRDA should pursue stable sources of alternative revenues in order to diversify its future revenue base.

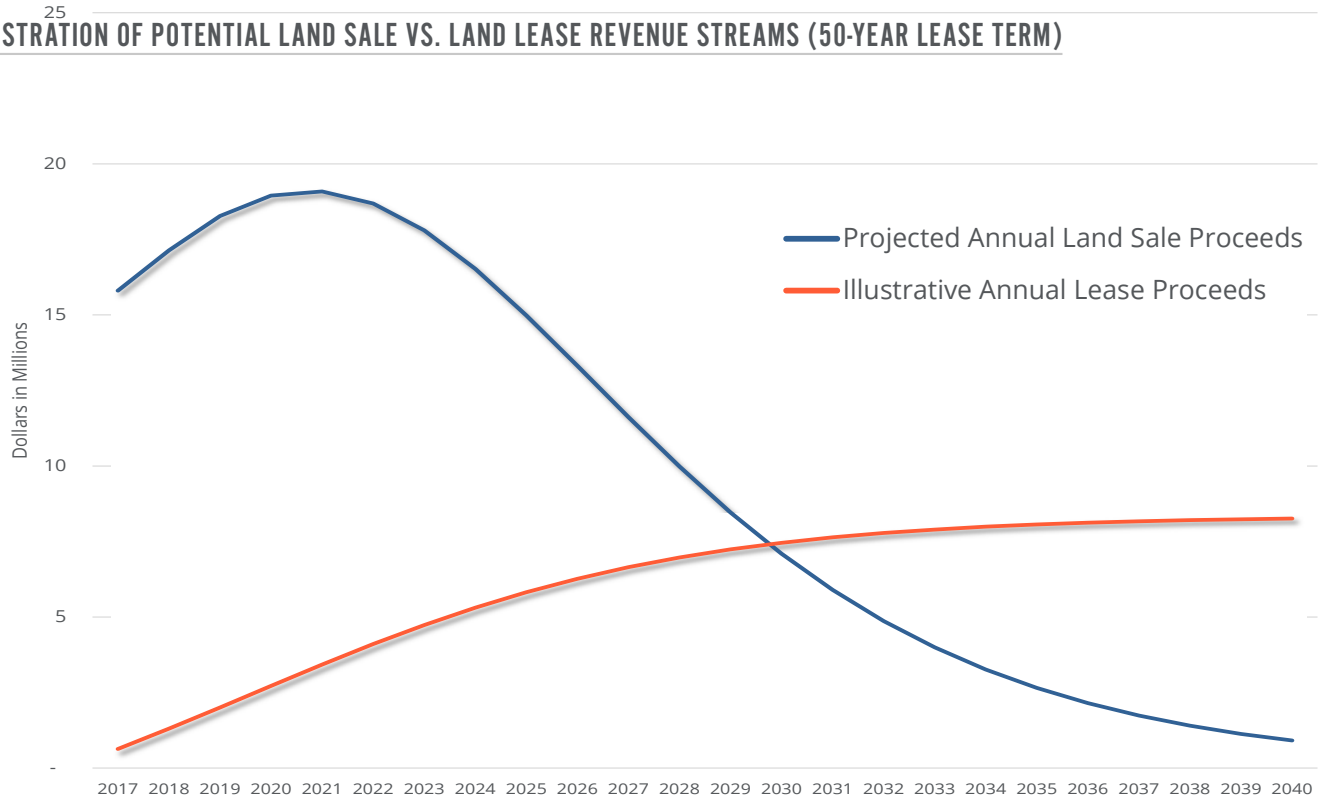
EVALUATION OF REVENUE SUPPLEMENTS // ALTERNATIVES

The revenue sources that have funded, and will continue to fund the RRCC's expansion may not be effective or efficient in providing long-term financial sustainability. This section will explore alternative and supplemental revenue options, that the RRDA may elect to purse to secure the long-term sustainability of the RRCC.

Alternative revenue options include:

- UEZ restructuring
- Road or Development Impact Fees
- Economic Improvement Districts
- Property Owner's Association(s)
- Land Lease Structure
- Master Property Developer Agreement

ILLUSTRATION OF POTENTIAL LAND SALE VS. LAND LEASE REVENUE STREAMS (50-YEAR LEASE TERM)



(Source: Policy Analytics)

Long-term Leases vs. Land Sales

The current practice of the RRDA is parcelize the land within the RRCC and then sell it outright to private investors for development. The one-time cash infusion generated by the sale of land is then reinvested in the form of further infrastructure development.

However, alternatives to the outright sale of land are available, and may be preferable in certain instances. Land lease arrangements are a common practice in public-private partnerships. In this structure, the public entity enters into a long- term lease with a private investor for the development of the land. Land lease transactions can be beneficial because they allow the public entity to retain ownership in the long term and they can be structured to include strong protections against malpractice or the dissolution of the private entity. Additionally, lease arrangements provide a stable, long term source of revenue for the public entity that can be used with fewer restrictions than TIF funding.

Downsides of lease arrangements include the forgoing of a large upfront cash infusion. Because the long-term ownership of the land remains with the public sector, the total net present value of land-lease transactions is less than cash sale transactions.

Land lease arrangements are surely not appropriate for all future River Ridge land transactions, but may be preferable in situations when long term control of development is desired, or to create a long-term source of operating revenue.

Ownership of Common Property

Through its CC&Rs, the RRDA has the ability to form an Owner's Association which can require maintenance fees from all property owners, including (some) existing ones. Upon its creation, the ownership of "common elements" transfers to the Owner's Association, which is then responsible for maintenance and operations of these elements. Once instituted, the authority to set maintenance fees belongs to the Owner's Association.

As currently written, "common elements" described throughout the CC&Rs include: lakes, open space, areas abutting public and private streets, sign easements, private streets, interior walkways, bikeways, paths and trails. "Common expenses" means and includes the actual and estimated expenses for operating and maintaining the "common elements." However, the current set of CC&Rs does not provide a vehicle for financing the management, marketing, financial, or legal operation of the RRDA.

Potential Benefits of an Owner's Association

- The ability to develop an alternative revenue source that is independent from the property tax system.
- The ability to provide stronger oversight and enforcement regarding development standards and other policies.
- The provision of a long-term ownership structure should the RRDA cease to exist.
- The ability to finance higher standards of amenities, finishes, and features than would otherwise be possible.

Potential Drawbacks of an Owner's Association

- The scale and standard of the RRCC road network would be impractical to maintain on the basis of the maintenance fees assessed to members of the Owner's Association.
- The established TIF funding mechanism is a stronger revenue stream for large scale capital redevelopment; it is also less onerous than an association fee.
- It is likely that, due to the size and scale of the development, there will be a continuous redevelopment/marketing/acquisition role for the RRDA to play as the RRCC matures.
- Infrastructure developments are new now, will need to be reinvested in over time.
- The interests of the variety of property owner's at the RRCC may not be particularly aligned in terms of the type, scale, level of common area improvement, and may differ greatly from the Gateway District for example, to the north end.

Implementation Considerations

The potential exists to create "sub associations" for the Gateway District and/or R&D park; both of which have the potential to become master planned developments. Under this scenario, the master developer would fund higher levels of amenities, materials and construction, using a separate, non-public funding stream that doesn't interact with other governmental agencies.

Ownership of Common Property
CASE STUDY

In non-residential development projects, such as business or industrial parks, where the property owner/developer sells some or all of the building sites to occupants of the park, it is standard practice to provide for the establishment of a not-for-profit property owner's association (POA) to manage the operations of the park and pay for the on-going maintenance of common areas. Maintenance funds are typically generated by an assessment levied on all property owners/occupants per the financial responsibilities (and purposes for which the funds will be used) as stipulated by the applicable CC&Rs, as amended from time to time. And while establishing CC&Rs and POAs for non-residential development projects appears to be a standard practice, planning, real estate and legal literature is relatively silent on POAs as a best practice .

A volunteer Board of Directors elected by the members of the POA and serving a one- or two-year term is often responsible for all operations of the POA; however, the day-to-day management of the operations of the POA will often be outsourced to a professional management company who enter into a contract with the POA. The POA works to ensure that the property owners (the members of the POA) each meet their financial obligations and comply with the provisions of the CC&Rs and other applicable policies that often need to be developed and adopted to either supplement or clarify the conditions or restrictions established by one or more applicable governing documents.

The other commonly used approach is through the establishment of a **Board of Trustees**, *which is a legal term synonymous with individuals who hold property, authority, and position of authority for – in the case of the RRCC – the common areas of the business park.*

Research suggests that there are compelling reasons to avoid creating a non-residential ownership of common property, including but not limited to the following:

Rarely, if ever, will the property owners or on-site occupants/users have the same amount of time, resources or vested interest in seeing to the day-to-day activities that are needed in order to successfully implement the RRCC master plan as envisioned by the RRDA.

Absent a compelling argument to add to the number of rules and procedures that exist today, an ownership of common property creates unnecessary administrative steps and costs.

Unequal distribution/application to properties located within the RRCC – whether through service areas, sub-associations, or some other geographical distinction – has the potential to introduce competing interests and introduce different levels of commitment and participation; both of which have the potential to discount the competitive advantages that the RRCC has in terms of being a planned development.

Term limits can have the effect of ensuring that no single member of the POA Board of Directors is able to affect change – for good or for bad.

Whether or a not a POA (or Board of Trustees) is established, project developers must ensure that funds are available for maintenance of the common areas.

Source: Frej, Anne, et al. 2001. Business Park and Industrial Development Handbook. Second Edition. Urban Land Institute.

Who owns, uses, fixes and pays for: a) maintenance (operating expenses) versus capital replacements (reserve expense) will largely depend on the answer to one or more questions, relating to:

- The RRDA's ability to enter into the next phase of development;
- The full suite of assets and liabilities that have been created;
- Having enough historical data pertaining to the performance of the common areas, and any obligations that exist to draw conclusions about the need for future obligations; and
- The (foreseeable) future of the RRDA as an organization and the role that it would take in the event that a POA is established.

Unless and until there is a master planned development proposed for the RRCC, the RRDA should use the evaluation and update process described on the following pages to proactively address all matters pertaining to the creation of a potential property owner's association for all or part of the RRCC.

ECONOMIC & FISCAL IMPACTS

Use this chapter to demonstrate the economic and fiscal benefits of the economic activity at River Ridge to local stakeholders.

This chapter quantifies the potential benefit of future River Ridge development on the local economy and to State and Local taxing units. The economic impacts not only include the economic activity that occurs on site at River Ridge, but supplier and household purchases throughout the local economy. The fiscal impacts include local income and property tax revenues and Indiana sales and income taxes.

The following pages describe the full economic impact of the development of the RRCC, as it pertains to the regional economy.

ECONOMIC IMPACT OF FULL BUILD OUT SCENARIOS

The development of a 6,000 acre commercial and business hub positions the RRCC as a major economic engine in the Southern Indiana/Louisville economy. The economic impact analysis arms the RRDA with the quantitative information necessary to communicate the full economic and fiscal impact of the RRCC to regional stakeholders, and to develop performance metrics that can be used to monitor the progress of the RRCC over time.

Economic impacts were estimated by converting the development scenarios envisioned in Scenario I and Scenario II into estimates of employment capacity. The economic impact of the RRCC does not end with business activity conducted on site. Rather, firms that operate at River Ridge stimulate economic activity throughout the region through supply chain purchasing, and through the everyday household spending of those employed within the RRCC. The impacts of these follow-on effects were modeled using IMPLAN, a professionally accepted input-output model, which estimates the follow on economic impacts of a direct stimulus in the economy.

ECONOMIC IMPACTS *are classified by three measures: direct effect, indirect effect and induced effect.*

Direct Effect – *A change in final demand resulting from an economic change, which may include investments. Direct effects occur at the site of the economic activity.*
Indirect Effect – *The impact of industry-to-industry supply chain purchases resulting from a change in demand.*
Induced Effect – *The impact of household spending changes stemming from the direct and indirect effects*

For this report, economic impacts are enumerated using three measures: economic output, labor income, and employment.

- **Economic Output** – The total value of goods and services sold within the economy. This is the broadest measure of economic impact.
- **Labor Income** – Employee compensation (wages and salaries) plus proprietor's income.
- **Employment** – Full time and part time jobs created or supported within the study region.

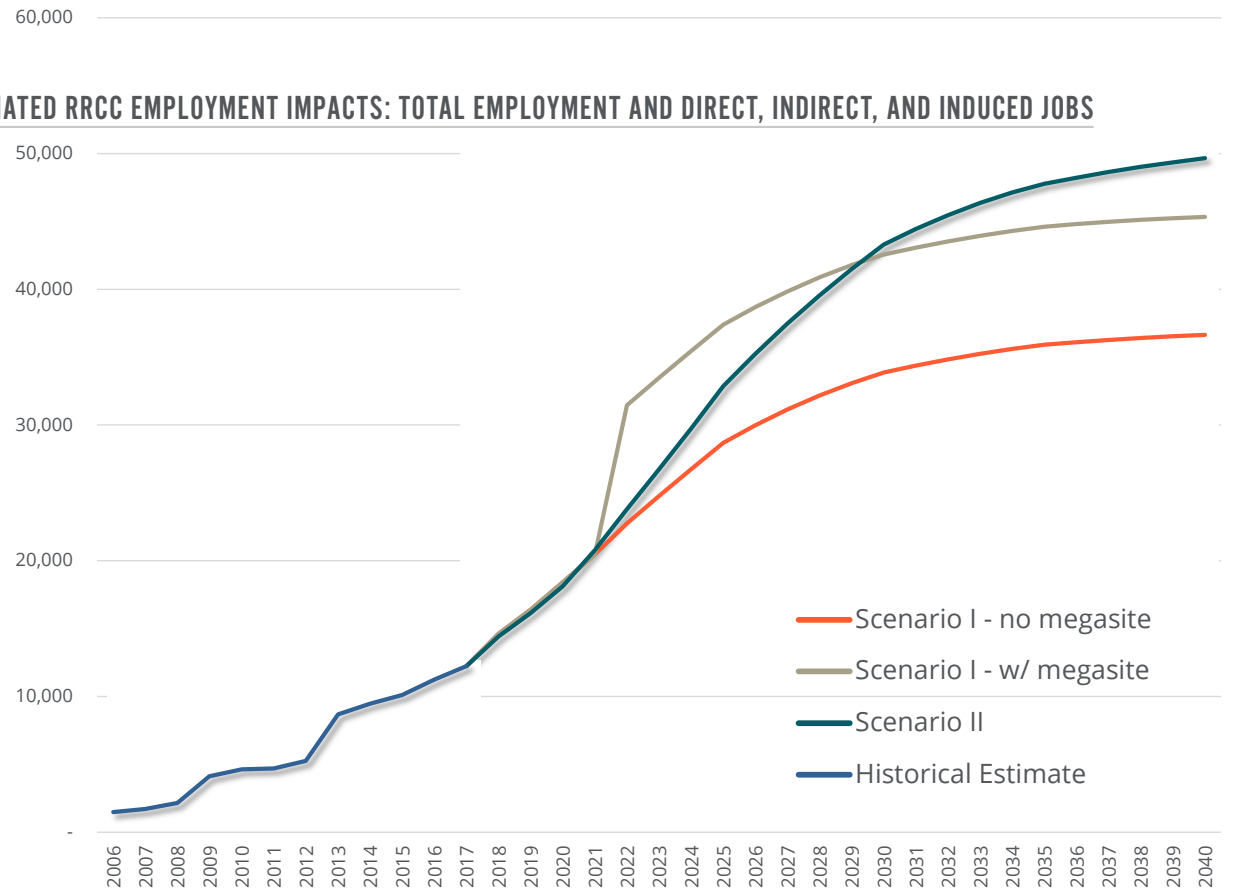
Economic and Fiscal Impact METHODOLOGY

The economic and fiscal impact analyses used the cost estimates and land use parameters from development scenario; costs and revenue estimates from the financial analysis; and economic data from the Southern Indiana/Louisville region to deliver the economic outcomes of both development concepts; fiscal impacts on state and local government; and return on investment with a set a performance metrics. Using a high-level breakdown of the proposed land use categories described on previous pages.

At full build-out, assuming a mega site user comes online, Scenario I generates an estimated 22,000 direct jobs. Scenario II supports an estimated 25,000 jobs at full build-out. Scenario II outperforms Concept I in terms of direct employment due to a denser commercial development pattern. However, Scenario I carries the potential of a significant near term employment impact if a suitable mega site employer can be identified.

When the full impact of River Ridge activity is considered – including indirect and induced effects – Scenario I is projected to support a total of 33,000 additional annual jobs through the Southern Indiana/Louisville region while

ESTIMATED RRCC EMPLOYMENT IMPACTS: TOTAL EMPLOYMENT AND DIRECT, INDIRECT, AND INDUCED JOBS



(Source: Policy Analytics)

Scenario II supports approximately 37,500 additional jobs. By 2040, the economic activity at River Ridge is projected to support 4.8 percent of the greater Louisville employment market. Because of the strong supply chain impacts associated with a large industrial user, such as an automotive manufacturer, the mega site has the potential to generate a high number of direct and indirect jobs within the region. However, the outcomes from Scenario I are dependent on a securing a mega site user, and carry a high level of risk. In the absence of a mega site employer, Scenario I under performs Scenario II by almost 40 percent.

The development scenarios differ in the composition of jobs supported. With its reliance on a major industrial employer, the direct jobs generated in Scenario I are largely within the manufacturing sector. The employment impacts of Scenario II are more diversified. Because of the anticipated development of a larger Gateway District and a research and development campus, the direct jobs created in this scenario are a mix of professional, technical and manufacturing jobs.

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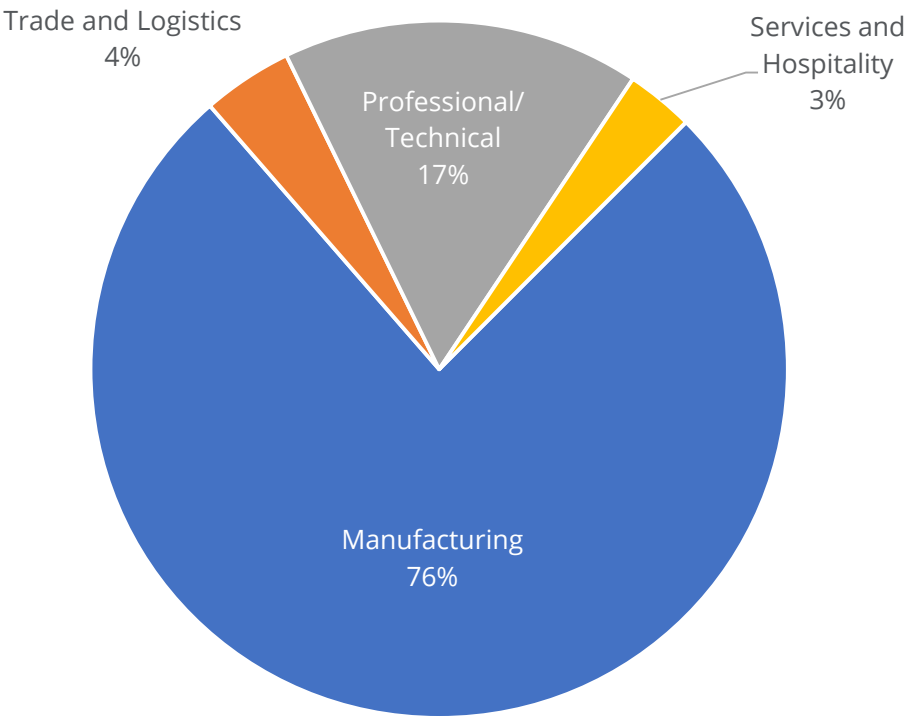
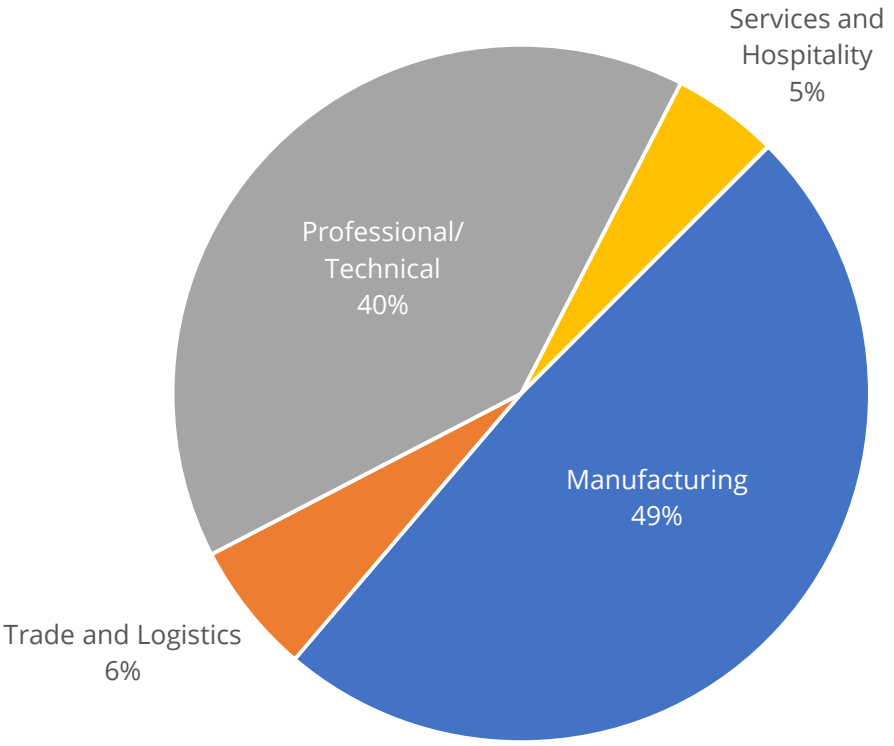
SCENARIO I: ESTIMATED EMPLOYMENT BY INDUSTRY



(Source: Policy Analytics)

SCENARIO II: ESTIMATED EMPLOYMENT BY INDUSTRY



(Source: Policy Analytics)

RRCC ECONOMIC IMPACT SUMMARY

Scenario I with Megasite

	2018	2020	2025	2030	2035	2040
Economic Output (constant 2017 dollars in millions)						
Direct Effect	$306.2	$794.4	$6,391.2	$7,129.5	$7,449.3	$7,564.3
Indirect Effect	$99.1	$256.8	$1,415.0	$1,644.2	$1,741.2	$1,775.8
Induced Effect	$95.2	$245.6	$1,039.7	$1,239.2	$1,315.2	$1,342.1
Total	**$500.5**	**$1,296.7**	**$8,846.0**	**$10,012.9**	**$10,505.7**	**$10,682.2**
Labor Income (constant 2017 dollars in millions)						
Direct Effect	$80.0	$206.2	$774.1	$936.0	$994.9	$1,015.6
Indirect Effect	$34.6	$89.7	$479.6	$558.2	$591.0	$602.8
Induced Effect	$31.8	$82.0	$347.2	$413.8	$439.2	$448.2
Total	**$146.5**	**$378.0**	**$1,600.9**	**$1,908.0**	**$2,025.2**	**$2,066.6**
Employment (annual employment)						
Direct Effect	1,092	2,812	9,987	12,361	13,307	13,639
Indirect Effect	603	1,561	7,575	8,910	9,459	9,655
Induced Effect	695	1,795	7,595	9,053	9,608	9,805
Total	**2,390**	**6,167**	**25,157**	**30,324**	**32,375**	**33,098**

Scenario II

	2018	2020	2025	2030	2035	2040
Economic Output (constant 2017 dollars in millions)						
Direct Effect	$292.7	$791.6	$2,385.0	$3,449.4	$4,033.1	$4,354.8
Indirect Effect	$92.1	$249.3	$812.1	$1,215.7	$1,410.3	$1,515.4
Induced Effect	$88.0	$237.5	$835.1	$1,247.2	$1,416.3	$1,498.5
Total	**$472.8**	**$1,278.4**	**$4,032.2**	**$5,912.2**	**$6,859.8**	**$7,368.7**
Labor Income (constant 2017 dollars in millions)						
Direct Effect	$74.3	$200.2	$717.4	$1,066.7	$1,202.5	$1,268.8
Indirect Effect	$31.9	$86.4	$288.8	$436.3	$504.6	$540.3
Induced Effect	$29.4	$79.5	$278.9	$416.5	$473.0	$501.2
Total	**$135.6**	**$366.1**	**$1,285.1**	**$1,919.5**	**$2,180.1**	**$2,310.4**
Employment (annual employment)						
Direct Effect	1,009	2,686	9,391	14,058	16,097	16,967
Indirect Effect	541	1,466	5,145	7,889	9,091	9,600
Induced Effect	636	1,718	6,097	9,113	10,348	10,859
Total	**2,186**	**5,870**	**20,632**	**31,060**	**35,537**	**37,426**
	-	-	-	-	-	-

(Source: Policy Analytics)

ESTIMATED LOCAL INCOME TAX IMPACTS TO CLARK COUNTY TAXING UNITS

	2018	2020	2025	2030	2035	2040
SCENARIO I (with megasite)						
Clark County	124.2	320.2	1,335.0	1,592.7	1,690.5	1,725.0
Jeffersonville	193.5	499.1	2,081.6	2,483.6	2,636.0	2,689.9
Charlestown	15.6	40.2	167.6	199.9	212.1	216.5
Utica	0.7	1.7	7.1	8.4	8.9	9.1
Schools	36.3	93.5	385.6	458.8	486.4	496.1
Other Units	130.7	337.1	1,404.9	1,675.9	1,778.7	1,814.9
Total	**501.0**	**1,291.8**	**5,381.6**	**6,419.3**	**6,812.7**	**6,951.6**
SCENARIO II						
Clark County	115.0	310.3	1,090.1	1,625.5	1,843.6	1,952.4
Jeffersonville	179.2	483.6	1,699.5	2,534.6	2,874.9	3,044.5
Charlestown	14.5	39.0	136.9	204.0	231.3	245.0
Utica	0.6	1.6	5.8	8.6	9.8	10.3
Schools	33.7	90.6	315.7	468.0	529.6	560.1
Other Units	121.1	326.7	1,147.3	1,710.3	1,939.7	2,053.9
Total	**464.0**	**1,251.8**	**4,395.2**	**6,551.1**	**7,428.9**	**7,866.2**

(Source: Policy Analytics)

text continued from page 123

STATE AND FISCAL IMPACT

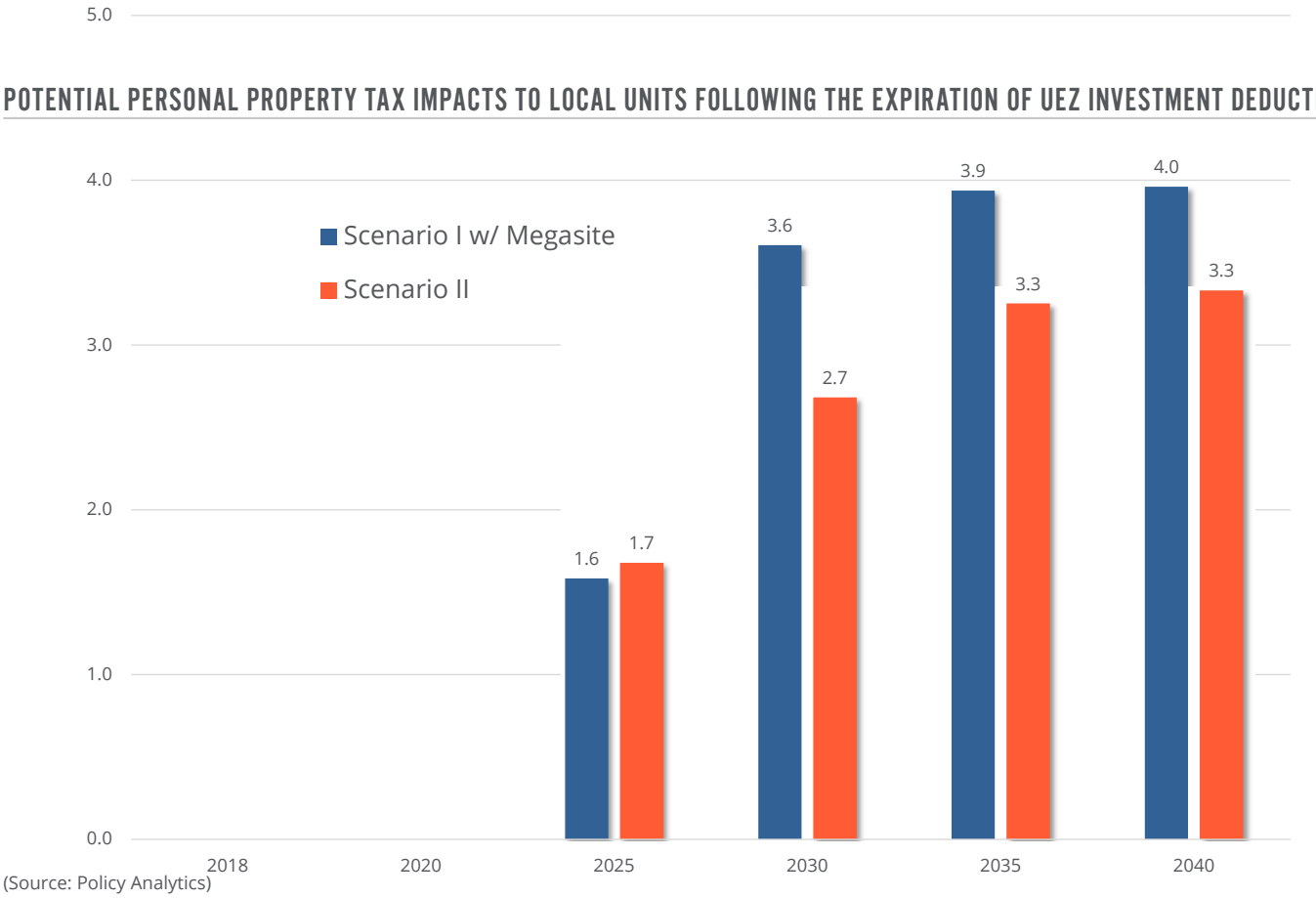
The following pages describe the potential fiscal impact of economic activity at RRCC to local taxing units and the State of Indiana.

Local Personal Income

The economic activity taking place at the RRCC will deliver fiscal returns to local and state units of government. The total impact of River Ridge commercial activity will be distributed throughout both the Indiana and Kentucky portions of the regional economy, but a significant share will be localized in the communities that surround River Ridge. The development at River Ridge is projected to generate $450 million in personal income within Clark County by 2040 (constant 2017 dollars). Local impacts are projected to be $183 million for Jeffersonville, $27 million for Charleston, $3 million for Utica, and $234 million for the remainder of Clark County.

Local Income Tax Revenue

Local income taxes provide the primary local fiscal impact from River Ridge activity. Indiana counties have the option to establish various types of local income taxes to fund public services or to provide property tax relief. Local income taxes (LITs) are paid on the basis of residence, not employment. Local taxing units receive more LIT revenues as the income levels of resident taxpayers increase. Clark County has established a local income tax rate of 2.0 percent. Of this, 1.5 percent comprises “spendable” income tax revenue that can be used for a variety of budgetary purposes. The remainder of the local income tax distribution is allocated to property tax relief to local



(Source: Policy Analytics)

taxpayers. The property tax relief component provides some fiscal benefit to taxing units to the extent it reduces revenue reductions caused by circuit breaker rate caps.

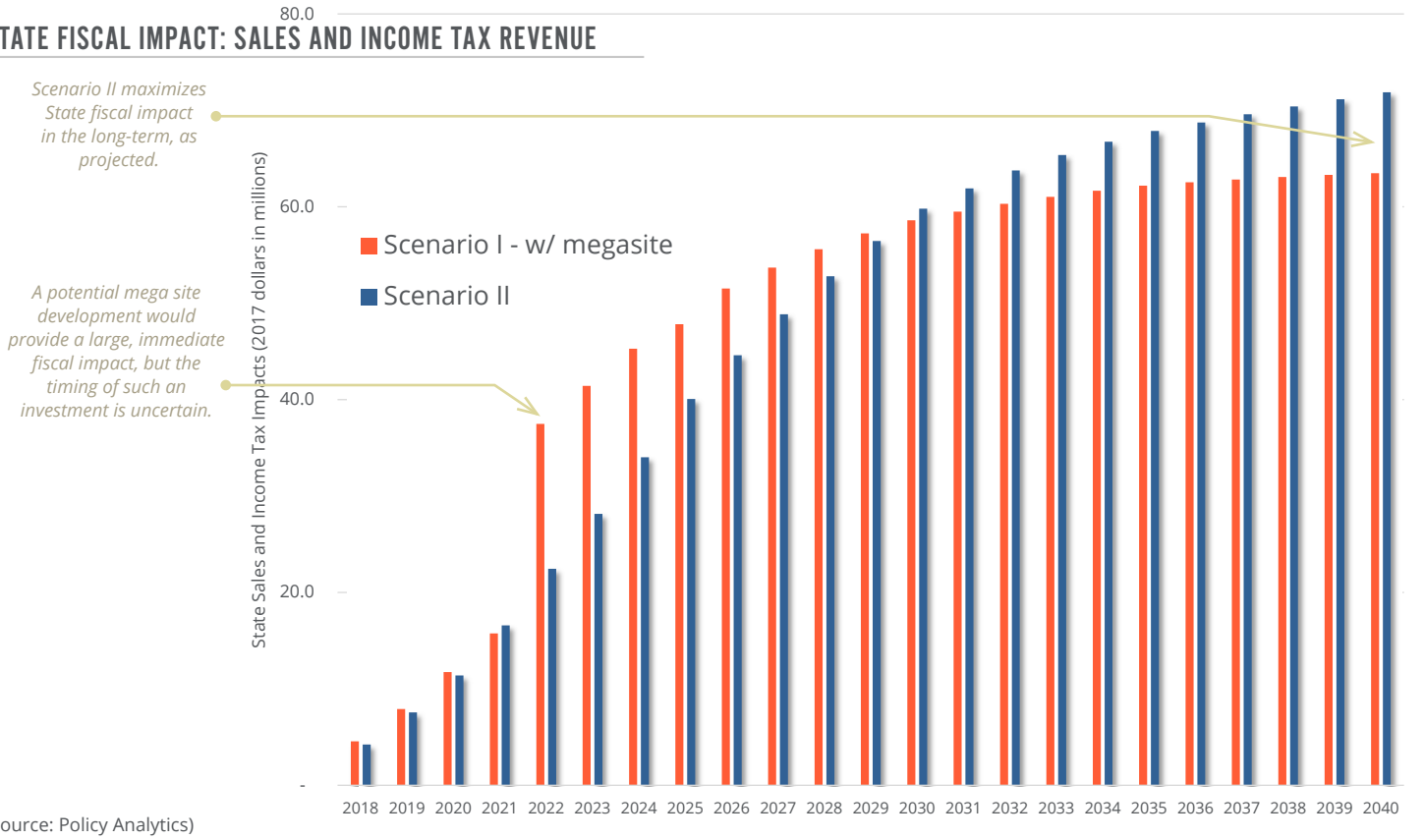
The business activity and related spin-off effects are projected to generate $8.0 million in annual local income tax revenue for Clark County taxing units in Scenario I (with mega site) and $9.1 million in Scenario II. Because local income tax is allocated by county of residence, neighboring counties in Indiana will experience a projected LIT increase ranging from $5.3 million to $6.0 million. The table on the following page illustrates the potential income tax effects to local taxing units within Clark County.

Property Tax Impacts

Fiscal impacts will also accrue to local taxing units through local property tax revenues. Due to the incentive structure used by the RRDA, much of the property tax related fiscal impacts will be deferred. The RRDA captures the assessed value of real property investments to fund ongoing development at the RRCC, and provides investment deductions, to qualifying personal property investments. After the 10 year term of the UEZ investment deduction expires, personal property investments at River Ridge (mostly industrial equipment and machinery) will add to the local tax base. By 2040, personal property investments at River Ridge are projected to add $230 million (in constant 2017 dollars) to the tax base of Clark County taxing units.

Growing the tax base – with all other variables held constant – leads to lower property tax rates. Lower tax rates, in turn, result in reduced property tax

STATE FISCAL IMPACT: SALES AND INCOME TAX REVENUE



(Source: Policy Analytics)

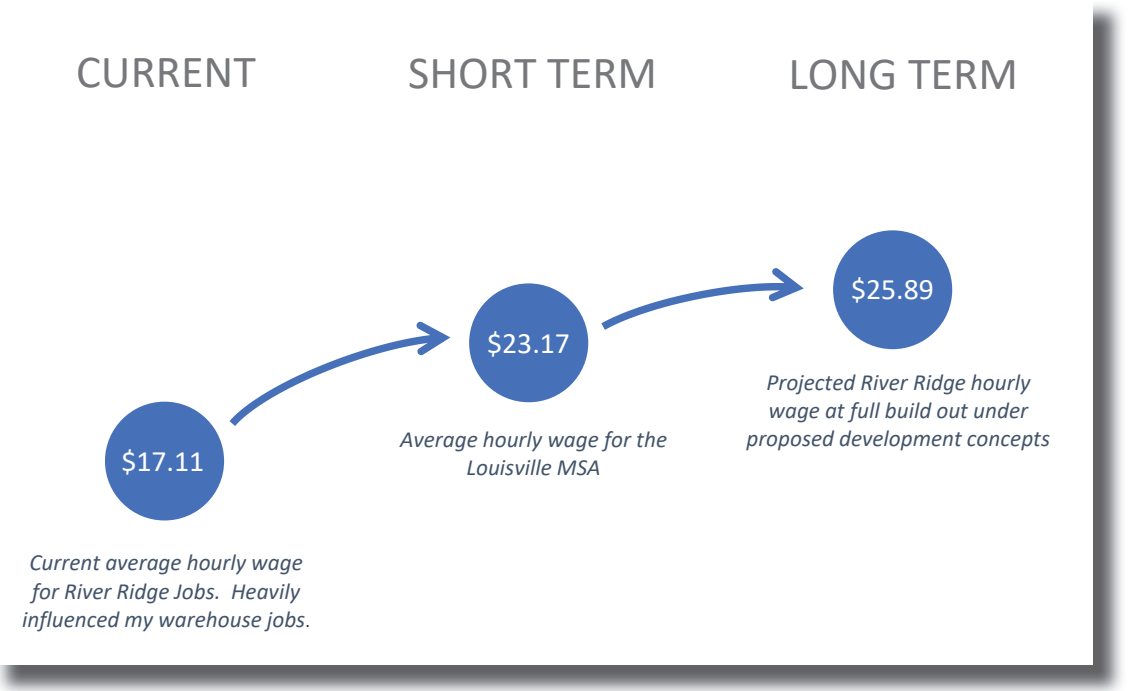
liabilities for some taxpayers (those not at the statutory circuit rate cap), and provide additional revenues to taxing units by mitigating revenue losses due to the circuit breaker credit.

The massive infrastructure and demolition demands of redeveloping the RRCC will require all available revenues to prepare the full site for private investment. Once demolition is complete and road and street infrastructure have been installed throughout the RRCC, the RRDA's resource requirements are projected to decrease. At that time, revenues will still be required to maintain, rebuild and replace existing infrastructure and respond to changing market dynamics. However, the level of private sector activity at full build out is projected to generate enough revenue to fund these ongoing redevelopment needs, while releasing increment assessed value back into the tax base. By approximately 2030, the financial models show the opportunity to begin releasing assessed value to base taxing units. By 2040, assuming full build out, the RRCC could release up to $280 million in increment assessed value, producing $2.1 million in annual property tax revenue to taxing units.

State Fiscal Impacts

The wages and salaries supported by the RRCC will supplement State revenues – through state sales and income taxes – in addition to local revenues. The state of Indiana has established a reciprocity agreement (insert reference) with Kentucky, which means that Indiana's state income tax impact accrues from those employed at River Ridge (or who benefit from

RRCC HOURLY WAGE TARGETS



(Source: Policy Analytics)

indirect and induced effects) and live in Indiana. The state sales tax impacts are predicated on the point of purchase, and are impacted to the extent that individuals increase their spending within the State.

By 2040, at full build-out, the economic activity at RRCC is projected to generate $63.5 million in state sales and income tax revenues (constant 2017 dollars) under Scenario I (with mega site), and $72 million under Scenario II.

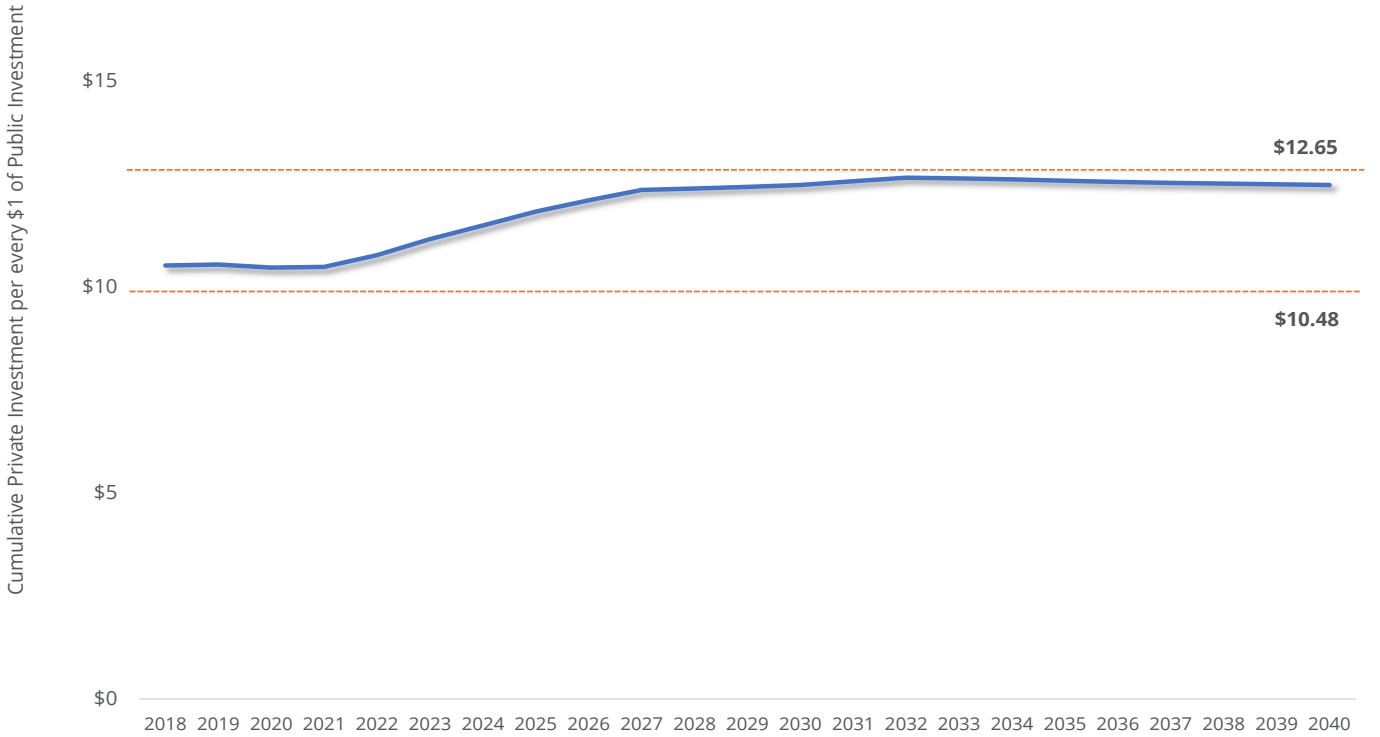
RETURN ON INVESTMENT METRICS

The following pages identify the quantitative milestones for the RRDA to target as it executes its strategic vision. These metrics are based on projected outcomes of the proposed development concepts.

Hourly Wage

The RRDA's vision is to attract high wage jobs to the RRCC. The current average hourly wage for jobs located at RRCC is estimated to be approximately $17.11 per hour, which is less than the average wage in the Louisville MSA. The proposed development concepts designed for this process are set up to accommodate high wage jobs in the Gateway District and in the mega site or research and development campus, depending on use. Assuming the RRDA is able to attract its intended targets to these locations, the average wage for RRDA could reach the MSA average by 2023, and exceed that average over the long term.

CUMULATIVE PRIVATE INVESTMENT FOR EVERY $1 OF PUBLIC INFRASTRUCTURE INVESTMENT

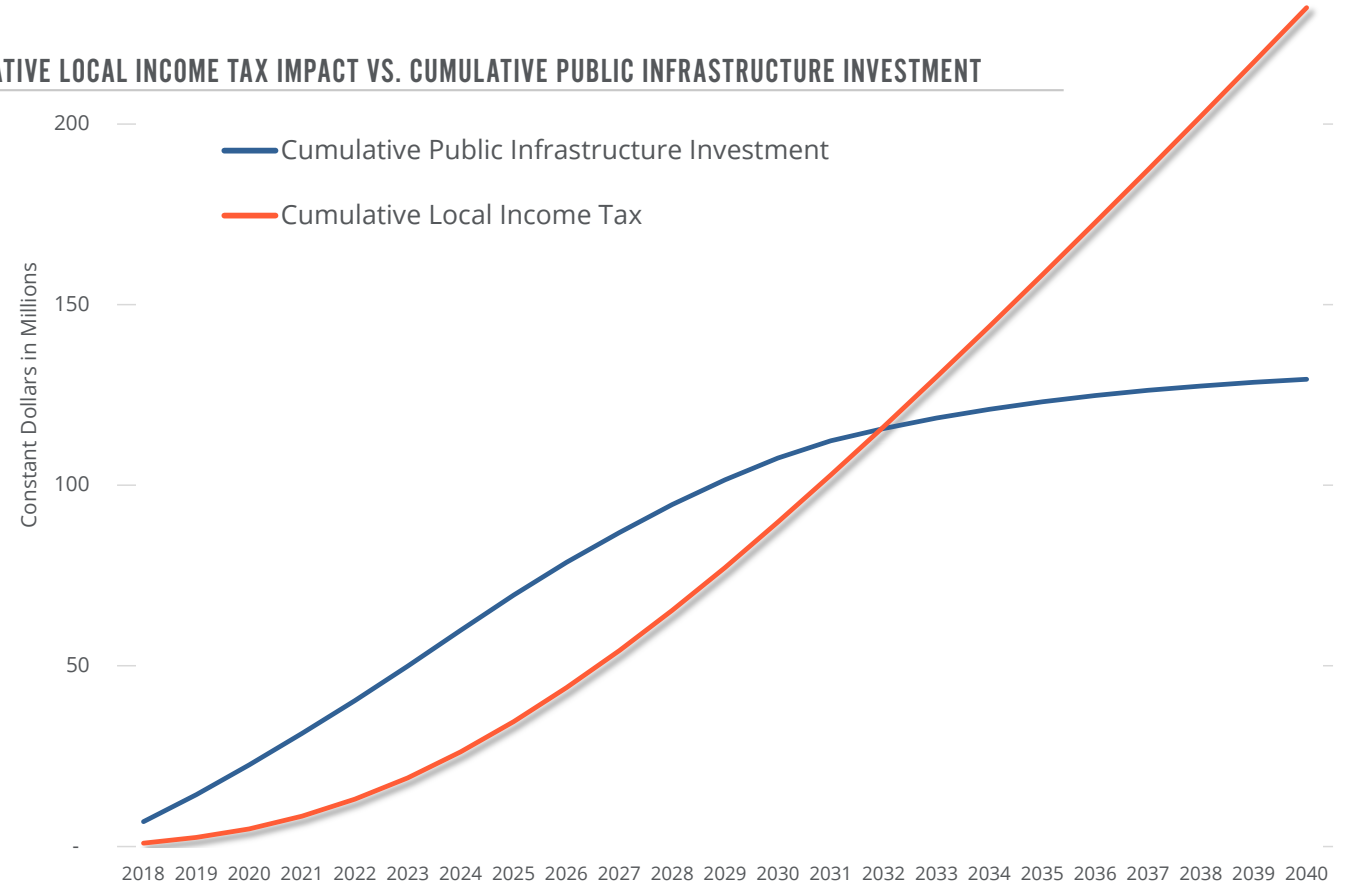


(Source: Policy Analytics)

Leverage on Public Investment

The objective of the RRDA is to attract private investment to the RRCC through the investment in first class public infrastructure. The RRDA is constructing brand new road networks, utilities and site amenities to accomplish this objective. Over the course of the financial projection, each dollar invested in new public infrastructure at River Ridge is projected to generate between $10.48 and $12.65 of private capital investment.

CUMULATIVE LOCAL INCOME TAX IMPACT VS. CUMULATIVE PUBLIC INFRASTRUCTURE INVESTMENT

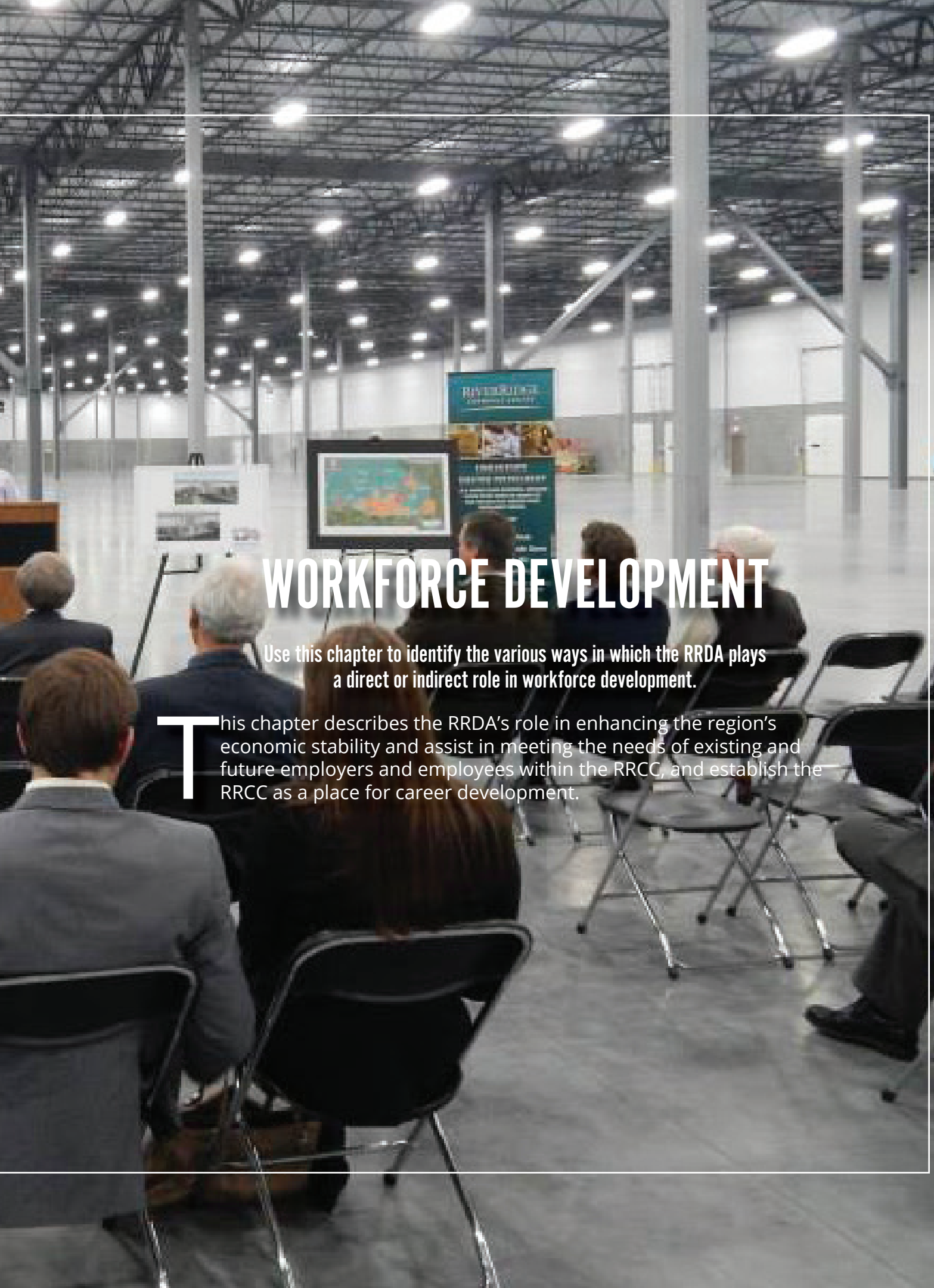


(Source: Policy Analytics)

Local Income Tax Returns

The employment activity at River Ridge generates income tax revenue for local units of government. By 2040, the development at River ridge is projected to cumulatively generate $1.80 for every dollar invested in public infrastructure in the RRCC. Total income tax revenues are projected to exceed infrastructure costs by 2031. The local return on investment could be further increased to the extent the RRDA is able to release TIF assessed value to taxing units once the initial build out of the RRCC is complete.


RIVERBRIDGE



WORKFORCE DEVELOPMENT

Use this chapter to identify the various ways in which the RRDA plays a direct or indirect role in workforce development.

This chapter describes the RRDA's role in enhancing the region's economic stability and assist in meeting the needs of existing and future employers and employees within the RRCC, and establish the RRCC as a place for career development.

There are a number of challenges concerning workforce development including:

- The number of available job seekers;
- Housing capacity and other employment barriers;
- Employability and technical skills among the talent pool; and
- A perceived lack of diverse career opportunities within the RRCC.

The opportunities to mitigate these challenges include space to accommodate a wide range of businesses, a plethora of local training opportunities and providers, proximity to the Louisville metropolitan area, and extensive access to highway, port, rail, and air transportation systems.

The challenges and opportunities of workforce development in the region have resulted in a strategic list of workforce priorities for the RRDA, including the need to the following.

ADDRESS BARRIERS TO NEW DEVELOPMENT

Barriers such as lack of transportation, childcare, and housing prevent new talent from joining the workforce of the RRCC. These issues can be addressed through collaboration with employers, the local workforce system, and community organizations that can leverage resources. By easing the burden of these employment barriers, new talent will be enabled to join the growing RRCC's workforce.

ADVANCE SKILLS OF CURRENT TALENT

The population in the areas surrounding the RRCC represents a pool of potential high-earning workers, if equipped with the necessary employability and technical skills. Employability skills ensure that individuals at all levels of an organization have the necessary professionalism, work values, communication, and leadership skills to meet employer demands. Likewise, technical skills ensure that individuals have the task-related knowledge and abilities needed to successfully complete their job responsibilities. As identified in the RRDA Training Inventory Database, over 1,500 training opportunities are available in the region, including programs to address both employability and technical skills. By working with the local workforce system RRDA can leverage existing programs such as Skill Up, 50,000 Degrees, and Ford Next Generation Learning – Pride Program and Work Ethic Certificate to link a talent pipeline to current and future RRCC business. The RRDA must promote and expand on these and other local assets in order to advance the skills of the current population to fill high-paying jobs.

ACCESS ADDITIONAL TALENT

Though the current population certainly holds the potential to fill high-paying jobs, it is critical to attract new talent in order to reach full capacity. There are opportunities to draw in talent from Jefferson County (KY), domestic talent from outside the region, and foreign talent. Over 30% of workers in Clark and Floyd counties commute to Jefferson County, Kentucky for work (30.6% and 32.7%, respectively). Efforts to market RRCC careers can draw workers who currently commute to Kentucky to work with the RRCC, thereby reducing their commute and allowing them to work inside their state of residence. Additionally, domestic talent from outside of the region can be drawn to the

WORKFORCE DEVELOPMENT RECOMMENDATIONS

	Short-Term Actions	Mid-Term Actions	Long-Term Actions
Hire Workforce Development Director 	Write job description Post job description Hire qualified candidate	Engage Region 10 Workforce Development Board Develop cross-sector partnership	Transition to Executive Director of partnership Oversee RRCC workforce development
Create Cross-Sector Partnership 	Build partnership on current foundation Establish name and operations	Conduct funding scan Implement workforce solutions Host workforce summit Develop career pathways	Continue partnership Publish/promote career pathways Receive support from public/private resources
Establish Onsite American Job Center 	Sign partner MOUs Identify site Establish operations	Begin operations Provide employability and technical skills training Provide career services	Provide customized jobseeker and business services Conduct onsite skills training

(Source: Thomas P. Miller and Associates)

RRCC by promotion of the quality of life and unique opportunities available. Living and working in the area surrounding Charlestown, Jeffersonville, and New Albany allows for a comfortable lifestyle with all of the benefits of living near a large city. Lastly, as reported in a recent study by Global Louisville, 2,078 foreign students came to the Louisville metro area on temporary visas between 2010 and 2012. Unfortunately, only 36% of these students secured employment to stay in the area after graduation, placing the Louisville area behind 48 other metro areas.[16] Furthermore, another study sponsored by Global Louisville reported that 21% of college-educated, foreign-born residents in Kentucky work below their education and skill level. Just over the Indiana border, high-paying Hoosier jobs are available and can be filled by foreign talent. Initiatives focused on retaining county residents, drawing domestic talent from outside of the region, and mobilizing foreign workers, in addition to marketing efforts focusing on employment opportunities and quality of place, will expand the talent available to fill high-paying jobs in the RRCC.

ALTER PERCEPTIONS OF THE RRCC

The public perception of the RRCC does not reflect the career opportunities available. Thought to offer only menial jobs with little opportunity for advancement, the RRDA must alter these perceptions by informing and engaging the community. The creation and promotion of career pathways, marketing efforts to explain the environment and diversity of jobs available, and an increase in high-paying job opportunities at the RRCC will contribute to advancing the public's perception and allow for quicker, more sustainable expansion.

To do so will require short-, mid- and long-term actions

Workforce development, which for the purposes of this plan is about careers as much as it is about jobs, a direct and purposeful roles and responsibilities for workforce development at RRCC and in the 15-county region is as much a conclusion as it is a set of proactive recommendations? Why? Consider that an agile and talented workforce makes it easier to achieve each of the following objectives:

- Retain and attract the highest and best land uses
- Generate enough increment to adequately support not only the construction, but the operation and maintenance of superior roadway infrastructure
- Increase the number of users necessary to substantiate utility upgrades and expansions at RRCC and in both municipalities
- Increase not only the total number of employees, but the talent available within the 15-county region
- Increase the average hourly wage for area workers
- Decrease the number of people who are underemployed
- Increase the assessed value over time and have a direct positive impact on all taxing units
- Collect enough revenue to fund the demolition and clean up that is needed at the north end
- Ensure that the RRDA is able to meet or exceed its development forecasts to the extent that the RRDA can avoid having to delay future investments or defer maintenance of past and present investments
- Firmly establish a value add proposition to anyone looking to expand or invest in the RRCC who might otherwise misinterpret the higher land sale prices as inflated land prices
- Differentiate the RRCC from other industrial-business parks by taking a proactive approach to the one aspect of job growth and development that has risen above all others; the availability of skilled labor

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MARKETING STRATEGY

Use this chapter to strengthen RRDA marketing efforts to create a memorable, experiential marketing strategy.

The following pages serve as a play book by which to scale the RRDA's current marketing strategy to a global level. From hosting guests at local and regional events and on-the-ground tours, to virtual customer experiences and traditional advertising campaigns, the RRDA seeks to invite interested parties to experience the RRCC like never before.

The most effective marketing strategy for the RRDA is one that directly engages buyers and invites and encourages them to participate in defining the experience offered by the RRCC. From site-selectors and workforce development partners, to news media and educators, the RRDA should seek as many face-to-face interactions as possible and to shorten the distance between the progress that is being made on the ground at RRCC and development prospects. In addition to being passive receivers of information, the types of businesses that the RRDA aims to attract are likely to look favorably upon the ability to develop a relationship, shared-identity with the RRCC "brand." In order to establish a memorable, experiential marketing strategy, the RRDA should consider the following.

SUPPLY CHAINS

The RRDA should directly market to companies that have proven to be successful in advanced technologies and services and have the added potential to build or strengthen local supply chains. Based on the target industry sectors described on the previous pages, this includes companies (or site selectors representing companies) that are known to use or produce one or more of the following:

- Automotive supplies
- Advanced automotive safety systems
- Plastics
- Industrial finance
- Insurance or data
- Shared services
- Robotics
- Additive manufacturing (i.e. 3D printing)
- Materials science
- Precision farming
- Agribusiness
- Synthetic biology
- Bioenergy
- Biotech, pharma, or medical devices
- Rail/transportation

MESSAGING

The central message in any direct or indirect marketing effort should explain to current and perspective property owners what they can expect in terms of:

- A talented and agile workforce
- Transportation access and connectivity
- On-site features and amenities
- Sustainable infrastructure

To do this effectively, consider that there are: relationships to cultivate, tangible benefits to placemaking, and experiences to be had. Relationships to cultivate include, but are not limited to: site selectors, heads of state and state and regional workforce and economic development partners. These key influencers should be seen as part of the RRDA family. An experiential marketing strategy centered on an event(s) where key influencers are brought to the RRCC and the opportunity to tour the property and meet with companies, on-site. As more and more developments come online, expand the tour to include the career center, dependent care facility, and event space(s), among others.

The Gateway District, natural areas, and higher design aesthetic already present throughout parts of the RRCC are the foundation upon which to foster a strong sense of place. The role of "placemaking" should be central to any key messages pertaining to the RRCC and RRDA; second only to experiential marketing.

The RRDA should identify a number of opportunities to go and visit with site selectors from the various target industry sectors with the intention of bringing them back to the RRCC to experience it first-hand. While they are here, it will be important to host them at area events so that they can hear from local leaders the degree to which the RRCC is supported by the region.

DIGITAL AGE

If they aren't already, virtual reality representations of the built environment are becoming must haves. They enable potential buyers the opportunity to

experience the RRCC or interact with the RRDA when they have the time. Examples include retargeting, where visitors to a company's website see reminder ads while browsing other sites, and geofencing, where a response is triggered when someone with a smart phone enters or leaves a particular area. Traditional media such as print advertising and billboards should become supplementary material.

SOCIAL MEDIA

As social media continues to gain in its importance, the RRDA should find ways in which to remind people of their experience at the RRCC. This is one area where social media can play a role in that it can be used to generate content that is conversational and communicate the RRCC brand, rather than a platform to sell property.

TARGETING FOREIGN BUYERS

Marketing at an international level requires a heightened understanding of different characteristics, habits, mannerisms, etc. that are prevalent throughout the culture of each foreign market. To translate a domestic campaign into a foreign campaign requires thoughtful consideration of cultural sensitivities, tone of voice, language, and the importance of trust in a business relationship.

SELLING A VISION

Trading in promises presents a unique set of circumstances. By maintaining and promoting a clear vision and acting on the strategic action steps that follow, the RRDA can paint a clearer picture in terms of what property owners can expect as the RRCC reaches full build out.

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CONTRACTING

ACTION PLAN

Use this chapter to identify the various ways in which the RRDA intends to honor its stated mission.

This chapter lists specific action steps needed to implement the strategies described herein.

The following is a list of high-level action steps related to each of the components of this plan. Critical path strategies, meaning action steps of a highly interdependent nature.

EXPERIENTIAL MARKETING

1. Carry out a customer experience audit to analyze the current experience of the RRCC
2. Create a brand platform and develop a touchpoint with customers taking into account the things buyers might aspire to that directly relate to the RRCC brand and the potential for co-branding
3. Design the brand experience to be participatory, hands-on, and tangible, including: hosting on-site tours and events, hosting guests at regional sporting and entertainment events, and developing virtual reality experiences
4. Communicate the brand proposition internally and externally; paying particular attention to a domestic campaigns ability to be translated into a global campaign
5. Monitor the performance of the brand against the RRDA's objectives by measuring the amount of dialogue that is being generated

SUSTAINABILITY

1. Exercise the option to extend the River Ridge UEZ designation one year to 2018, and then another five years to 2023.
2. Develop alternative options to continue to provide property tax incentives once the UEZ designation expires in 2023.
3. Explore the suitability of alternative revenue options, including land lease and master development agreements, to diversify the RRDA's revenue sources.
4. Begin structuring a financial plan for the demolition and clean-up of the former munitions plant and the north end region.

ECONOMIC DEVELOPMENT

1. Travel with State Departments of Commerce to meet with foreign delegates to build awareness of the opportunities at the RRCC
2. Establish and maintain a list of places in which to seek a speaking engagement, including: economic development organizations, local chambers of commerce, (Indiana and Kentucky) state finance organizations, site selector conferences, and target industry sector conferences
3. Develop and maintain a media relations plan to include a both a press release schedule and an editorial calendar

PROPERTY DEVELOPMENT AND REDEVELOPMENT

1. Update and then record the revised Declaration of Covenants, Conditions and Restrictions
2. Implement the signage master plan
3. Continue to pursue a master developer for the build-out of the Gateway District, with the added potential to do the same for the Research and Development Park/Campus under Scenario II
4. Work with the cities of Jeffersonville and Charlestown, and county and state highway departments to develop an overlay district for the SR 62 corridor
5. Update the RRDA's review and approval processes and development standards documentation to address issues and opportunities pertaining to redevelopment
6. Continue to pursue the potential for a land swap with the Indiana Department of Natural Resources

WORKFORCE DEVELOPMENT

1. Hire a workforce development director, and begin to lay the groundwork for the creation of an industry-led, cross-sector, self-funding partnership separate from the RRDA
2. Create the cross-sector partnership
3. Establish an on-site, American Job Center to provide a full range of assistance to job seekers seeking training referrals, career counseling, job listings and similar employment-related services under one roof

PUBLIC SAFETY

1. Prepare and issue a Request for Qualifications for the completion of a public safety facilities feasibility study
2. Manage the feasibility study process to, among other thing, ensure that facility space needs, the assessment of existing facilities, study recommendations, and the funding and financing options considered are in alignment with the overall objectives of this plan
3. Prepare and distribute a set of recommended updates for all applicable capital improvement plans to ensure that the project is able to move from the planning phase into the programming, design and construction phases

EVALUATING THE PLAN

Use this chapter to continue to reflect on the issues and opportunities that have been studied or evaluated, and to inform the next steps in the strategic planning process.

Monitoring and evaluating the planning activities and status of the implementation of this plan is as important to the RRDA as identifying the strategic issues and opportunities. This chapter establishes the key questions to ask when evaluating the plans relevance or effectiveness, and provides guidance on when it might be appropriate or necessary to deviate from the plan.

It is anticipated that the RRCC Strategic Plan will undergo regular bi-annual updates, but also that a major investment or development within or in proximity to the RRCC could also necessitate the need for an update to the strategic plan. For these and other reason, it will be important to regularly monitor and evaluate the plans implementation over time.

MONITORING THE PLAN

Key questions to consider while monitoring and evaluating the implementation of the plan could include the following:

1. Are the stated objectives being achieved or not? If they are, be sure to acknowledge and communicate the various achievements that have been accomplished. If there are stated objectives that are not being achieved, then consider the following follow up questions.
2. Will the stated vision be achieved according to the projected timelines identified in the plan? If not, then why?
3. Should the marketing strategy be changed, and why? To reflect what?
4. Does staff have adequate resources, including budget, equipment, facilities, training, etc., to complete the prescribed action steps?
5. What is the succession of the Board of Directors? Either as a whole, or the various individuals that have been appointed by their respective entity/community?
6. Are the stated objectives still relevant and do the action steps still make sense?
7. Have priorities changed? What about the assumptions that were made?
8. How do changes to the priorities and assumptions impact what is achievable in the long-term?
9. What have we learned that we can then use to improve and update the plan?
10. What might we want to do differently in terms of monitoring and evaluating the plan going forward?

REPORTING ON THE PERFORMANCE OF THE PLAN

In monitoring and evaluating the plans performance, the RRDA should seek to report their findings on a regular basis. A quarterly report demonstrating proof of progress year over year, would be one way to ensure that the plan is being implemented. Include, in the report, the following:

1. A summary of the answers to the key questions offered above.
2. Circumstances or trends – both internal and external - that are impacting progress (or lack thereof).
3. Recommendations as to the impact that the progress (or lack thereof) is having on both the organization, and the development of the park.
4. The necessary actions (including any deviations from the plan) on the part of the Board of Director's, the staff, or both.

UPDATING OR DEVIATING FROM THE PLAN

Because this strategic plan is a living and breathing document, and because of the Development Authority's need to continue to respond to changing market conditions, deviations from this plan are to be expected. When deviating from the plans recommendations be sure to:

1. **What?**
   Know the circumstances or trends that are influencing the desire (or need) to change or otherwise deviate from the plan
2. **Why?**
   Know why it is necessary or important to go in another direction
3. **Where?**
   Specifically identify the components of the plan that have or will be affected by the change/deviation
4. **When?**
   Maintain separate versions of the plan and note the various changes that are made over time within the document itself


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