

CHICAGO ILLINOIS USA



December 1, 2015

Mayor Rahm Emanuel City of Chicago 5th Floor, City Hall 121 N. LaSalle Street Chicago, IL 60602

Re: River Works: A Plan for Community, Jobs and Innovation

Dear Mayor Emanuel:

As a member of the board of directors of North Branch Works (NBW), I am pleased to present "River Works: A Plan for Community, Jobs and Innovation." This plan lays out a path forward for the redevelopment of the A. Finkl & Sons, A. Lakin & Sons and Gutmann Tannery sites (the River Works Sites). These three contiguous sites, totaling over 34 acres, are located in the Clybourn Corridor and Elston Corridor Planned Manufacturing Districts (PMDs). The River Works Plan calls for retention of these sites in the PMDs and promotes PMD-eligible uses, updated to reflect the needs of 21st century manufacturing and industry.

The River Works Plan was developed by NBW, a delegate agency to the City's Department of Planning and Development, and our partner the Delta Institute. It represents two years of planning, community outreach and collaboration with relevant stakeholders. It was funded by a grant of \$200,000 awarded to NBW from the US Environmental Protection Agency, joined by the Department of Housing and Urban Development and the Department of Transportation.

The foundation of the River Works Plan is the understanding that the planned manufacturing districts were created for and exist to:

- foster the stability and growth of manufacturing and industrial firms in the city;
- · attract new industry to the city; and,
- create a diverse and growing pool of jobs for Chicagoans at all economic strata.

In the 25-plus years since they were created, the four PMDs in the North Branch Industrial Corridor have been hugely successful. By creating a stable land-use environment, they have helped to retain hundreds of manufacturers and industrial businesses that employ nearly 10,000 workers. These four PMDs have seen over \$700 million in private investment by firms such as Wrigley, WaterSaver Faucet, CH Robinson and General Iron Industries.

The River Works Plan foresees building on this success, while acknowledging the evolving character of today's economy. In developing the plan, we performed a market study to identify the most suitable business types upon which to focus a redevelopment strategy. We identified:

INNOVATIVE PRODUCTS FOR RESEARCH

WaterSaver Faucet 701 W Erie St Chicago, IL 60654 312 666 5500 TELEPHONE 312 666 5501 FACSIMILE WSFlab.com

- advanced manufacturing technologies (UI LABS is literally 4 blocks south on Goose Island);
- · "makers movement" or artisanal production;
- light industrial;
- research and development;
- high tech office uses; and,
- industrial innovation districts.

The Plan then articulates thirteen redevelopment principles and five initiatives to promote these uses on the River Works Sites. Please refer to the Executive Summary for details on these principles and initiatives. The result is a plan for a market-backed redevelopment that captures and directs private investment. It builds on the successes of the PMDs, is compatible with existing industry and businesses located there and creates 21st Century jobs for a wide range of Chicago residents. The redevelopment contemplated by this plan would create up to 6,500 jobs and retain 10,000 jobs located throughout the North Branch Industrial Corridor and its four PMDS.

The principles and initiatives identified herein can and should be replicated in other areas of the City to maximize benefits for other communities with similar industrial development and workforce objectives. As you know, the Department of Planning and Development has completed a study of the PMDs and published "Chicago Sustainable Industries, A Business Plan for Manufacturing" (CSI Plan). The CSI Plan has many recommendations for modernizing and improving the PMDs. We now await DPD and the city's leadership to operationalize and implement these improvements to ensure the long-term benefits of these programs and policies.

It is no secret that demand for space in the North Branch Industrial Corridor is very strong. In this environment, there is no question that the River Works Sites can and will be redeveloped. We applaud the initiative and commitment of those who believe in the future of Chicago and are willing to invest their resources here. However, the challenge for the city is how to best guide the redevelopment to provide the maximum benefit for the city and its citizens. We believe the River Works Plan will help to do just that.

Thank you for your time and thoughtful consideration of "River Works: A Plan for Community, Jobs and Innovation." We look forward to working closely with you to achieve these benefits for Chicago.

Regards,

Steven A. Kersten

President

WaterSaver Faucet Company

0	INTRODUCTION	2
0.1	PREFACE by Steve Kersten - President, WaterSaver Faucet Company	2
0.2	TABLE OF CONTENTS	4
0.3	LETTERS OF SUPPORT	5
	ORGANIZATIONS LOCATION MAP	6 8
	LINCOLN PARK CHAMBER OF COMMERCE	9
	WICKER PARK BUCKTOWN CHAMBER OF COMMERCE SHEFFIELD NEIGHBORHOOD ASSOCIATION	10 11
	WRIGHTWOOD NEIGHBORS ASSOCIATION	12
	UI LABS	13
).4	AWARD ANNOUNCEMENT by Mayor Rahm Emanuel - City of Chicago	14
0.5	PROJECT TEAM	16
1	EXECUTIVE SUMMARY	19
1.1	PLANNING AREA + CHARACTERISTICS	20
1.2	PURPOSE	21
1.3	MARKET ANALYSIS	22
1.4	REDEVELOPMENT PRINCIPLES	23
1.5	REDEVELOPMENT SCENARIOS	24
1.6	RECOMMENDATIONS	26
2	BACKGROUND	31
2.1	PURPOSE	888
2.2	PLANNING AREA + CHARACTERISTICS	888
2.3	BENEFITS OF THE PLAN	888
2.4	FUNDING	888
2.5	PLAN BACKGROUND	888
2.6	STUDY PROCESS	888
2.7	STUDY CONTEXT	888
3	MARKET STUDY	43
3.1	PURPOSE	888
3.2	PLANNING AREA + CHARACTERISTICS	888
3.3	BENEFITS OF THE PLAN	888
3.4	FUNDING	888
3.5	PLAN BACKGROUND	888
3.6	STUDY PROCESS	888
3.7	STUDY CONTEXT	888

4	REDEVELOPMENT VISION	53
4.1	REDEVELOPMENT PRINCIPLES	54
4.2	REDEVELOPMENT SCENARIOS	55
5	IMPLEMENTATION	67
5.1	RECOMMENDATIONS	68
6	ATTACHMENT[i]	81
6.1	PMD LAND USE REGULATIONS + ENABLING LEGISLATION	82
6.2	PERMITTED PMD USES	83
6.3	ECONOMIC BENEFITS OF AN INDUSTRIAL INNOVATION DISTRICT	84
6.4	STUDY AREA CHARACTERISTICS	89
6.5	ENVIRONMENTAL + OTHER PHYSICAL CONDITIONS	100
6.6	INFRASTRUCTURE + UTILITY ISSUES	101
6.7	MARKET STUDY INTERVIEWS	102
6.8	STAKEHOLDER INVOLVEMENT	106
6.9	LAND USE PRECEDENT	108
6.10	AMENITIES PRECEDENT	114
6.11	DENSITY OF REDEVELOPMENT SCENARIOS	118
6.12	MOBILITY ENHANCEMENT DETAILS	119
6.13	RELEVANT SUSTAINABILITY BEST PRACTICES	127
6.14	PLANNED DEVELOPMENT ZONING PROCESS	129
6.15	FEDERAL GRANT RESOURCES	130
7	ATTACHMENT[II]	137
	NORTH BRANCH INDUSTRIAL CORRIDOR TRANSPORTATION FRAMEWORK PL	.AN
8	ATTACHMENT [III]	151
	TRANSPORTATION MANAGEMENT ASSOCIATION WHITE PAPER	

90 AVONDALE LOGAN SQUARE **PALMER** SQUARE HUMBOLDT PARK GARFIELD PARK

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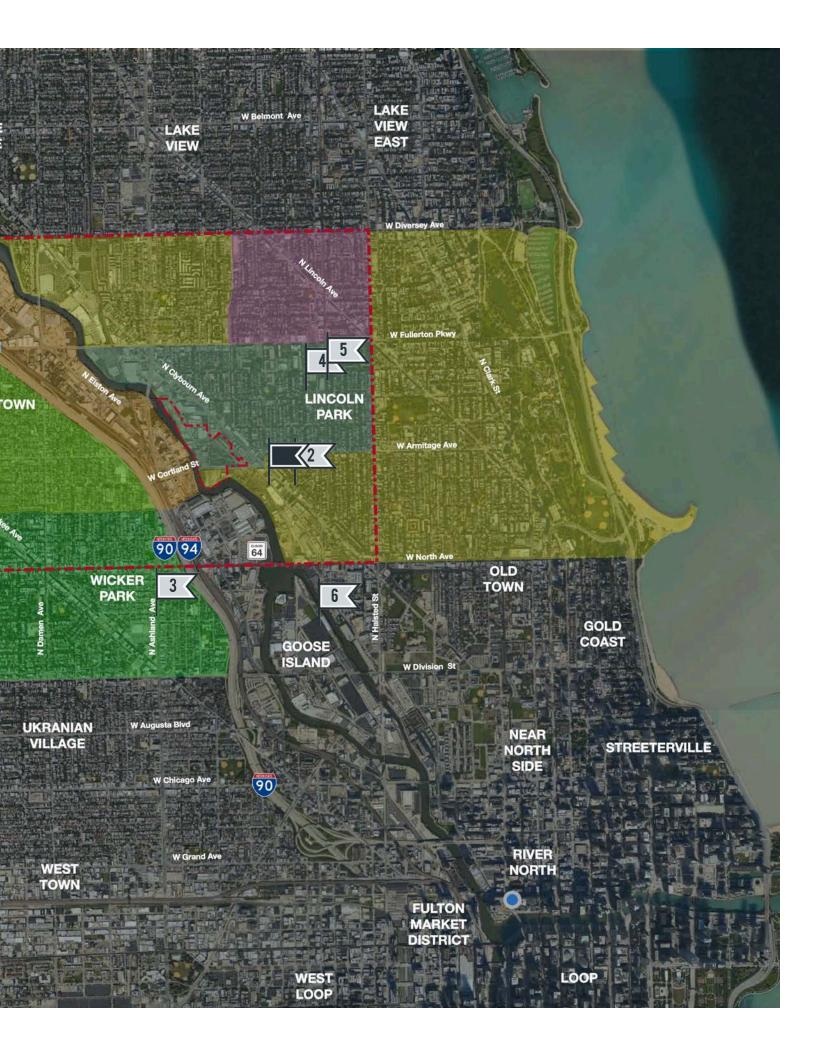
VILLAGE

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BUCKT

SUPPORTING ORGANIZATIONS

- LOGAN SQUARE NEIGHBORHOOD ASSOCIATION 1
 - NCOLN PARK CHAMBER OF COMMERCE 2
- WICKER PARK BUCKTOWN CHAMBER OF COMMERCE 3
 - CHEEFIFI N NEIGHBODHOOD ACCOCIATION A
 - WRIGHTWOOD NEIGHRORS ASSOCIATION 5
 - III LABS F
 - NORTH BRANCH WORKS <





Logan Square Neighborhood Association

2840 N MILWAUKEE AVE • CHICAGO, ILLINOIS, 60618 PHONE (773) 384-4370 • FAX (773) 384-0624 www.isna.net

October 15, 2015

Mike Holzer North Branch Works 1866 N. Marcey St. Chicago, IL 60614-4820

Dear Mike:

As you know, the Logan Square Neighborhood Association (LSNA) is a multi-issue, non-profit community organization serving the Chicago communities of Logan Square, Avondale, Hermosa and the Lathrop Homes. Founded in 1962, LSNA leads issue campaigns and provides a range of programs and services. We work on issues of education, housing and land use, living wage jobs, immigration, crime prevention and health. The eastern edge of the Logan Square community area is directly across the Chicago River from the former Finkl Steel site.

We are proud to have partnered with North Branch Works several times over the past 25 years on strategies to attract and sustain permanent, head-of-household jobs in our community.

We are writing to confirm our strong support for the 13 Redevelopment Principles and the Five Recommendations contained in the North Branch River Works Plan for Community, Jobs and Innovation prepared by North Branch Works. In addition, LSNA is willing to work with NBW in a coalition of stakeholders to advocate that all of these principles and recommendations are implemented to the greatest extent possible in the redevelopment of the River Works site.

I will be LSNA's point person in this effort. I can be reached at <u>jmcdermott@lsna.net</u> or at (773) 384-4370. Please keep me informed of the next steps as they emerge. Thank you for your leadership in this crucial effort!

Sincerely,

John McDermott

Housing & Land Use Director

John A. Muzer moto fr.

cc: Nancy Aardema, Executive Director

Daniel LaSpata, Co-Chair, LSNA Housing & Land Use Committee

J. L. Gross, Lathrop (Homes) Leadership Team



1925 North Clybourn, Suite 301 Chicago, IL 60614 TEL 773.880.5200 FAX 773.880.0266 www.lincolnparkchamber.com

October 7, 2015

Mike Holzer North Branch Works 1866 N. Marcey Street Chicago, IL 60614-4820

Dear Mr. Holtzer:

The Lincoln Park Chamber of Commerce (LPCC) is a business and community organization that supports and celebrates Lincoln Park as a thriving place to live, work and play. We are writing to confirm our support for many of the ideas presented in the Redevelopment Principles in the North Branch River Works Plan for Community, Jobs and Innovation prepared by North Branch Works (NBW).

We agree that:

- Any future use of the catalyst sites should prioritize uses that support a diverse economy and that create and retain high-quality, head-of-household jobs that are available to a diversity of Chicagoans.
- Any redevelopment efforts should address the critical transportation issues of this corridor for all users and should encourage connections between the adjacent neighborhoods.
- Any redevelopment should use sustainable development practices as it relates to the larger community, and should also address any necessary environmental assessment and cleanup of the sites.
- Community, business, and neighborhood groups should be involved throughout the planning and redevelopment process to ensure continued community input and support.
- Because of the strong real estate market in the area, public resources and entitlements should be deployed only to obtain public benefits from the new development at the sites.

Furthermore, the LPCC supports the much of the Five Initiatives Moving Forward, especially that:

- The City should meet with current and future property owners to coordinate the redevelopment of these sites to develop a master development plan considering the ideals above and involving community stakeholder groups.
- Thorough mobility and transportation studies, planning, and strategy should continue as quickly as possible.
- End users for any redevelopment should be recruited to the site.
- · Community stakeholders should negotiate a Community Benefits Agreement with the purchaser(s) of the sites, and Local Hiring Agreements should be negotiated with any end users of the sites.

Finally, the LPCC is willing to work with NBW in a coalition of stakeholders throughout the planning and redevelopment of the River Works site to ensure that these ideals are taken into consideration and implemented. Martin Sorge and I will be our point persons in this effort. We can be reached at kim@lincolnparkchamber.com, martin@lincolnparkchamber.com or by phone at (773) 8890-5200. Please keep us informed of the next steps as they emerge.

Sincerely

President and CEO



WPB Chamber of Commerce 1414 N Ashland Chicago, Il 60622 T 773-384-2672 F 773-384-7525 wickerparkbucktown.com

November 2, 2015

Executive Director: Erik Harmon

ETIK Harmon

Officers:
David DeSanto
President
TransNational Bankcard

Steven Vargas Vice President Pro Mobile Websites

Albert Spenadel Treasurer Spenadel Tax & Accounting Services

Chad Johnson Secretary Elevenzees

Directors: Mike Cho Wicker Park Tavern & Café

Absinthe

Michelle Gomez

MGO Fashion

Roberto Gomez Subterranean

Pamela McNeal Chicago Athletic Club

Genna Saccomonto Double Door

Erica Sloter Fatpour Chicago

Joseph Spataro Waddell & Reed

David Stearns Bar Bar Black Sheep

Justin Jahnke
Super Dog Walking
Nancy Stark
Clinical Device Group

To: Mike Holzer

North Branch Works 1866 N. Marcey Street Chicago, IL 60614-4820

Dear Mike:

The Wicker Park Bucktown Chamber of Commerce (WPBCC) is an organization that serves the interests of businesses and residents in the Wicker Park and Bucktown neighborhoods.

Thank you for coming in to present to the Chamber your North Branch River Works Plan for the redevelopment of the Finkl, Lakin and Gutmann properties.

There are many parts of the plan that we strongly support, and we would like to continue to be included in the process of further plan development, along with the other community organizations joining your coalition of stakeholders.

Aspects of the plan that are of particular interest and concern to the Chamber are:

- The revitalization of Cortland and Southport Avenues, providing pedestrian routes, bicycle lanes and vehicle access to and through the property, helping to create a strong connection between Bucktown/Wicker Park and Lincoln Park,
- The enhancement of public transportation to and through the area for residents and workers, such as restoration of the CTA's #33 Magnificent Mile Express and #41 Elston/Clybourn routes and extending the River Taxi north to Cortland,
- The introduction of pedestrian level commercial amenities,
- An increase in green space and pedestrian access to the river.

Please keep us updated on the process and informed of upcoming meetings. Erik Harmon will serve as point person for this project, and can be reached at 773-384-2672 or erik@wickerparkbucktown.com. We look forward to working together for the benefit of all the surrounding communities.

Sincerely,

David DeSanto

President, Board of Directors

Wicker Park Bucktown Chamber of Commerce



October 16, 2015

Mr. Mike Holzer North Branch Works 1866 North Marcey Street Chicago, IL 60614-4820

Re: North Branch River Works Plan

Dear Mike:

I am writing this letter on behalf of the Sheffield Neighborhood Association (SNA) to confirm that we support the 13 Redevelopment Principles and the 5 Recommendations in the North Branch *River Works plan for Community, Jobs and Innovation.* A resolution of support has been approved by the board of the SNA. As you know, most of the Finkl site and the Lakin site are located within the boundaries of the SNA and the development of these properties is of great concern and interest to the SNA and the residents of our area.

The Sheffield Neighborhood Association looks forward to working with North Branch Works and other stakeholders in connection with the redevelopment of the River Works site and addressing the transportation and other issues arising out of that development.

If you have any questions please feel free to contact me at 312-855-0995 or tedwrob@msn.com or contact the SNA at the email address below.

Very truly yours

TED WROBLESKI

Vice President and Chairman of the Planning Committee, Sheffield Neighborhood Association

Garden District of Chicago

2233 North Kenmore Street • Chicago, Illinois 60614 •
SheffieldNeighborhoodAssociation@hotmail.com



WRIGHTWOOD NEIGHBORS ASSOCIATION P.O. BOX 147179 CHICAGO, ILLINOIS 60614-7179

September 21, 2015

Mike Holzer Executive Director North Branch Works 1866 N. Marcey Street Chicago, IL 60614-4820

Dear Mr. Holzer:

The Wrightwood Neighbors Association is a 53-year-old neighborhood association that represents residents, businesses and institutions in the area bounded by Halsted, Fullerton, Lakewood, and Diversey.

We support the 13 Redevelopment Principles and the 5 Recommendations in the North Branch River Works Plan for Community, Jobs and Innovation prepared by North Branch Works. The plan will provide a vision, guidelines and suggestions to the future developer(s) of this 42-acre site.

Furthermore, the Wrightwood Neighbors Association will work with NBW in a coalition of stakeholders to advocate that all of these principles and recommendations are implemented in the redevelopment of the River Works site.

Allan Mellis will be our point person(s) in this effort. He can be reached at mellisfamily@rcn.com 773-327-9123.

Please keep us informed of the next steps as they emerge.

Sincerely

Justin Moore President

Cc: Allan Mellis

Wrightwood Neighbors is bounded by Halsted, Lakewood, Fullerton and Diversey. It is an affiliate of the Lincoln Park Conservation Association.

UI LABS

10/2/2015

Mr. Mike Holzer North Branch Works 1866 N. Marcey Street Chicago, IL 60614-4820

Dear Mike,

This is a letter of support for North Branch Works for its leadership in creating the North Branch Works River Works Plan for Community, Jobs and Innovation.

As a fellow stakeholder in the manufacturing and innovation community in Chicago, UI LABS was pleased to see that Chicago's advanced manufacturing agenda and the goal for the area to become a business innovation district were the top two redevelopment principles.

UI LABS solves large-scale societal challenges by forming industry-driven consortia to close the gap between innovation and commercialization. Located on Goose Island, UI LABS is developing a portfolio of applied research and commercialization Labs that lead to a return on investment for its partners, improve local, regional and national competitiveness, and transform entire industries.

Although Goose Island is not within the boundaries of the River Works Plan, we realize the surrounding area that comprises the plan shares many attributes with Goose Island — specifically the limited transportation options reducing accessibility. The Plan's efforts to ensure the site drives economic development would benefit UI LABS, our community and Chicago.

Please feel free to contact me at caralynn.collens@uilabs.org or Marty Malone, UI LABS Communications and Outreach Coordinator, at marty.malone@uilabs.org regarding UI LABS' support for North Branch Works.

Sincerely,

Caralynn Nowinski Collens, M.D. Chief Executive Officer, UI LABS

UI LABS | 1415 North Chery Avenue, Chicago, Illinois 60642 | www.uilabs.org

CITY OF CHICAGO

2015 NEIGHBORHOOD BUSINESS DEVELOPMENT CENTER AWARD WINNER

NEIGHBORHOOD ENGAGEMENT



OFFICE OF THE MAYOR CITY OF CHICAGO

RAHM EMANUEL MAYOR

November 19, 2015

Dear North Branch Works (NBW):

Congratulations on winning first place in the City's Neighborhood Business Development Center 2015 Awards in the "Neighborhood Engagement" category for your "A. Finkle & Sons and Adjacent Sites Redevelopment Plan" in Lincoln Park. This is an example of the development and successful implementation of a neighborhood engagement project that connects businesses with the community.

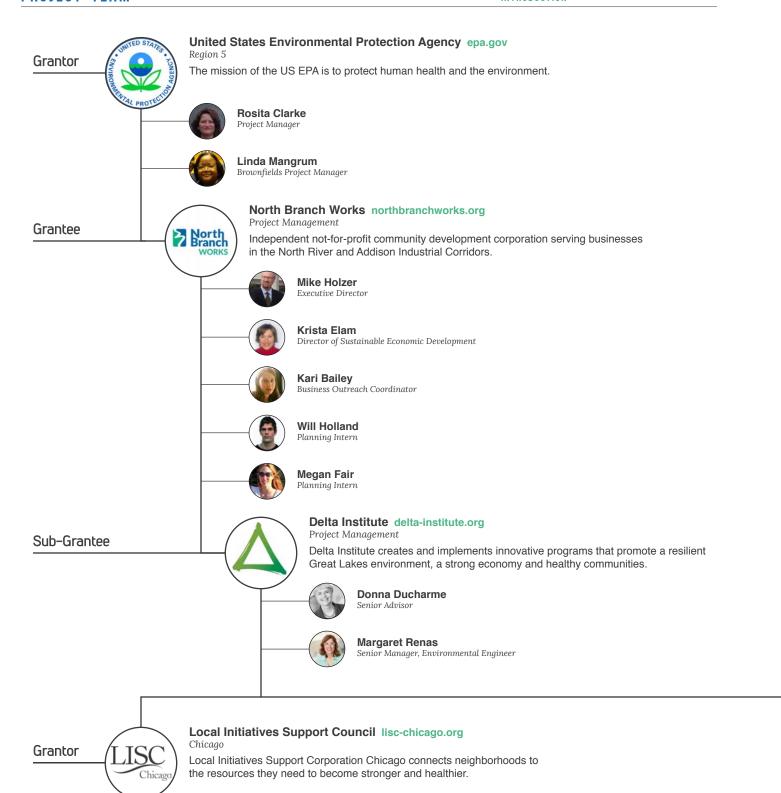
NBW is driving economic development in Chicago, and your organization's hard work and creativity contribute to making both Lincoln Park and Chicago's neighborhoods thrive.

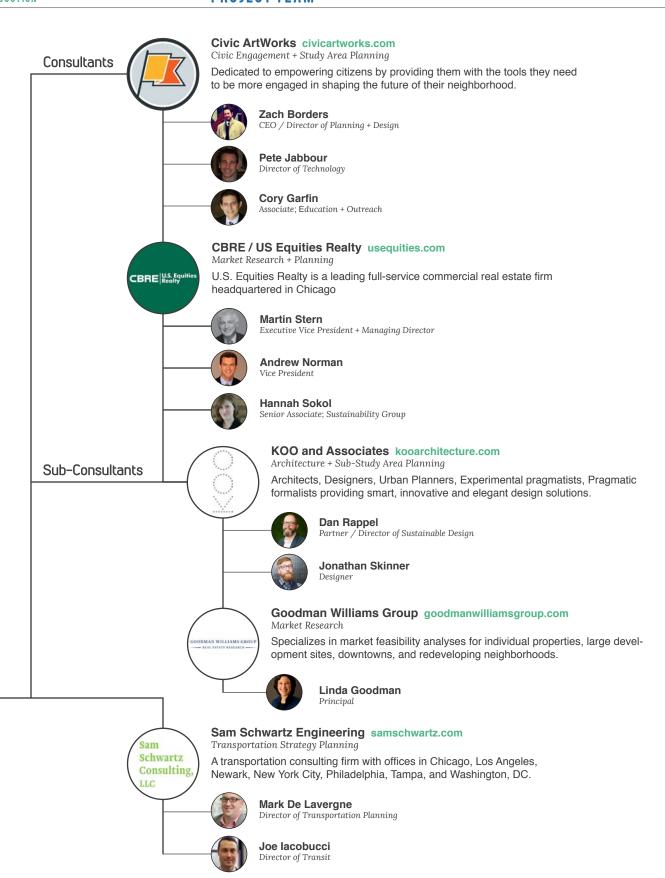
The "A. Finkle & Sons and Adjacent Sites Redevelopment Plan" serves as a model for other business organizations throughout the City as a way to make our Small Business Growth Strategy a reality by making new resources and services available to small businesses and demonstrating a strong partnership with City Hall.

Thank you for everything you do for Chicago's small businesses.

Sincerely,

Mayor





1

EXECUTIVE SUMMARY

NORTH BRANCH RIVER WORKS

River Works is a 34-acre development site located within the North Branch Industrial Corridor. It is comprised of three component properties—the former A. Finkl & Sons, A. Lakin & Sons, and Gutmann Tannery properties (figure 1.1).

River Works Component Properties

The plan examines development of a business innovation district within the context of a larger Study Area, which extends from North Avenue (south) to Diversey Avenue (north) to Halsted Avenue (east) to Western Avenue (west) (figure 1.2). The Study Area is comprised of adjacent industrial areas (figure 1.3), a retail district (figure 1.4) and residential community areas (figure 1.5) that will be most impacted by the redevelopment of the River Works catalyst sites and the likely subsequent redevelopment of other nearby sites in the North Branch Corridor.

River Works is characterized by proximity to infrastructure that supports industry, Planned Manufacturing District (PMD) zoning, strong private investment throughout the industrial corridor and proximity to a highly skilled workforce, retail and entertainment amenities and educational institutions. The North Branch Industrial Corridor and its four PMDs (figure 1.6) have been successful. Demand for building space there is strong relative to other industrial areas in the region, with an availability rate (available building sf/total rentable building sf) of 6.3% according to CoStar data, compared to 6.6% citywide, and 8.1% across the Chicago region.

Public and private investment has been strong and is growing in the area. Private investments range from construction of Wrigley's Global Innovation Center (figure 1.7) to Water Saver Faucet's (figure 1.8) advanced manufacturing expansion. CH Robinson (figure 1.9) and Coyote Logistics (figure 1.10) have established large freight forwarding business in the area. Large, older, multi-story buildings have become home to smaller businesses such as Chicago Local Foods (figure 1.11) and ReSource Point of Sales. South Street Capital has purchased two properties on Goose Island and is planning to develop new high tech office space (figure 1.12). UI LABS (figure 1.13), founded through a public-private partnership, is investing over \$340 million in a research and commercialization collaborative for manufacturers. Sterling Bay recently purchased the Gutmann and Lakin portions of River Works.



Figure 1.2

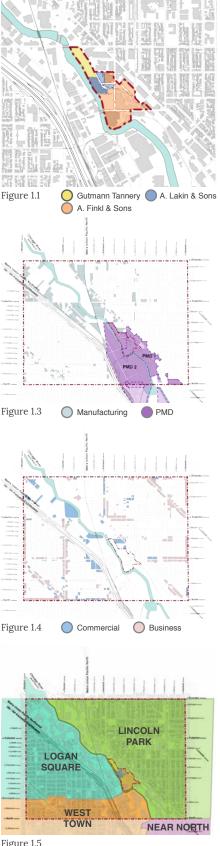
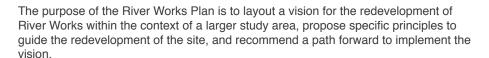


Figure 1.5





The path proposed in this plan will result in a wide range of benefits to the existing and future businesses of the North Branch Industrial Corridor, the surrounding residential communities and the city economy as a whole. These benefits include:

- Good paying jobs created and retained with a mix of skill levels suited to nearby residents and Chicagoans in general;
- A model to pilot the "urban innovation district of the future" featuring sustainable development practices, diversity of land use through connectivity and a mix of emerging innovation businesses;
- Compatible development that supports rather than destabilizes the existing business base and is compatible with the surrounding residential communities;
- Mobility solutions to address the well-known transportation problems that hinder the market in this area;
- Economic multipliers and tax benefits that are greater than other reuse alternatives;
- Redevelopment principles with broad based support among River Works diverse stakeholders to guide the ultimate redevelopment plan; and
- Implementation strategies crafted to ensure redevelopment that supports the community's goals, creates jobs, and fosters the innovation economy.

The highly sought after characteristics of the River Works site forms the basis for a future business innovation district. This large site is rare and also presents a unique opportunity to model sustainable employment generating development and to envision the PMD of the future.



Figure 1.7



Figure 1.8



Figure 1.11



Figure 1.9



Figure 1.12



Figure 1.10



Figure 1.13

1.3

The market analysis prepared by US Equities / CBRE found that it is reasonable to expect continued and heightened focus on opportunities for industrial business growth and investment on the North Branch Corridor. Furthermore, it is not necessarily the case that these competitive properties and the River Works site are in a zero-sum competition for finite market. More likely, the fact that the North Branch Industrial Corridor PMDs are just now seeing the leading edge of this tech, creative, and collaborative business investment may translate into the creation of net new local demand for space. The very nature of these collaborative activities means that a growing critical mass of businesses and business amenities will encourage yet more local growth.

Land values, based on land sales (greater than a half-acre in size) in the North Branch Corridor since 2008, have ranged from \$37.48 to \$64.92 for manufacturing or PMD zoned land. The average price for industrial land in Chicago is \$22.45 per square foot.

River Works appears to be very competitive for a wide-range of business types that defy simple categorization. The competitive appeal may be better illustrated by listing the characteristics of businesses that may be drawn to locate and invest in the River Works site. These characteristics include the following:

- Companies with a significant component of skilled, creative, and professional staff:
- High value / low volume production;
- Entrepreneurial activities and "makers", where individuals and very small companies have access to shared equipment and support;
- Collections of very small light industrial, professional, and creative businesses that can exist in multi-story buildings;
- Design, graphics, engineering, and scientific services, perhaps with contract manufacturing elsewhere;
- Tech and tech-related firms;
- Other office uses seeking non-CBD, non-traditional environments, less expensive environments for their business economics and employee recruitment;
- "Last-mile" distributors that indirectly serve the dense consuming population (residents, workers, tourists, etc.) of the central area;
- · Craft breweries and distilleries;
- Other specialty food and beverage companies;
- Due to the relative large size of the River Works opportunity in a dense environment, a corporate headquarters or anchor R&D facility;

With the PMD modernization changes already proposed to the Chicago Department of Planning and supported by NBW, all of these uses would be PMD eligible.

Makers definition

Existing conditions research, market assessment and stakeholder input were all considered in crafting redevelopment principles for River Works. These principles were approved by the Community Stakeholder Advisory Group and are also appropriate for future redevelopment sites in the four North Branch Industrial Corridor PMDs in the fu-

ture. They should be used to evaluate the final redevelopment plan/

plans for River Works.

- The redevelopment should help implement Chicago's advanced manufacturing agenda in a manner that is consistent with the current and anticipated marketability of the area.
- 2. The site should be developed as a business innovation district and should maximize the benefit and synergies of the three adjacent catalyst sites.
- 3. New uses should build upon the success and investment that have happened in the PMD and be consistent with the PMD zoning.
- 4. Priority should be given to firms locating in the district that maximize the creation of head-of-household jobs for employees that include a wide range of education, skill level and socio-economic backgrounds.
- Environmental site assessments and clean-up, if necessary, should support the redevelopment plan for the site.
- 6. Efficient movement of traffic and parking solutions on site should be considered and the project should address these issues through street layouts and in new and creative ways such as public transit, alternative transport such as cycling, car-sharing, etc., and promoting rail and river use to reduce traffic. Traffic plans should align this redevelopment with solutions to these problems in the surrounding area and with other plans.
- 7. The River Works development should connect to and serve as a connection between the neighborhoods to the east, west, north and south where possible without compromising the other redevelopment goals.
- The business innovation district should be able to coexist with the wide range of uses (from existing heavy manufacturing to newer high tech uses) in the area and address existing companies' expansion, retention and relocation needs as well as minimize potential problems between the existing businesses and new users.
- Opportunities for public access to the river and river's edge should be encouraged where appropriate but not at the expense of commercial river users (for example: barges and water taxi services).
- I O. The project should employ sustainable development practices as it relates to the larger community through infrastructure, transportation, green space and river access and in site planning and building design, materials, function and operations.
- II. New initiatives and resources should be leveraged to support implementation of this redevelopment plan, all of which should be mutually reinforcing and supportive of implementation of other existing community plans in the area.
- I 2. Development in the area should adhere to these principles. North Branch Works, existing neighborhood groups and community institutions should be involved throughout the planning and redevelopment process to ensure implementation of these principles and continued community input and support.
- I 3. Because of the strong real estate market for innovation businesses in the area, public resources and entitlements (such as TIF and zoning flexibility) should be deployed only to obtain greater public/community benefits from the new development at River Works.

Three redevelopment scenarios were explored for River Works based upon the likely ownership options.

Scenario 1

The catalyst sites are sold individually by their **separate owners**

In this scenario individual property transactions and independently-developed parcels would likely minimize the vacation and reconfiguration of rights-of-way and the ability to plan the site comprehensively. There is the possibility that not only would the three separate parcels be developed independently, but that smaller discrete parcels may be sold and developed in piecemeal fashion (e.g. the portion of the former Finkl property south of Cortland, or the triangle formed by Cortland, Southport, and Kingsbury, etc.). Redevelopment features that are more impactful when coordinated, such as many sustainability features, are less likely in this parcel-by-parcel strategy. This scenario increases the burden of the Planned Development process (described later herein) and on City staff to take a comprehensive view of area redevelopment as individual projects are approved.

Scenario 2

The catalyst sites are sold together to a **master developer**

The master developer scenario would involve negotiated purchases with all three owners, by a single development entity, either simultaneously or in close sequence. This would allow for comprehensive project planning across the entire site area, which would maximize the potential for flexible site planning, right-of-way reconfiguration, and parking and traffic management, coordinated site amenities, and sustainability features. Significant public access to the river is more likely to result from the master developer scenario. It would provide the opportunity to site various uses in an efficient optimal way, and phase development to support overall project feasibility.

Scenario 3

The catalyst sites are sold together to a large company as a corporate campus

An additional possibility is that a single large corporate user would secure a significant portion of the study area and either self-develop or utilize a fee developer or sale-leaseback mechanism to control and occupy space. In this approach, the corporate user provides much of the capital and/or the guarantees that minimize the investment and risk required from a developer. In turn, at-risk development capital can be deployed on related projects elsewhere in the study area, targeting the markets and users that are leveraged by the presence of the corporate anchor. The corporate campus scenario offers great opportunity for the amenities, flexibility and coordination described in the master developer scenario above, but the public access to and benefit from these elements such as the river trail and green space access or right of way configurations will depend, in part, upon corporate policy and campus design.





1.5

Design Elements

- Existing parcels individually sold
- No right-of-way reconfiguration
- Building re-use
- Raised two-way bike path along Cortland Street.

Building + Site Data

Master Plan Area:

34.02 Acres (1,482,006 sf)

Total Lot Area:

25.85 Acres (1,125,821 sf)

Total ROW Area: 8.18 Acres (356,320 sf)

Approx. Total Building Footprint Area: 14.33 Acres (624,397 sf)

Approx. Individual Building Footprint Area:

A: 37,553 sf

B: 94,922 sf

C: 53,484 sf

D: 26,459 sf

E: 40,666 sf F: 47,351 sf

G: 15,753 sf

H: 83,419 sf

I: 22,675 sf

J: 37,494 sf

K: 44,877 sf

L: 13,425 sf M: 106,319 sf



Design Elements

- Master Developer reassembles parcels in preparation for new sales and leases
- Major right-of-way reconfiguration
- Minimum building re-use
- Transportation node
- Raised two-way bike path through center of the site

Building + Site Data

Master Plan Area: 34.02 Acres (1,482,006 sf)

Total Lot Area:

27.44 Acres (1,195,078 sf) Total ROW Area:

6.58 Acres (286,624 sf)

Approx. Total Building Footprint Area: 13.86 Acres (603,685 sf)

Approx. Individual Building Footprint Area:

A: 107,553 sf

B: 220,142 sf C: 41,385 sf

D: 40,697 sf

E: 51,281 sf

F: 51,583 sf

G: 57,447 sf

H: 13,425 sf

I: 58,561 sf

J: 31,611 sf K: 60.953 sf

Figure 1.15

Design Elements

- Corporate anchor purchases and occupies the majority of the site
- Southport remains closed to public - Building re-use
- Minor right-of-way reconfiguration
- Raised two-way bike path along Cortland Street.

Building + Site Data

Master Plan Area:

34.02 Acres (1,482,006 sf)

Total Lot Area:

27.66 Acres (1,204,772 sf)

Total ROW Area:

6.36 Acres (277,041 sf)

Approx. Total Building Footprint Area: 13.34 Acres (581,113 sf)

Approx. Individual Building Footprint Area: A: 37,553 sf B: 50 139 sf

C: 53.484 sf

D: 294,809 sf

E: 44,073 sf

F: 13,425 sf G: 67,807 sf

H: 19.823 sf



Figure 1.16

The land uses in all three scenarios reflect the conclusions found in section **3 Market Study** of this document. While the types of uses are the same for all three scenarios, the mix is different for each. The primary land uses included in all scenarios are:

- · R&D Facility or Large Corporate Anchor
- · Multi-Tenant Tech Office
- Maker Space
- Industrial Flex Space
- · Brewery / Distillery

These primary land uses are joined by other, supporting, land uses that improve the site for everyday users and, in some cases (especially around the site edges), the general public as well.

- Ancillary Commercial Amenities (such as restaurants and retail sales of products produced on site)
- Structured Parking
- Surface Parking
- Plaza / Open Space
- Public Urban River Trail
- Public River Access
- Public Transportation Node

The three scenario plan diagrams on the previous page show the site layout for each scenario and the distribution of the primary and support uses on the site.

The use variations between the three scenarios are illustrative of the different use mixes that might be developed on the site and should be viewed as variable and interchangeable.

The conceptual River Works site schemes have building footprints totaling 580,000 to 625,000 square feet. At the assumed Floor Area Ratio (FAR) for each scenario, this equates to between 690,000 square feet to 1,900,000 square feet of building space which, even for a high-demand location, is a significant amount of space to be absorbed by the market.

While the River Works plan has taken the first critical steps to identify stakeholder opinions and goals, determine the existing conditions in the area, assess the market, develop redevelopment principles, create prototype redevelopment options to meet community, city and regional goals, and recommend a path forward, this effort is the beginning and not the end of the redevelopment process. As noted above, this process will take years rather than months to complete.

Additional planning and implementation steps must be taken in order to ensure that the ultimate redevelopment of the River Works site is a model of sustainable, employment-rich, development that complements the existing business base and addresses key community concerns such as traffic congestion + mobility, open space, river access, and diverse job opportunities.

Five initiatives should be undertaken to move the redevelopment of the River Works site forward toward the community, jobs and innovation goals desired. These initiatives require public, private and community cooperation ranging from informal

dialogue to formal legal agreements.

FIRST

1.6

As the foundation of further action by all public, private and community actors, the City of Chicago should adopt the Redevelopment Principles created and affirmed through this multi-stakeholder process. This would be similar to the City's support of the redevelopment principles recently developed as part of the community stakeholder process undertaken to further the redevelopment of the Fisk and Crawford coal plants. The redevelopment principles for River Works blend the concerns and goals of most residents, employers, and employees in the area as identified through the organizations that represent them as well as through the majority of comments shared by individual citizens.

SECOND The City should meet with the property owners as soon as possible to determine the status of their marketing / sales efforts and whether a unified development outcome is still possible. If a master development approach is possible, it should be determined how it will be accomplished. If a master developer or large corporate user is identified, one coordinated approach to site redevelopment can be negotiated.

> If a unified development approach is unlikely, the City should prepare itself, with help and involvement from NBW and the community stakeholder advisory group it has organized, to determine the desired elements of a working master development plan. This can be done using the Redevelopment Principles and the three scenarios presented herein as a basis for decision making. Negotiations with the separate buyers for entitlements and incentives should be conducted with the working master development plan in mind.

The full range of community / public benefits described should be considered in assessing and / or developing the master plan. These benefits should be codified in formal agreements between the developers and the City including the PDs, TIF Plan and Redevelopment Agreements.

THIRD

Mobility and transportation strategy planning should continue for the area as quickly as possible. If CDOT's LTA application (described in section 5 Implementation) to CMAP is approved, this work will begin for the Study Area portion of the North Branch Industrial Corridor soon. (CDOT plans to submit an application for the southern portion of the North Branch Industrial Corridor next year.) If the LTA grant is not approved, other funding. possibly TIF, RTA or US DOT TIGER funds, should be obtained as soon as possible. While awaiting funding, interim steps such as organizing the key decision makers to support this effort and/or hosting an Urban Land Institute panel should be considered to continue forward momentum on this issue. Immediate action on the mobility and transportation strategy is important to relieve stakeholder concerns but also to enhance the marketability of the site(s) to potential users.

Based upon the results of these efforts, a determination should be made regarding whether to establish a TMA or an SSA to implement components of the plan and to ensure that emerging mobility concerns are addressed as the North Branch Industrial Corridor continues to develop.

FOURTH Based on the Redevelopment Principles, the development approach and master development plan, end users should be recruited. As noted above, the private real estate community, the City as well as NBW and local firms can help in the recruitment of appropriate businesses. A key part of this effort will be to identify those parts of the master plan, such as a maker space, sustainability elements and / or better internet connectivity, which require some sort of a public / private / community partnership to establish and to determine who will take the lead on such initiatives.

FIFTH The Community Stakeholder Advisory Group, established by NBW to guide this planning process, should continue working together until the site is fully redeveloped. It should provide on-going input to the City and to the owners and purchasers of the River Works site(s) informally as well as formally in public hearings and negotiations. This group should participate in assessing or developing a master plan for the site (with or without the involvement of the landowners and / or the City). Most importantly, it should negotiate a collective Community Benefits Agreement with the site's(') purchaser(s) that mirrors or, when necessary, surpasses the City's negotiated agreements to ensure that their various concerns and goals are incorporated into the final development and they are not divided by offers to address the concerns of some, but not other stakeholder communities. As a corollary to the Community Benefits Agreement (Referenced, Local Hiring Agreements should be negotiated with the end users. The River Works developers should agree to inform their purchasers or tenants of this expectation upfront when they are considering their location decision.

The River Works developer(s) are likely to request public entitlements, incentives, and investments to support their investment. This provides many meaningful opportunities to ensure that the potential public and community benefits of the redevelopment are, in fact, realized as recommended above.

2

BACKGROUND

NORTH BRANCH RIVER WORKS

2

- Layout a vision for employment generating redevelopment of the 34-acre River Works site within the context of a larger study area comprised of the adjacent industrial areas, retail district and residential communities.
- Propose specific principles to guide the redevelopment of the site.
- Recommend a path forward to implement the vision.

River Works is uniquely situated within Chicago's north side industrial sub-market in the North Branch Industrial Corridor. It is characterized by proximity to infrastructure that supports business and commerce, Planned Manufacturing District (PMD) zoning, strong private investment by businesses throughout the industrial corridor and proximity to a highly skilled workforce, retail and entertainment amenities and educational institutions. The highly sought after characteristics of these particular development sites form the basis of a future business innovation district.

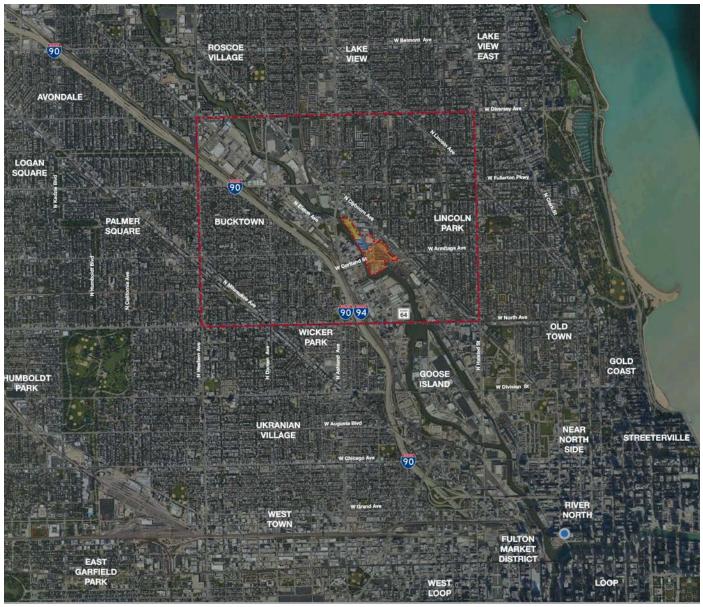


Figure 2.1

Component Properties

The area-wide plan proposes viable strategies to establish a business innovation district at River Works within the context of a larger planning area, the "Study Area", which extends from North Avenue (south) to Diversey Avenue (north) to Halsted Avenue (east) to Western Avenue (west) (figure 2.1). The Study Area comprises the adjacent industrial area, retail district and residential neighborhoods that will be most impacted by the redevelopment of the catalyst sites and the likely subsequent redevelopment of other nearby sites in the North Branch Corridor. Figure 2.2 below shows the three catalyst River Works sites within the larger Study Area.



Figure 2.2

This plan was crafted to offer a path forward that will result in a wide range of benefits to the existing and future businesses of the North Branch Industrial Corridor, the surrounding residential communities and the city economy as a whole. These benefits include:

- Good paying jobs created and retained with a mix of skill levels suited to Chicago residents nearby and citywide;
- A model to pilot the "urban business area of the future" featuring sustainable development practices, diversity of land use through connectivity and a mix of emerging innovation industries;
- Compatible development that supports rather than destabilizes the existing business base and is compatible with the surrounding residential communities,
- Mobility solutions to the well known transportation problems that hinder the market in this area;
- Economic multipliers and tax benefits that are greater than other reuse alternatives;
- Redevelopment principles with broad based support among River Works diverse stakeholders to guide the ultimate redevelopment plan; and
- Implementation strategies crafted to ensure redevelopment that supports the community's goals, creates jobs, and fosters the innovation economy.

On June 16, 2009, the U.S. Department of Housing and Urban Development (HUD), U.S. Department of Transportation (DOT), and the U.S. Environmental Protection Agency (EPA) joined together to help communities nationwide improve access to affordable housing, increase transportation options, and lower transportation costs while protecting the environment.

The Partnership for Sustainable Communities (PSC) works to coordinate federal housing, transportation, water, and other infrastructure investments to make neighborhoods more prosperous, allow people to live closer to jobs, save households time and money, and reduce pollution. The partnership agencies incorporate six principles of livability into federal funding programs, policies, and future legislative proposals.

In September 2013, NBW, with support from Chicago's Department of Planning and Development (DPD), was awarded a Brownfields Area-wide Planning grant for \$200,000 from the US Environmental Protection Agency (EPA) to conduct a 2-year planning effort focused on redevelopment of three adjacent catalyst sites: the former A. Finkl & Sons steel forging plant, the neighboring former Gutmann Tannery, and the A. Lakin & Sons tire plant sites. The grant was funded as part of the US EPA, Department of Transportation (DOT) and US Department of Housing and Urban Development (HUD) Partnership for Sustainable Communities.

The Brownfields Area-Wide Planning Program grant funding enabled North Branch Works to work with the community stakeholders and to perform the research needed to develop an area-wide plan and implementation strategies that can lead to the future assessment, cleanup, and reuse of these sites. Together these sites comprise an approximately 34-acre project area (including right-of-way) with 26 acres of prime land for job-producing redevelopment called, for the purposes of this plan, North Branch River Works (River Works).

The grant allowed NBW to:

- · Research the existing conditions of the catalyst sites and the study area;
- Conduct a market study to assess the real estate market and position the project to attract these end users;
- Assess existing infrastructure and recommend investments to support the plan;
- Plan for the catalyst sites within the context of the goals and concerns of the surrounding communities; and
- Envision sustainable urban industrial development that positions the city and the region to meet their economic development goals.

The Brownfields Area-wide Planning grant enabled North Branch Works to conduct a planning process to develop a reuse plan for these catalytic sites, with outreach to the business and residential communities nearby.

Additional funding from LISC (\$25,000) allowed NBW to conduct additional, high-levell, transportation and mobility strategy planning to address the high level of stakeholder concern about these issues.

North Branch Works (NBW), formerly the LEED Council, is the author of *River Works: A Plan for Community, Jobs, and Innovation*. NBW is a 33 year-old, non-profit, economic development organization that works within the North Branch, Addison and more recently, the Ravenswood and Kennedy Industrial Corridors as well as the neighborhoods that surround them in Chicago, north of downtown. The City of Chicago contracts with NBW as its delegate agency to encourage industrial retention and economic development in these corridors. NBW's mission is to retain and expand businesses in the industrial corridors and to encourage hiring of nearby residents, especially low-income and disadvantaged residents, through job training and placement services. Since its inception, NBW has worked diligently to encourage public investment in infrastructure and transit that supports private investment and jobs. NBW has focused on land use policies that promote compatibility between the diverse uses in the larger community.

NBW's interest in this project was prompted when Finkl Steel (Finkl)-- who had championed, along with the LEED Council (now NBW), creation of the City's first Planned Manufacturing District (PMD) for the Clybourn Corridor in 1988 and the second, Elston Corridor PMD, in 1991-- announced in 2006 that it had outgrown its location. ComEd could not provide enough electrical power to supply their large arc furnaces and despite their ground-breaking urban campus plan, developed over the past 15-20 years, they were land-locked and once again needed expansion space.

In 2008, the Finkl company was purchased by Schmolz+Bickenbach of Germany, the world's largest steel forging company. The purchase by Schmolz+Bickenbach of Finkl enabled the company to acquire and achieve much needed expansion space at the site of the former Verson Steel plant on East 93rd Street in Chicago. Finkl has now completely relocated to a 40-acre site in the Burnside Industrial Corridor on the city's south side. The relocation of Finkl Steel to another site within Chicago was made possible, in part, because of the preservation of diverse business environments for evolving and growing businesses through the City's industrial land use policies. The Finkl company, but not their former property on the north side, was sold to Schmolz+Bickenbach who provided the capital for the relocation. A small group of former employees and a family member now owns the land where the plant once stood and has demolished much of the former plant located in the River Works site.

Gutmann Tannery closed in 2008 following their sale to a Milwaukee tannery. The property is currently under the control of a trustee.

Lakin's tire plant was for sale and the owners have indicated their fate lies with the future of the former Finkl property. Lakin still owns and continues to operate their business on their property north of Cortland Avenue. The portion of Lakin's original property that is south of Cortland Avenue was sold early in the planning process to General Iron, a scrap metal recycling company located immediately south of the River Works site, for use in their ongoing business operations. Therefore, it has been excluded from the site plan developed through this planning process. This excluded parcel is the southeast most parcel (in blue) shown on the River Works Component Properties map. (figure 2.2)

Given this situation a plan was needed to create a vision of how these three catalytic sites can be redeveloped with uses appropriate to and supportive of the industrial corridor. The rare large site presents a unique opportunity to model sustainable job-producing development and to envision the PMD of the future.

It should be noted the ownership of the three catalytic sites is fluid since they are actively on the market. Sterling Bay purchased both the Lakin and Gutmann sites while this Plan was being finalized. NBW began this planning process in September 2013. The first nine months were dedicated to organizing the process and selecting the consultants who would become part of the planning team along with NBW and the Delta Institute. Civic Art Works was selected to manage the communications, community engagement, and Study Area planning. US Equities/CBRE along with their partners the Goodman Williams Group and Koo Architecture and Design were contracted to prepare the Existing Conditions report, Market Study and Site Redevelopment Options. Sam Schwartz Engineering was later retained with money received from the Local Initiative Support Corporation (LISC) to explore the transportation and mobility strategy options for the entire North Branch Industrial Corridor, especially as it relates to the River Works site.

A plan oversight group consisting of local businesses and various experts met regularly throughout the process and a stakeholder advisory group comprised of the leadership of key community organizations and businesses was formed to provide guidance to the community outreach process. The Community Input process is described in more detail in Attachment I (6.8).

A number of interim products were produced by the planning team that are incorporated, along with substantial stakeholder input, into the final River Works Plan:

- River Works Web Application www.civicartworks.com/riverworks
- Project Profile

(contents incorporated throughout)

- Existing Conditions Report
- Market Analysis

(3 Market Study)

· Redevelopment Planning Principles

(1.4 Redevelopment Principles + 4.1 Redevelopment Principles)

Site Redevelopment Options

(4.2 Redevelopment Scenarios)

Transportation and Mobility Strategies White Paper

(Attachment III)

Implementation Strategy Recommendations

(5.1 Recommendations)

2.7.1 Business Innovation District Benefits

There is a large and growing body of research generated both locally and nationally that documents the importance of industry, and in particular manufacturing, to the economy. The PMDs in general, and this plan in particular, aim to take advantage of the many benefits of industry to the local economy. Many cities have suffered because of the common misconception that real estate development and economic development are the same thing. Consequently, whoever can pay the most for land is assumed to do the most for the economy. However, basic economic theory is clear that there are three inputs to production—land, labor and capital. It is the effective use of all three that produces the greatest economic impact. It is wise for cities to ensure that they safeguard places where they can maximizing economic impact rather than simply encouraging the highest land values. This is particularly important for the River Works site which is located in the midst of the North Branch Industrial Corridor. The Corridor already has a significant base of both traditional and innovation companies, a desirable workforce nearby, support and amenity businesses in close proximity and a desirable location with significant land use pressure.

An innovation district will result in the greatest benefit to the local economy through:

- · Increased Multiplier Effects
- · Leveraging Competitive Advantages
- · Encouraging Innovation
- · Using Organizational and Regulatory Infrastructure
- · Generating Tax Revenues Versus Consuming Them
- · Higher Wages for A Wide Range of Employees

These benefits, which are presented in more detail in the research, reports and plans summarized in Attachment I (6.3 Economic Benefits of an Industrial District), have been so well documented over the years that the Chicago Department of Planning and Development indicated, at the start of this process, that there was no need to spend Brownfield Area-wide planning dollars on another econometric study to prove this one more time.



Figure 2.3

2.7.2 Planned Manufacturing Districts

The North Branch Industrial Corridor that is home to the catalyst sites and the immediately adjacent portions of the study area contains a very diverse industrial base that has benefits for the surrounding neighborhoods as well as the entire city. This Industrial Corridor is also the birthplace of Chicago's Planned Manufacturing Districts, a cornerstone of Chicago's industrial policy. The PMD is a zoning classification intended to:

- · Foster the city's industrial base
- Maintain the city's diversified economy for the general welfare of its citizens
- Strengthen existing manufacturing areas that are suitable in size, location and character and which the City Council deems may benefit from designation as a PMD
- Encourage industrial investment, modernization and expansion by providing for stable and predictable industrial environments
- Help plan and direct programs and initiatives to promote growth and development of the city's industrial employment base.

Despite their name, PMDs actually allow a wide variety of land uses that are compatible with and/or support manufacturing and have accommodated the emerging advanced manufacturing, high tech, research and data driven users in Chicago well. This is evidenced by the diverse NAICS (industry codes) of businesses in the area. This diversity is described in detail below in the Existing Conditions and Market Assessment portions of the plan.

The first three PMDs — #1 Clybourn Corridor, #2 Elston Corridor, and #3 Goose Island (figure 2.3) — as well as the Chicago-Halsted PMD, were designated in the North Branch Industrial Corridor because land use and market pressures from residential and retail uses were creating an unstable environment for industrial retention and development in the Corridor. A retail buffer area was created in the Clybourn Corridor PMD to buffer the residential and industrial uses.

The North Branch Corridor and its four PMDs have been successful. Demand for building space there is strong relative to other industrial areas in the region, with an availability rate (available building square feet / total rentable building square feet) of 6.3% according to Costar data, compared to 6.6% citywide, and 8.1% across the Chicago region.

Public and private investment in industry has been strong and is growing in the area. Private investments range from construction of Wrigley's Global Innovation Center to Water Saver Faucet's advanced manufacturing expansion. CH Robinson and Coyote Logistics have established large freight forwarding business in the area. Large, older, multi-story buildings have become home to smaller businesses such as Chicago Local Foods and Resource Point of Sales. South Street Capital has purchased two properties on Goose Island and is planning to develop new high tech office space. And, UI LABS, founded through a public-private partnership, is investing over \$340 million in a research and commercialization collaborative for manufacturers.

2.7 STUDY CONTEXT 2 BACKGROUND

2.7.3 Current Zoning and Land Use

The Study Area contains, and the River Works site is located within, portions of PMDs #1 and #2. Most of the River Works site lies within Sub-District A of PMD #1 (Clybourn Corridor PMD) and PMD #2 (Elston Corridor PMD). The property lying to the east of Kingsbury between Southport and Cortland is within Sub-District B of the Clybourn Corridor PMD.

In general, Sub-District A is intended to accommodate manufacturing, industrial, distribution, and other employment-related uses. Sub-District A also permits a range of office-type uses within existing buildings. There have been discussions about the possibility of permitting new office construction for non-consumer-oriented offices in A Sub-Districts, consistent with the employment goals of PMDs as part of the PMD modernization study (prepared by US Equities / CBRE for the City of Chicago). This change has not been enacted to date. NBW supports these changes and has urged the City to adopt them. If adopted, the PMD zoning will accommodate the uses proposed in this plan. Sub-District A places limitations on consumer-oriented retail, and food + drinking establishments that could be modified through the PD process if appropriate.

2.7.4 PMD Districts Containing the River Works Site

Sub-District B was initially established as a commercial "buffer" zone between the more intensive industrial uses to the west, and the residential neighborhood to the east. While this Sub-district has developed into an intensive retail and entertainment district (figures 2.4 and 2.5), in other PMDs the B Sub-Districts serve the purpose of encouraging a stable mix of employment activities and commercial amenities.

A full table of permitted and special uses in these PMDs can be found in Attachment [I] (6.2 Permitted Uses). Land uses near the River Works site range from intensive industrial operations such as Ozinga Cement, Horween Leather, General Iron and Sipi Metals, to advance manufacturing, high tech and data intensive uses such Wrigley's Research & Development Center, UI LABS, and CH Robinson in the core area of the PMD to upscale consumer retail such as Crate and Barrel, Trader Joes, Treasure Island, Patagonia in the buffer of the Clybourn PMD to residential to the east and west beyond the PMD boundaries.

The PMDs in the North Branch Industrial Corridor with their 30-plus years history of successful industrial retention and development policy, planning, and investment are an important foundation of this plan. This plan builds on this history and points the way toward a vision of the future PMD that achieves the economic development and sustainable industry goals of the City as they have evolved.

2.7.5 Study Area Characteristics

The characteristics of the Study area including the neighborhood context, the real estate market, business characteristics, employment data, transportation and mobility conditions, environmental issues and utilities and infrastructure are described in Attachment [I] (6.4.1.A through D; 6.5 Environmental + Other Physical Conditions; 6.6 Infrastructure + Utility Issues).



Figure 2.4



Figure 2.5

66

Consider the site a bridge between west and east neighborhoods.

New development should serve as a bridge, not a barrier, between neighborhoods on the west and east sides of the Chicago River (+ beyond to Lake Michigan). New infrastructure like a 606 / Bloomingdales Trail extension should be allowed for the greater good.

- Outreach Meeting 2 Attendee

Congestion plagues this area.
There is a need to increase access into the corridor and through it.
Streets like Cortland need to be improved (for cars and bicycles) in order to handle the high traffic volumes. Remediating this situation would lead to a greeter connection between east and west neighborhoods (Lincoln Park, Wicker Park, Bucktown, etc.) in this part of the City.

- Outreach Meeting 2 Attendee

66

Be sustainable. Plans to redevelop the site should include a number of different sustainable practices that could be implemented. Everything should be on the table - from planting more trees to green roofs to composting as an internal business practice.

- Outreach Meeting 2 Attendee

66

Provide better access to the river. Make it easier to get to in order to encourage greater usage by nearby residents and employees and patrons of nearby businesses.

- Outreach Meeting 2 Attendee

2.7.6 Key Stakeholder Concerns

The key stakeholder concerns identified during the planning process are briefly described below.

2.7.6.A Congestion and Mobility

The most common concern by far from residents, businesses and employee stake-holders in the area was traffic congestion and mobility problems. Residents as well as employers and workers expressed an interest in better connectivity to and from communities surrounding the industrial corridor with safer more pleasant pedestrian and bike routes and improved public transit access, bridge improvements and right of way connections. A number of heavy industrial companies expressed concern about protecting their freight transportation options including barges, rail and trucks.

2.7.6.B Land Use

Big box retail was not endorsed by any community stakeholders. While some developers advocated for residential development, few residents, businesses or employees expressed support for more housing. Lincoln Park residents expressed concerns about parking and many are reluctant to have any additional heavy industry locate in the area.

The vast majority of participants in the planning process expressed support for the employment generating industrial uses identified in the market study and forming the basis of the River Works plan and expressed support for maintaining the PMD intact with the modernization tweaks proposed in the Chicago Sustainable Industries report prepared by US Equities for the City.

2.7.6.C Jobs

Stakeholders, such as the Logan Square Neighborhood Association, expressed concerns about the mix of employee skill levels at businesses that locate at River Works. They are interested in making sure that these companies have lower and middle skill level jobs with career ladders appropriate to residents of their community.

2.7.6.D Sustainability

The plan should incorporate sustainability features related to energy, waste, water, transportation, green space, community.

2.7.6.E River Access / Green Space

Recreational river access, river edge trails and green space were mentioned often as priorities by some area residents. Unimpeded barge access was a key concern of industries that receive and make shipments via the river. River taxi service is of interest to residents, businesses and employees. Green space and sustainability features can also help alleviate flooding problems in nearby neighborhoods.

2.7.6.F Historic Preservation

Historic preservation of the Finkl buildings, while of interest, became a moot point when the owners demolished most of the buildings with historic character during the planning process.

2.7.6.G Connecting to Popular Plans for the Area

Many stakeholders also expressed a desire for this plan to work with and complement other plans in the works such as extending the 606 / Bloomingdale Trail east of the River.

MARKET STUDY

NORTH BRANCH RIVER WORKS

Industrial brokers, developers, academics, and select companies were engaged by US Equities/CBRE in order to better understand the current industrial real estate market and the nature of potential demand for industrial land and building space in the Study Area. These discussions and others helped to inform the findings in this report and beyond, and suggest redevelopment opportunities for River Works. A list of interviews for the market assessment as well as an analysis of the critical supporting and constraining market factors are included in Appendix [I] (6.7 Market Study Interviews).

According to several industrial brokers and developers, demand for industrial space is particularly strong today in the area bounded by Cermak Road on the south, Western Avenue on the west, Fullerton Avenue on the north, and the inner ring of Chicago's central area. Land and buildings within this area have several important competitive attributes in common, including:

- Convenient access to/from the central business district;
- Access to multiple modes of transportation and the central transportation hub of Chicago;
- · Proximity to a large skilled and creative workforce;
- Presence of a unique density of other businesses and institutions -- and the
 resulting density of knowledge and skills -- with which to form economic, supply,
 support, and innovation networks;
- Proximity of neighborhood, cultural, and entertainment amenities; and
- Relatively strong real estate values.

Specifically within the North Branch Corridor, it is reasonable to expect continued and heightened focus on opportunities for industrial business growth and investment. Unlike retail businesses that derive demand from local purchasing power, the very nature of industrial and business employment – which combines local market and "export" market demand – makes it very difficult to quantify the demand for space by industrial uses.

Furthermore, it is not necessarily the case that these competitive properties and the River Works site are in a zero-sum competition for a finite market. More likely, the fact that the North Branch Industrial Corridor PMDs are just now seeing the leading edge of this tech, creative, and collaborative business investment may translate into the creation of net new local demand for space. The very nature of these collaborative activities means that a growing critical mass of businesses and business amenities will encourage yet more local growth.

Land values, based on land sales (greater than a half-acre in size) in the North Branch Corridor since 2008, have ranged from \$37.48 to \$64.92 for manufacturing or PMD zoned land. That compares to an average price for industrial land in all of Chicago at \$22.45 per square foot.

Though this is a very small sample of land economics from which to draw conclusions, the prices per square foot are consistent with the views of brokers and developers that North Branch industrial land is among the most expensive in the City. This is due to a number of factors, among which is the suitability of the area to more value-dense business activities: activities such as technology-intensive production, research and design, and business and professional services. It should also be noted that established and expanding companies that may not fall into these categories (such as General Iron and Ozinga), are also competing — and often paying for — this relatively more expensive land, due to particular locational advantages and significant in-place investment of these companies.

3.3.1 National Trends

Macro and national trends in production technology, logistics and supply, and opportunities for entrepreneurial investment are driving much of the demand for space in unique urban locations like River Works. Research and data over the past few years points to a resurgence in certain types of manufacturing in the U.S. Moreover, emerging technologies in manufacturing, such as 3D printing, digital manufacturing, robotics, and advanced sensing (often collectively labelled "advanced manufacturing") are impacting the nature and geography of production, with select urban locations competitive again for some of this investment. A selection of the research illustrating these national trends is as provided in Attachment [I] (6.7 Market Study Interviews).

Lifestyle trends are also impacting employment patterns in central cities. The millennial generation has continued the trend of young singles and couples being drawn to the amenities of urban living. Among the key amenities is the ability to conveniently access employment, often using non-automotive modes of travel. This in-turn has caused employers to increasingly seek locations that are convenient to this workforce, and in which companies can compete effectively for new talent. The trend has been apparent in the relocation of corporate headquarters from sub-urban and ex-urban campuses to central city locations, but is also more recently illustrated in the re-purposing of space around central city downtowns for entrepreneurial and high-value production that incorporates advanced technologies, and for non-traditional office uses – particularly for the technology sector and other creative and collaborative businesses.

Advanced Manufacturing is the integration of technology based systems and processes in the production of products (fit, form, and function) to the highest level of quality and in compliance with industry specific certification standards.

3.3.1 Local Trends

The table below shows employment trends in the four PMDs that constitute the bulk of the North Branch Corridor. The job numbers are divided into economic sectors that represent 2-digit NAICS codes, and span from 2002 to 2011 (the most recent year for which data is available). These PMDs are among the strongest in the City with regard to job growth, experiencing a gain in employment of more than 46% during this time period, even as the Manufacturing sector itself has declined by 8.6% (pre-Finkl relocation).

Employment by Industry Sector in the Clybourn, Elston, Goose Island, and Chicago-Halsted PMDs

			Changes	Since 2002
Sector	Count	% of Total	Percent	Number
Professional, Scientific, and Technical Services	1,632	16.9%	225.7%	1,131
Manufacturing	1,324	13.7%	-8.6%	(124)
Wholesale Trade	1,207	12.5%	-23.3%	(367)
Finance and Insurance	1,030	10.6%	995.7%	936
Transportation and Warehousing	881	9.1%	66.9%	353
Educational Services	746	7.7%	*	742
Retail Trade	721	7.5%	-8.0%	(63)
Accomodation and Food Services	456	4.7%	43.4%	138
Admin. & Support, Waste Mangement & Rem.	400	4.1%	*	307
Other Services (excluding Public Administration)	324	3.3%	113.2%	172
Arts, Entertainment, and Recreation	220	2.3%	*	131
Health Care and Social Assistance	207	2.1%	*	124
Information	191	2.0%	-32.5%	(92)
Real Estate and Rental & Leasing	178	1.8%	*	103
Construction	157	1.6%	-31.1%	(71)
Management of Companies and Enterprises	3	0.0%	-99.2%	(356)
Agriculture, Forestry, Fishing, and Hunting	0	0.0%	*	0
Mining, Quarrying, and Oil and Gas Extraction	0	0.0%	*	(1)
Utilities	0	0.0%	*	(5)
Public Administration	0	0.0%	*	0
TOTAL	9,677	100.0%	46.2%	3,058

^{* &}lt; 100 Jobs in 2002

Employment Increase > 300

Source: U.S. Census Bureau, Center for Economic Studies, OnTheMap

A closer look at the data shows that business sectors that require locations near a well-trained workforce and neighborhood amenities, have performed particularly well. Most notable among these is Professional, Scientific, and Technical Services, which more than tripled employment in the North Branch Industrial Corridor PMDs with 1,632 new jobs since 2002, and is now the most prominent business sector terms of employment. Based on anecdotal evidence and continued national trends, it is reasonable to assume that the employment shift toward light industry, tech-related and creative office-like activities has continued since the 2011 data was collected.

Firms categorized within the Professional, Scientific, and Technical Services sector generally provide jobs at higher skill levels than traditional industrial jobs, including jobs such as computer and mathematical operations, architecture + engineering, and management occupations. However, the industry sector includes a wide range of employment categories at all skill levels, providing opportunities at entry-level and moderately skilled positions for residents of Chicago. The largest single occupational category within the sector is office and administrative support, accounting for more than one out of every five jobs. Other jobs within the sector include production, installation, maintenance and repair occupations.

The large size of the River Works site in the midst of a dense urban environment allows for the creation of a corporate campus, multi-user district, or both, with identity, a unifying theme, and the potential for a critical mass of activities. These activities in today's economy can benefit from sharing knowledge, equipment, services, talent, and common spaces among users and with the adjacent neighborhoods. This in itself can create a momentum and "buzz" that single-use opportunities lack.

River Works appears to be competitive for a wide-range of business types that defy simple categorization. To attempt to list such companies solely by product type, business profile, or economic classification would be incomplete and misleading. The competitive appeal may be better illustrated by listing the characteristics of businesses that may be drawn to locate and invest in the River Works site. These characteristics include the following:

- Companies with a significant component of skilled, creative, and professional staff among their total employment profile, such as front office staff and marketing staff, research & design professionals, engineers, and scientists.
- High value / low bulk production, where there is relatively less emphasis on large production lines, warehousing, and large distribution volumes, and relatively more value created in smaller spaces (often enabled by new production technologies and the ability to fabricate and assemble economically on smaller scales). Multiple industrial brokers suggested that there is a "sweet spot" of demand from companies in a size range of 15,000 to 30,000 square feet, which are seeking to lease space in a north side market in which such space is extremely scarce.
- Entrepreneurial activities and "makers", where individuals and very small companies have access to shared equipment and support, and can grow businesses without heavy capital investment requirements. An example of this is Tech Shop (Figure 3.1), which has a handful of locations around the country and is looking to enter the Chicago market. Such a collaborative use could be a site anchor, drawing small businesses and entrepreneurs who need access to equipment during the start-up phase, and could provide an incentive for the clustering of small start-ups near such an amenity.
- Collections of very small light industrial, professional, and creative businesses that can exist in multi-story buildings and benefit from shared services, collaboration, and access to financial and other business resources.
- Design, graphics, engineering, and scientific services, perhaps with contract manufacturing elsewhere. As noted above, technology is allowing for design and

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Create new jobs and encourage entrepreneurship. Consider ways to incubate small to mid-size businesses.

- Outreach Meeting 2 Attendee



Figure 3.1

66

Create a business incubator for small manufacturing companies. Develop a manufacturing co-working space (similar to 1871 but for companies that make things). This could be similar to what Catalyze Chicago, a co-working space for hardware entrepreneurs, is doing in the West Loop.

- Outreach Meeting 2 Attendee



Figure 3.2



Figure 3.3

Creating breweries, distilleries and wineries out of industrial facilities not only maintains the integrity of the North Branch Industrial Corridor, but will boost the economy and create a tourism hotspot. Up north, Minneapolis has created a community of breweries, with many clustered in the Northeast neighborhood. The success of these businesses has put the Twin Cities on the map, drawing in locals and tourists to major events such as the Winter Beer Festival. By developing the North Branch Industrial Corridor into the hub of Chicago's burgeoning craft spirits industry, we can form a sense of community between locals and tourists alike.

- Koval Distillery

- initial prototyping and testing to be much more closely integrated. The impact is that design can now co-locate with the front-end, small-scale production space, which itself can be separate from large-scale commercial production space that may seek lower cost environments.
- Tech and tech-related firms. The current surge in tech-related businesses is already impacting the North Branch Corridor. As the cost of space in River North is already prohibitively high to many businesses, space has become more expensive and scarce in the Fulton Market area. In fact, 600 West Chicago (Figure 3.2) on the border of the North Branch Industrial Corridor represents the City's largest single concentration of tech and tech-related firms on one complex. As companies there, and elsewhere, mature and demand more / different space, demand for tech space on the north side is likely to strengthen.
- Other office uses seeking non-CBD, non-traditional environments, less expensive environments for their business economics and employee recruitment, such as designers and architects, photography studios, logistics companies.
- "Last-mile" distributors that indirectly serve the dense consuming population (residents, workers, tourists, etc.) of the central area, through retail outlets, restaurants, and hotels, as well as direct distribution to consumers.
- Craft breweries and distilleries (Figure 3.3), which naturally seek locations near where the crafts people live and near a population of consumers, particularly when there are associated tasting rooms and retail outlets.
- Other specialty food and beverage companies with a customer base clustered among downtown restaurants, hotels, and retail outlets, such as locally-sourced and organic food suppliers, artisan and gourmet food producers, coffee roasters, bakeries, etc.
- Due to the relative large size of the River Works opportunity in a dense environment, a corporate headquarters or anchor R&D facility for a company seeking a unique campus location, on the river, next to commercial amenities, with great views of, and easy access to, the Loop.

The strength of demand among higher-density / higher-value uses poses a challenge for traditional single-story industrial uses with at-grade parking. Such land-extensive uses will generally have difficulty competing for space in a higher land-value environment. Instead, redevelopment will likely be focused on higher-density uses, perhaps a mix of single and multi-story buildings for the types of production that do not require constant ground floor access (production defined broadly to include not only the production of physical products, but also of knowledge and virtual goods), as well as the provision of services, training, business amenities, etc. Other strategies for the efficient use of land include shared services, common amenities, and convenient access (e.g. shuttles) to commuter and public transportation to minimize on-site parking demands.

The redevelopment of River Works will ultimately be subject to Planned Development (PD) review and approval by the City of Chicago -- due to its size and frontage along the river – regardless of whether it is developed as a single site or multiple sites. One or more PDs will be needed regardless of whether or not a change in zoning is sought. The PD process allows for enhanced review of the project by both the City and community, and offers the possibility of flexibility with regard to use, height, bulk, parking, and other regulations while ensuring the project as a whole meets zoning and development objectives.

The market-supported uses described above are well-aligned with the larger economic development strategy framework that the City of Chicago has established through its recent Plan for Economic Development and Chicago Sustainable Industries (CSI) initiative. Select strategic recommendations from the "Chicago Plan for Economic Growth" include the following:

- · Become a leading advanced manufacturing hub;
- Increase attractiveness as a center for business services and headquarters;
- Foster innovation in mature and emerging sectors and support entrepreneurship;
- Develop and deploy neighborhood assets to align with regional economic growth; and
- · Create an environment and processes that allow businesses to flourish . . .
- \dots and, "Chicago Sustainable Industries, A Business Plan for Manufacturing" adds the following to this list:
- · Prepare Industrial Corridors for the Next Generation of Manufacturing.

River Works represents a unique opportunity for the City to attract very sizable business development and investment, in a highly-attractive location, and in economic sectors that are the focus of City policy. River Works offers the unusual coalescence of conditions for the City to pilot a model of the industrial corridors and PMDs of the future that is supportive of the sustainable industrial development they seek.

REDEVELOPMENT VISION

NORTH BRANCH RIVER WORKS

- The redevelopment should help implement Chicago's advanced manufacturing agenda in a manner that is consistent with the current and anticipated marketability of the area.
- 2. The site should be developed as a business innovation district and should maximize the benefit and synergies of the three adjacent catalyst sites.
- New uses should build upon the success and investment that have happened in the PMD and be consistent with the PMD zoning.
- 4. Priority should be given to firms locating in the district that maximize the creation of head-of-household jobs for employees that include a wide range of education, skill level and socio-economic backgrounds.
- Environmental site assessments and clean-up, if necessary, should support the redevelopment plan for the site.
- 6. Efficient movement of traffic and parking solutions on site should be considered and the project should address these issues through street layouts and in new and creative ways such as public transit, alternative transport such as cycling, car-sharing, etc., and promoting rail and river use to reduce traffic. Traffic plans should align this redevelopment with solutions to these problems in the surrounding area and with other plans.
- 7. The River Works development should connect to and serve as a connection between the neighborhoods to the east, west, north and south where possible without compromising the other redevelopment goals.
- The business innovation district should be able to coexist with the wide range of uses (from existing heavy manufacturing to newer high tech uses) in the area and address existing companies' expansion, retention and relocation needs as well as minimize potential problems between the existing businesses and new users.
- Opportunities for public access to the river and river's edge should be encouraged where appropriate but not at the expense of commercial river users (for example: barges and water taxi services).
- I O. The project should employ sustainable development practices as it relates to the larger community through infrastructure, transportation, green space and river access and in site planning and building design, materials, function and operations.
- I I . New initiatives and resources should be leveraged to support implementation of this redevelopment plan, all of which should be mutually reinforcing and supportive of implementation of other existing community plans in the area.
- I 2. Development in the area should adhere to these principles. North Branch Works, existing neighborhood groups and community institutions should be involved throughout the planning and redevelopment process to ensure implementation of these principles and continued community input and support.
- I 3. Because of the strong real estate market for innovation businesses in the area, public resources and entitlements (such as TIF and zoning flexibility) should be deployed only to obtain greater public/community benefits from the new development at River Works.

The existing conditions research, market analysis and community input were all considered in crafting redevelopment principles for the River Works plan. These principles should be used to assess the ultimate redevelopment plan or plans for River Works. They are also appropriate guidelines for future redevelopment sites in the four North Branch Industrial Corridor PMDs.

The Redevelopment Principles were incorporated into three scenarios for redevelopment of the River Works site. These scenarios are based upon three potential ownership options as described in the narrative to the right and the illustrations on the following pages.

Scenario 1

The catalyst sites are sold individually by their **separate owners**

In this scenario **individual property transactions** and independently-developed parcels would likely minimize the vacation and reconfiguration of rights-of-way and the ability to plan the site comprehensively. There is the possibility that not only would the three separate parcels be developed independently, but that smaller discrete parcels may be sold and developed in piecemeal fashion (e.g. the portion of the former Finkl property south of Cortland, or the triangle formed by Cortland, Southport, and Kingsbury, etc.). Redevelopment features that are more impactful when coordinated, such as infrastructure and many sustainability features, are less likely in this parcel-by-parcel strategy. This scenario increases the burden of the Planned Development process (described later herein) and on City staff to take a comprehensive view of area redevelopment as individual projects are approved.

Scenario 2

The catalyst sites are sold together to a master developer

The **master developer** scenario would involve negotiated purchases with all three owners, by a single development entity, either simultaneously or in close sequence. This would allow for comprehensive project planning across the entire site area, which would maximize the potential for flexible site planning, right-of-way reconfiguration, and parking and traffic management, coordinated site amenities, and sustainability features. Significant public access to the river is more likely to result from the master developer scenario. It would provide the opportunity to site various uses in an efficient optimal way, and phase development to support overall project feasibility.

Scenario 3

The catalyst sites are sold together to a large company as a **corporate campus**

An additional possibility is that a single **large corporate user** would secure a significant portion of the study area and either self-develop or utilize a fee developer or sale-leaseback mechanism to control and occupy space. In this approach, the corporate user provides much of the capital and/or the guarantees that minimize the investment and risk required from a developer. In turn, at-risk development capital can be deployed on related projects elsewhere in the study area, targeting the markets and users that are leveraged by the presence of the corporate anchor. The corporate campus scenario offers great opportunity for the amenities, flexibility and coordination described in the master developer scenario above, but the public access to and benefit from these elements such as the river trail and green space access or right of way configurations will depend, in part, upon corporate policy and campus design.

All three scenarios include the same assumptions regarding the site planning Intervention Area, Existing Buildings, and Demolished / To Be Demolished Structures as identified on the plan diagrams shown on the following pages.

4.2.1 Land Use

The land uses in all three scenarios reflect the conclusions of the market study. While the types of uses are the same for all three scenarios, the mix and configuration is different for each scenario. The primary land uses included in all scenarios are:

- 1. R&D Facility or Large Corporate Anchor
- 2. Multi-Tenant Tech Office
- 3. Maker Space
- 4. Industrial Flex Space
- Brewery/Distillery

Photographic examples of each primary land use are included in Attachment [I] (6.9) to help clarify their characteristics.

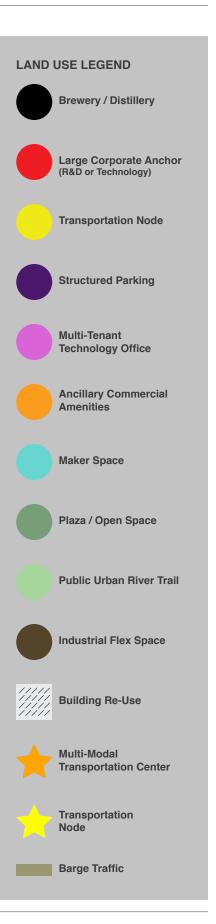
The primary uses are supported with other uses that improve the site for the primary users and in some cases, especially around the edges of the site, for the general public as well. These support uses include the following:

- Ancillary Commercial Amenities
 (such as restaurants and retail sales of products produced on site)
- 2. Structured Parking
- 3. Surface Parking
- 4. Plaza/Open Space
- 5. Public Urban River Trail
- 6. Public River Access
- 7. Transportation Hub

Photographic examples of ancillary commercial amenities, public urban river trails and public river access are in Attachment [I] (6.10) to help clarify their characteristics.

The three scenario plans on the facing page show the site layout and the distribution of the primary and support uses on the site. These are meant to be illustrative scenarios only, incorporating the redevelopment principals listed above, market factors, stakeholder concerns and physical possibilities presented by the sites and their location.

The use variations between the three scenarios, shown on the three adjacent pie charts, are illustrative of the different use mixes that might be developed on the site and should be viewed as variable and interchangeable.



Design Elements

Building re-use

Cortland Street.

34.02 Acres (1,482,006 sf)

25.85 Acres (1,125,821 sf)

8.18 Acres (356,320 sf)

14.33 Acres (624,397 sf)

Building + Site Data

Master Plan Area:

Total Lot Area:

Total ROW Area:

Existing parcels individually sold No right-of-way reconfiguration

Raised two-way bike path along



parcels in preparation for new sales and leases

Approx. Total Building Footprint Area:

- Transportation node
- center of the site

Building + Site Data

Master Plan Area: 34.02 Acres (1,482,006 sf)

Total Lot Area:

27.44 Acres (1,195,078 sf)

Total ROW Area:

6.58 Acres (286,624 sf)

Approx. Total Building Footprint Area: 13.86 Acres (603,685 sf)

Approx. Individual Building

Footprint Area:

A: 37,553 sf

B: 94,922 sf

C: 53,484 sf

D: 26,459 sf

E: 40,666 sf

F: 47,351 sf

G: 15,753 sf

H: 83,419 sf

I: 22.675 sf

J: 37,494 sf

K: 44,877 sf

L: 13,425 sf

M: 106,319 sf

Design Elements

- Master Developer reassembles
- Major right-of-way reconfiguration
 Minimum building re-use

- Raised two-way bike path through

B: 220,142 sf

Approx. Individual Building

Footprint Area: A: 107,553 sf

C: 41,385 sf

D: 40,697 sf

E: 51.281 sf

F: 51,583 sf

G: 57,447 sf

H: 13,425 sf

I: 58.561 sf

J: 31,611 sf

K: 60,953 sf

Figure 4.2



Design Elements

- Corporate anchor purchases and occupies the majority of the site
- Southport remains closed to public
- Building re-use
- Minor right-of-way reconfiguration
- Raised two-way bike path along Cortland Street.

Building + Site Data

Master Plan Area:

34.02 Acres (1,482,006 sf)

Total Lot Area:

27.66 Acres (1,204,772 sf)

Total ROW Area:

6.36 Acres (277,041 sf)

Approx. Total Building Footprint Area: 13.34 Acres (581,113 sf)

Approx. Individual Building Footprint Area:

A: 37,553 sf

B: 50,139 sf C: 53,484 sf

D: 294,809 sf

E: 44,073 sf

F: 13,425 sf

G: 67,807 sf

H: 19,823 sf

4.2.2 Density

The scenarios (figures 4.1-4.3) presented on the previous page also show variations in the density of development on the site with the lot, street, and building areas varying slightly. The floor area, seen in the table below, shows the most significant variations due to the assumed number of stories (ranging from one to four stories) in each building. The estimated number of employees varies based upon the number of square feet per employee assumed for each use which, as noted above, varies by scenario. So, for example, the much lower amount of floor area in Scenario 3 compared with Scenarios 1 and 2 is nearly offset by the higher amounts of office space assumed in the corporate campus scenario when comparing employment estimates.

At their manufacturing prime Finkl, Lakin, and Gutmann, along with Standard Steel and Wire and Jarrow Products, all operated on the River Works site. Together they had less than 1,000 employees. All three redevelopment scenarios, given current market conditions, project a significant increase in employment at the site. This will exacerbate the already difficult congestion and mobility problems in the area.

Redevelopment Scenario Performance			
Measurement	Scenario 1	Scenario 2	Scenario 3
Master Plan Area	1,486,006 sf	1,486,006 sf	1,486,006 sf
Lot Area	1,125,821 sf	1,195,078 sf	1,204,772 sf
Street Area	356,320 sf	286,624 sf	277,041 sf
Building Area	624,397 sf	603,683 sf	581,113 sf
Floor Area	1,461,398 sf	1,897,739 sf	687,673 sf
Floor Area Ratio	1.3	1.6	.6
Estimated Employees	6,078	5,682	5,067

4.2.2 Parking

All three scenarios rely on a combination of structured parking, surface parking, building parking (first floor) and on-street parking to provide one space per every 1,000 square feet of floor area or one parking space for every three employees. City code requires roughly double this amount. This ratio proposed is based upon case studies of other companies in the study area and assumes that the alternative modes of transportation described in the plan will be implemented.

The mix of type and location of parking varies by scenario and is depicted in the diagrams on the facing page.

Based upon the mix of uses in each scenario and the employees per square foot calculation for each use, the projected employees per parking space varies significantly between the scenarios as shown on the table below.

Redevelopment Scenario Parking Allotments		
Scenario	Projected Employees / Parking Space	
One	3.84	
Two	3.28	
Three	2.85	



Figure 4.4



Figure 4.5



SCENARIO 1: Lot-by-Lot

Off-Street Parking Calculations

1 parking spot for every 1,000 SF

Total SF with mix of 1 & 4 story buildings:

Total Number of Parking Spots: 1,583,376 (.001) = 1,583

Required SF for parking: 1,583 (325) = 514,475 SF

Proposed SF for Structured Parking: 47,351 (5) = 236,755 SF

Proposed SF for Surface Parking: 47,351 (5) = 236,755 SF

Proposed SF for Building Parking: 514,475 - 236,755 - 176,639 = 101,081 SF

Proposed building parking would be approximately 18% of the first floor across all buildings

SCENARIO 2: Master Developer

Off-Street Parking Calculations

1 parking spot for every 1,000 SF

Total SF with mix of 1 & 4 story buildings: 1,730,470 SF

Total Number of Parking Spots: 1,730,470 (.001) = 1,730

Required SF for parking: 1,730 (325) = 562,250 SF

Proposed SF for Structured Parking: 41,385 (5) + 60,953 (4) = 450,737 SF

Proposed SF for Surface Parking: 45,448 SF

Proposed SF for Building Parking: 562,250 - 450,737 - 45,448 = 66,065 SF

Proposed building parking would be approximately 13% of the first floor across all buildings

SCENARIO 3: Corporate Campus

Off-Street Parking Calculations

1 parking spot for every 1,000 SF

Total SF with mix of 1 & 4 story buildings: 1,775,501 SF

Total Number of Parking Spots: 1,775,501 (.001) = 1,775

Required SF for parking: 1,775 (325) = 576,875 SF

Proposed SF for Structured Parking: 44,073 (5) = 220,365 SF

Proposed SF for Surface Parking: 29,729 + 54,062 = 83,791 SF

Proposed SF for Building Parking: 576,875 - 220,365 - 83,791 = 272,719 SF

Proposed building parking would be approximately 50% of the first floor across all buildings

4.2.3 Right of Way

The current right of way configuration on the River Works site is far from ideal. South-port Avenue, which is closed to public traffic, jogs into Kingsbury Street at McLean Street before it continues as Southport. Dominick Street becomes a narrow road between McLean and Southport. Armitage Avenue is non-existent east of Southport and, west of Southport, it ends abruptly after one block-- stopped by the river. Thus, there is no easy way to travel north-south through the site and Cortland provides the only east-west access with just a two lane bridge over the river. This causes congestion to the east of the site where Cortland ends / begins just one block away at Clybourn Avenue. And, it causes congestion to the west of the site where Cortland is not an arterial street and Armitage Avenue is the larger, more heavily traveled, street leading to the I-94 expressway. The Scenario 1 site plan on the facing page shows the current street configuration on and near the River Works site.

The three scenarios differ significantly in their ability to address these issues. Scenario 1 (figure 4.7), where the parcels are sold separately, provides the least flexibility to address concerns about connectivity and right of way configurations. Scenario 2 (figure 4.8), where a master developer redevelops the site, provides the most opportunity for flexibility to address connectivity and right of way concerns. For example, the street grid could be rationalized eliminating smaller streets and straightening Southport Avenue to enhance mobility within and through the site. Scenario 3 (figure 4.9), with a corporate campus, provides the opportunity to make changes in the right of way configuration, but it cannot be assumed that these improvements will actually enhance mobility in general. They may not be available for public use since they would be contained within a private corporate campus.

Scenarios 1 and 2 show the buildings placed upon the site in a manner that protects the opportunity for a future right of way for Armitage Avenue to go through the entire site. This leaves open the possibility of one day fully connecting Armitage Avenue as a through street both east and west of the site if it would, based on more study, help alleviate congestion and enhance mobility and connectivity within both the River Works site and the Study Area as a whole.

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Reopen Southport for car / bike traffic. We need the shortcut between Webster & Cortland.

- Steve Jensen Chicago Citizen

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Streets that have been disconnected, like Armitage, need to be reconnected in order to provide more choices for travel so that one route does not become overwhelmed (current status).

- Outreach Meeting 2 Attendee



Figure 4.7



Figure 4.8

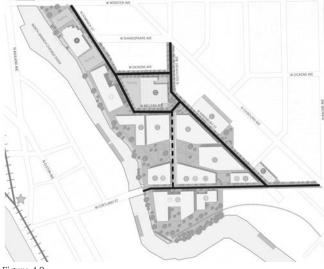


Figure 4.9

4.2.4 River Trail and Access

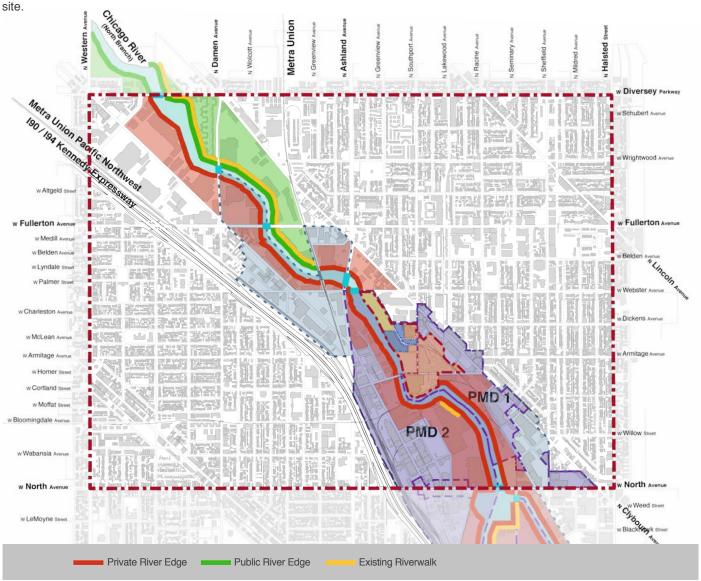
Chicago's River Edge Guidelines require that all new development along the river be set back 30 feet for a river edge trail. The site plans for all three River Works scenarios meet this criteria. It is not clear, however, whether the public will be able to access the trail. For example, the Chicago River travels diagonally across the Study Area for approximately 2.2 miles. Of that, just less than a mile is accessible to the public. Figure 4.10 shows which parts of the river edge in the Study Area are accessible to the public and which are not.

Many area residents advocated for public river access during the planning process and River Trail access is shown in all three scenarios at various places along Webster and Cortland Avenues. Scenarios 2 and 3 show significant green space next to the river trail along the Chicago River south of Cortland Street at the bend in the river and north of Cortland. Scenario 1 has little green space beyond the River Trail itself. Whether the public will have access to this green space in Scenarios 2 and 3 is also unclear and must be negotiated with the ultimate developer of the site(s). A park, boat launch for kayaks and canoes, and a wetland that naturalizes the river bank at the bend in the river south of Cortland are all suggestions, in addition to a biking and walking trail, to improve public access and enjoyment of the river at the River Works

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I would like to see increased public access to the River in the form of walking and bike paths (that preferably pass under bridges) and public launches for those who would like to boat on the river.

- Doug Step Chicago Citizen



Figures 4.10

There has been much discussion about cars, buses, trucks, and bicycles, but not a lot about the pedestrian experience has one walks / runs through (or near) the site. Sidewalks are crumbling, unkept, or not wide enough to comfortably walk without feeling unsafe adjacent to so much traffic. Consider ways to make the routes the site safer for those on foot in order to encourage more pedestrians and less drivers.

- Outreach Meeting 2 Attendee

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Use the LEED-ND system to guide the redevelopment plans for the site and surrounding areas that are affected.

- Outreach Meeting 2 Attendee

4.2.5 Mobility

Mobility and connectivity have emerged as a key theme in the River Works plan. Community residents, employers and employees are all concerned about creating access to and from the site for people stopping there as well as for those passing through. In addition, area businesses are concerned about maintaining their ability to transfer goods to and from the area by truck, rail and by barge.

The entire area is currently congested and redevelopment of the River Works site and future redevelopment that is likely to follow in the North Branch Industrial Corridor could easily add to the problem. The solution will take creativity and resources and should include a wide variety of transportation options including:

- Safe and pleasant complete streets that encourage walking;
- New bicycle routes that connect and pass through the site from all directions for both commuters and recreational bikers;
- Added transit options especially last mile connections to CTA rapid transit lines and two new bus lines along Clybourn and Elston Avenues;
- A multi-modal transportation hub on Ashland Avenue north of Cortland Avenue that connects the Clybourn Metra stop with the proposed Ashland BRT and other bus lines, Divvy bike sharing, trolleys or shuttles and other modes of transportation; and
- Water taxi and recreational boating sited to enable continued industrial barge traffic

Opportunities for implementing these mobility improvements are detailed in Attachment [I] (6.12 Mobility Enhancement Details).

4.2.6 Sustainability Opportunities

Sustainability elements will be required in the Planned Development process. They are also an important objective of the community, and largely in the interest of the developer(s). There will be a number of opportunities to incorporate environmentally sustainable site considerations, building, energy, waste and transportation best practices. A detailed look at how many sustainability elements can be applied to Scenario 3 is contained in "Final Report: Eco-PMD in Lincoln Park". This report was prepared by students in conjunction with Northwestern University and the Center for Neighborhood Technology.

The list in the Appendix [I] identifies the best practices in a variety of areas relevant to the River Works redevelopment opportunity that should be explored in more detail when the ultimate redevelopment plan(s) emerges.

4.2.7 Private Development Economics and Variables

The table below illustrates typical development cost categories and are meant to be a reasonable order of magnitude summary of costs for a mix of office, R&D and industrial flex space as conceptualized in the three site schemes completed for the assignment. These are based generally on recent CBRE experience and the views of professionals in the company involved in similar projects. Note that this is not meant to be an estimate of any particular scheme, as a wide range of variables that cannot be anticipated or assumed now will determine actual scope and costs.

Primary among these unknowns are underground conditions, soil remediation issues, scope of foundation removal, seawall condition, etc. The Gutmann portion of the River Works site has received a No Further Remediation (NFR) Letter from the Illinois EPA. The environmental condition of the Finkl and Lakin portions of the site are not public knowledge. Given the previous use of each site, there is likely to be environmental contamination to be remediated as part of the redevelopment process. If this information, in the form of Phase 1 and Phase 2 environmental reports, is already available it should be shared with the purchaser as part of the real estate transaction. If either report is not available it should be generated and any contamination problems must be addressed to protect the new land owner from liability. The actual clean-up plan should be based upon the ultimate redevelopment plan for the site in order to ensure public safety while minimizing the remediation costs.

As noted above, the market price of PMD real estate in the North Branch Corridor is robust, therefore, it is likely that the cost of clean-up is well under the per square foot value of the land. As a result, the clean-up responsibility, site remediation planning, as well as the investigation and remediation costs are likely to be negotiated and addressed in determining the sale price of the property.

The final actual development proposal will likely depart in some significant ways from what can be conceptualized in this assignment, though hopefully it will incorporate many of the ideas and themes that have been developed in this plan.

Redevelopment Scenario Costs			
Item Cost Range			
Site Acquisition	TBD		
Base Building (including demolition and site prep)	\$150 to \$180 per RSF		
Parking	\$4,500 per surface; \$16,000 per structured		
Tenant Improvements	\$65 to \$85 per RSS		
Soft Costs	\$54 to \$64 per RSF		
Contingency	5% of above, excl. land and select soft costs		

Assuming for the purpose of this illustration that roughly two parking spaces per 1000 rentable square feet will be required by code*, the cost ranges above equates to roughly \$290 to \$360 per rentable square foot, not including site acquisition. In reality, each building will be somewhat unique and the project as a whole will be built over time, responding to changing market conditions and costs that are difficult to anticipate in advance. Therefore, at the mid-range of estimated rentable square feet (calculated in Scenario 2) the private development costs, exclusive of land costs, are approximately \$200 million.

*Note that the three site plans assume one parking space per 1,000 square feet of rentable space based upon information from existing area businesses.

IMPLEMENTATION

NORTH BRANCH RIVER WORKS

FIRST

As the foundation of further action by all public, private and community actors, the City of Chicago should adopt the Redevelopment Principles created and affirmed through this multi-stakeholder process. This would be similar to the City's support of the redevelopment principles recently developed as part of the community stakeholder process undertaken to further the redevelopment of the Fisk and Crawford coal plants. The redevelopment principles for River Works blend the concerns and goals of most residents, employers and employees in the area as identified through the organizations that represent them as well as through the majority of individual comments. Real estate developers and some residents who do not agree with these principles, are provided mechanisms such as the PD, TIF Plan, RDA and Community Benefit agreements described above to obtain flexibility in exchange for community benefits.

SECOND

The City should meet with the property owners as soon as possible to determine the status of their marketing/sales efforts and whether a unified development is still possible. If a master development approach is possible, it should be determined how it will be accomplished. If a master developer or large corporate user is identified, one coordinated approach to site redevelopment can be negotiated.

If a unified development approach is unlikely, the City should prepare itself, with help and involvement from NBW and the community stakeholder advisory group it has organized, to determine the desired elements of a working master development plan. This can be done using the Redevelopment Principles and the three scenarios presented herein as a basis for decision making. Negotiations with the separate buyers for entitlements and incentives should be conducted with the working master development plan in mind.

The full range of community/public benefits described should be considered in assessing and/or developing the master plan. These benefits should be codified in formal agreements between the developers and the City including the PDs, TIF Plan and Redevelopment Agreements.

THIRD

Mobility and transportation strategy planning should continue for the area as quickly as possible. If CDOT's LTA application to CMAP is approved this work will begin for the Study Area portion of the North Branch Industrial Corridor soon. (CDOT plans to submit an application for the southern portion of the North Branch Industrial Corridor next year.) If the LTA grant is not approved, other funding, possibly TIF, RTA or US DOT TIGER funds, should be obtained as soon as possible. While awaiting funding, interim steps such as organizing the key decision makers to support this effort and/or hosting an Urban Land Institute panel should be considered to continue forward momentum on this issue. Immediate action on the mobility and transportation strategy is important to relieve stakeholder concerns but also to enhance the marketability of the site(s) to potential users.

Based upon the results of these efforts, a determination should be made regarding whether to establish a TMO or an SSA to implement components of the plan and to ensure that emerging mobility concerns are addressed as the North Branch Industrial Corridor continues to change. More information on mobility and transportation issues can be found in Attachment [I](6.12 Mobility Improvement Details).

Five initiatives should be undertaken to move the redevelopment of the River Works site forward toward the community, jobs and innovation goals desired. These initiatives require public, private and community cooperation ranging from informal dialogue to formal legal agreements. They incorporate the mechanisms to structure this multi-sector involvement described on these two pages.

These recommendations are based upon the assumptions, entitlement processes, potential economic resources and incentives as well as the public-private-community collaboration vehicles described on the following pages.

FOURTH

Based on the Redevelopment Principles, the development approach and master development plan, end users should be recruited. As noted above, the private real estate community, the City as well as NBW and local firms can help in the recruitment of appropriate businesses. A key part of this effort will be to identify those parts of the master plan, such as a maker space, sustainability elements and/or better internet connectivity, which require some sort of a public/private/community partnership to establish and to determine who will take the lead on such initiatives.

FIFTH

The Community Stakeholder Advisory Group established by NBW to guide this planning process should continue working together until the site is fully redeveloped. It should provide on-going input to the City and to the owners and purchasers of the River Works site(s) informally as well as formally in public hearings and negotiations. This group should participate in assessing or developing a master plan for the site (with or without the involvement of the landowners and/or the City). Most importantly, it should negotiate a collective Community Benefits Agreement with the site(s) purchaser(s) that mirrors or when necessary, surpasses the City's negotiated agreements to ensure that their various concerns and goals are incorporated into the final development and they are not divided by offers to address the concerns of some, but not other stakeholder communities. As a corollary to the Community Benefits Agreement, Local Hiring Agreements should be negotiated with the end users. The River Works developers should agree to inform their purchasers or tenants of this expectation upfront when they are considering their location decision.

5.1.1 Overview and Likely Development Approaches

River Works represents a unique development opportunity in a high-demand part of the city. Development of the River Works site is most likely to be the result of one or more private purchase transactions with existing site ownership. The presence of the three adjacent properties, all either vacant or with ownership willing to entertain proposals for sale and redevelopment, raises the possibility of the different approaches to overall site development detailed above in the three redevelopment scenarios.

The conceptual River Works site schemes presented in section 4 Redevelopment Vision have building footprints totaling 580,000 to 625,000 square feet. At the assumed Floor Area Ratio (FAR) for each scenario, this equates to between 690,000 to 1,900,000 of building space which, even for a high-demand location, is a significant amount of space to be absorbed by the market.

While the NBW River Works Plan has taken the first critical steps to identify stake-holder opinions and goals, determine the existing conditions in the area, assess the market, develop redevelopment principles, create prototype redevelopment options to meet community, city and regional goals, and recommend a path forward, this effort is the beginning, not the end of the redevelopment process which, as noted above, will take years rather than months to complete.

Additional planning and implementation steps must be undertaken to ensure that the ultimate redevelopment of the River Works site is a model of sustainable business development that envisions the PMD of the future with all of its economic benefits to the community, the city and the region including better jobs, more tax revenue, and the economic multiplier rippling through the economy.

5.1.2 Public. Private, and Community Collaboration

A broad range of private, public, and community costs will be incurred to support a successful urban development at River Works. Balancing private investment / risk with private return, and public and community entitlements and expenditures with pubic and community benefits, will be the key to the successful deployment of resources. Total return and benefits to all sectors can be further enhanced through negotiated collaboration on issues important to each.

Public and community interests are not necessarily the same. The costs and benefits perceived by each may or may not be aligned. And, different parts of the community see the costs and benefits very differently. For example, one community may see manufacturing jobs as its highest priority when another community may value green space and bike trails more highly. Similarly, public officials may value certain interests and stakeholders over others. Nonetheless, the likely range of public and community benefits will be:

- Quality and mix of employment opportunities created;
- Opportunities to address area transportation, mobility and access issues;
- Inclusion of affordable space in the development mix for manufacturers, startups, etc.;
- Sustainable development practices;
- · Use of local contractors;
- Proper integration of new development with adjacent neighborhoods;
- Enhancement of public amenities, including the river's edge; and
- Tax generation

Among the factors on which private developers and investors will focus to manage risk and maximize the private return are:

- Commitments of public resources to area-wide improvements needed to serve the site;
- Flexibility with regard to land use constraints, which, in turn, broadens market demand, facilitates absorption, and provides for more income from the project;
- · Density rights to increase land values and returns;
- Where relevant, commitments of public resources (e.g. TIF) to defray extraordinary private development costs, mitigate uncertainty and risk, support publicly-oriented amenities, and/or achieve expected returns.

There will be common ground as well as room for negotiation in sorting out the public / community and private costs and benefits of the River Works redevelopment.

Given the high market values for land at River Works, the strong potential market of PMD eligible users, as well as the significant and varied public and community benefits desired from the redevelopment, decisions about entitlements and incentives should adhere to the following redevelopment principle:

The River Works developer(s) are likely to request public entitlements, incentives, and investments to support their private investment. This provides meaningful opportunities to ensure that the potential public and community benefits of the redevelopment are, in fact, realized. For example, zoning flexibility such as more amenities or higher density could be allowed in exchange for additional manufacturing space at River Works. Financial incentives could be exchanged for additional green space, right of way changes, public access, and extra sustainability measures incorporated into the site design. And, mobility and transportation investments could be made in exchange for a private match of mobility and transportation investments made by the River Works developer(s).

5.1.3 Zoning Related Entitlements

Any new development of the River Works study area will require review and approval by the City through the Planned Development (PD) process. The PD process provides for enhanced review by the City of site planning, traffic and parking impacts, building design, and other aspects of new development that the standard zoning change process does not involve. Among the minimum thresholds requiring PD review that are relevant to the study area are the following:

- New development within 100 feet of any waterway
- New development in industrial districts on sites of 8 acres of net site area or more

PD zoning will replace the existing PMD zoning for the site. This differs from the way PDs (or PUDs) function in many other jurisdictions, where the underlying base zoning remains as a foundation and guide for the overlaying PD. Historically, it has been the City's policy to require general consistency with PMD use regulations when reviewing and approving PDs within Planned Manufacturing Districts. For the study area, the PDs could provide for some flexibility to accommodate new office construction, ancillary commercial and other uses that are uniquely supportive of the overall PMD goals, but technically not permitted under current PMD zoning in the desired scale or configuration in exchange for desired public and community benefits.

Among the key elements and requirements for PD approval are the following:

5.1.3.A Riveredge Setback

Any new development along the river must be setback a minimum of 30 feet from the river's edge. In industrial areas with more traditional and heavier industry, this setback often serves the purpose of protecting the river from adjacent industrial activities. Where new development includes more commercial and office uses, the setback is viewed as more of an amenity, and any connections to adjacent public trails or right-of-ways are likely to be encouraged. Whether or not the setback becomes a publicly-accessible riveredge trail is a matter of negotiation with the developer, and will need to take into account the requirements of adjacent private companies, the potential for public use, and the ability to provide adequate maintenance and security for the space.

5.1.3.B Sustainability

New construction will be required to incorporate green roof design, where feasible, and a range of other green and sustainable elements to achieve at least minimum LEED certification for new buildings. The sustainability requirements, as identified in the City's 'Green Matrix' for the uses proposed in the River Works plan are:

City of Chicago "Green Matrix" Relevancy				
Use	Without Incentives			
Industrial	100% green roof + exceed ASHRAE 90.1-2004 or LEED Certification or Exceed Storm- water Ordinance by 20% or 50% green roof + 50% VUA shading in 5 years	100% green roof + exceed ASHRAE 90.1-2004 or LEED Certification or Exceed Storm- water Ordinance by 20% or 50% green roof + 50% VUA shading in 5 years		
Office	100% green roof + exceed ASHRAE 90.1-2004 or 50% green roof + LEED Certification	50% green roof + LEED Certification		
Existing Building	50% green roof + exceed ASHRAE 90.1-2004 or LEED Certification	50% green roof + exceed ASHRAE 90.1-2004 or LEED Certification		

5.1.3.C Site Planning + Design

Site planning and building design review for traditional industrial activities tends to be minimal. However, for creative and tech office development and ancillary commercial uses, there will likely be much more focus on the how the site is organized and designed. The City will likely encourage a pedestrian-friendly environment, with buildings holding the corners, glass and other transparent and active building facades, public amenities, and adequate / safe public access through the site for multiple modes of transit.

5.1.3.D Traffic & Parking

While traffic and parking are often not significant issues for traditional industrial development, the uses likely to be developed on the site will be much more employment dense and interconnected with adjacent neighborhoods. As such, the City will almost certainly require fully-developed traffic and parking demand studies to ensure that impacts on traffic flow and on-street parking in the study area and adjacent communities are minimized and managed effectively. The role that alternative modes of transportation play will be critical, such as convenient connections to mass and rapid transit, car sharing services, bike facilities and linkages to bike routes, and water taxis.

The Planned Development review and approval process can range from as short as five months – for the very straightforward and minimal impact projects without a community process – to a year or more. The length of the approval process is a function of the complexity of the project, scope of community process, nature of impacts, and degree of controversy. The general steps and milestones in the process are detailed in Attachment [I](Planned Development Zoning Process).

5.1.3.E Incentives for Private Development

A variety of public incentives are potentially available to support the private development of land. Some of the most likely incentives to be applied to the River Works project are:

5.1.3.F Tax Increment Financing (TIF)

TIF has become the primary economic development tool on the local level that supports private development projects that result in public benefits. TIF is also key in funding public infrastructure and amenity costs. TIF funds are generated from the increment in real estate taxes that result from new development, building rehabilitation, and general property tax escalation. Private development costs that are eligible for TIF support (TIF-eligible expenses) include the following:

- · Site acquisition;
- Demolition and clearance;
- · Environmental remediation and site preparation;
- Infrastructure and utilities;
- Building rehabilitation;
- Training;
- Certain soft costs associated with the above hard costs.

Additionally, TIF can provide an important source of funds for investment in public infrastructure and utilities, landscaping, and open space enhancements.

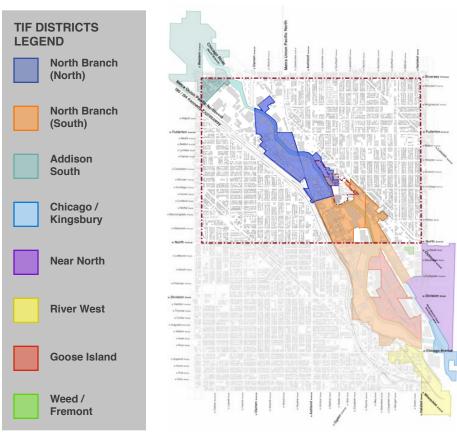


Figure 5.1

Though most of the City's PMDs have also been designated as TIF Districts, a significant portion of the River Works site lies outside existing TIF Districts. This presents an opportunity to maximize the potential tax increment that the project generates by taking advantage of the full 23-year life of a newly-designated district. Figure 5.1 on the previous page illustrates the existing North Branch North TIF District which includes the Gutmann and Lakin properties, as well as a small portion of the Finkl site on the west side of Southport. The North Branch South TIF District includes only the Finkl parcel on the east side of Kingsbury. The balance of the Finkl property remains outside of these TIF districts, both of which expire in 2020. Since the former Finkl property is no longer in use or generating revenue for ownership, it would be expected that the property would be (or has been) reclassified as vacant, significantly reducing current assessed value. This in-turn enhances the potential for incremental tax revenue from new development, some of which could be used to support eligible private and public costs used through a new TIF District.

5.1.3.G New Market Tax Credits (NMTCs)

The New Market Tax Credit Program provides federal tax credits to investors who make equity investment in certified Community Development Entities (CDEs). Investors receive a total of a 39% tax credit, over a period of seven years, for the amount invested. Projects must be located in qualifying communities, and according to the Department of Treasury's CDFI Fund webpage a significant portion of the River Works site is within a qualified community.

The Community Development Fund administers the NMTC program on behalf of the City of Chicago. The City, in turn, is just one of the CDEs locally that regularly receives tax credit allocation. Industrial investment and job creation have historically been among the key public benefit objectives of the Community Development Fund.

5.1.3.H Enterprise Zone

The entire site is located in Enterprise Zone #4. For qualifying projects, Enterprise Zone designation makes possible real estate tax reductions, sales tax exemptions on building materials and machinery & equipment, utility tax exemptions, investment tax credits, and job creation credits. Enterprise Zone incentives are particularly useful for business expansions and relocations, though not particularly impactful on development project economics (unlike TIF).

5.1.3.I Tax Abatements

The Class 6(b) and 7(b) property tax incentives are designed to lighten the tax burden for new development and substantially rehabilitated industrial and commercial properties. Qualifying properties receive a reduction in real estate assessments from the standard 25% to 10% for the first ten years, 15% for the eleventh year, and 20% for the twelfth year, returning to the 25% level in the thirteenth year. These tax abatement programs can be effective in lowering occupancy costs and competing with other jurisdictions for companies.

It should be noted, however, that the tax abatements diminish the amount of tax increment generated by a project through a TIF District. As such, the City is often unwilling to consider both TIF and tax abatements for the same project. For a project as large and multi-phased as that likely to be proposed for the study area, a TIF designation and upfront commitments for TIF subsidy may include an outright prohibition of future tax abatements, so that incremental tax projections are not undermined.

5.1.4 Public Investments

The River Works plan calls for substantial public improvements, especially to address the congestion and mobility problems in the Study Area particularly in the North Branch Industrial Corridor. The exact nature of these public investments is still to be determined. Some resources that are likely to support these public investments are:

5.1.4.A Tax Increment Financing

5.1.4.B CMAP Local Technical Assistance

TIF funds, described previously as an incentive for private developers, can and are often used to make the public infrastructure improvements that are necessary to maintain and / or improve the mobility, functionality and attractiveness of an area. The TIF funds generated by this project could be used to support many of the mobility improvements identified in the plan, especially if the new TIF was established to be able to share resources with the existing adjacent TIFs.

With funding from a Sustainable Communities Regional Planning grant by the U.S. Department of Chicago Department of T Local Technical Assistance the entire North Branch Ir evolute and pede

Chicago Department of Transportation has applied for 2016 funding from the CMAP Local Technical Assistance Program to take the mobility / transportation planning for the entire North Branch Industrial Corridor to the next level. If received, this grant will explore bicycle and pedestrian mobility opportunities in the northern half of the North Branch Industrial Corridor.

5.1.4.C Federal Grants Through The Sustainable Communities Partnership Brownfield Area-Wide Planning Grants are part of the Sustainable Communities Initiative which is a partnership between EPA, HUD and US DOT. Area-wide Planning Grantees will receive, according to the EPA, special consideration for grant applications submitted to these agencies that support implementation of their area-wide plans. Attachment I (6.15) contains a list of federal grant programs provided to NBW by the US EPA.

5.1.5 Public-Private-Community Collaboration Vehicles

It is clear that development of the study area will require public, private and community collaboration at multiple levels and on a variety of issues. The importance of area-wide infrastructure upgrades, mobility enhancements, zoning, PMD and industrial policy concerns, public river access, green space desires and linkages with adjacent communities require an array of collaborative actions. Some of this collaboration will take the form of legally binding contracts and agreements, while in other cases the collaboration will be more informal.

5.1.5.A Redevelopment Agreements

When the City of Chicago provides incentives to a private developer a redevelopment agreement (RDA) is negotiated. The RDA spells out the commitments and responsibilities of the private developer in exchange for receiving public resources. The RDA can provide another legal mechanism to ensure that public and community benefits are the result of public investment rather than windfall profits to the land owners or developers. All RDA's must be approved by the Community Development Commission (CDC) and the City Council.

5.1.5.B TIF Plans

In order to establish a new TIF District a TIF plan is required. The TIF plan provides an opportunity to ensure that public / community benefits will be supported with the funds generate by the TIF – including sharing increment with the neighboring TIF's, if desirable. TIF plans must also be approved by the CDC and the City Council.

5.1.5.C Planned Development (PD) Process

The PD process, as noted above, provides a vehicle to combine or cluster amenity uses permitted in smaller amounts (such as restaurants) around the site(s) and into larger uses that provide this function for the entire site. The PD process provides a way forward to introduce land use flexibility into the development in a way that remains generally consistent with the underlying PMD zoning so the substantial existing industrial base is not jeopardized and the entire area is not opened to land speculation.

across the Chicago metropolitan region to undertake planning projects that advance the principles of GO TO 2040. It is currently funded by the Federal Highway Administration, Federal Transit Administration, HUD, Economic Development Administration, Illinois Department of Transportation, Illinois Attorney General, Illinois Environmental Protection Agency, Illinois Department of Natural Resources, and Chicago Community Trust.

Housing and Urban Development

(HUD), CMAP initiated the Local

Technical Assistance (LTA) pro-

gram in 2010. The program involves

providing assistance to communities

5.1.5.D Master Development Plan

For an opportunity of this size and visibility, another key to success is to articulate a unifying concept for the entire development through a master plan. Establishing a master plan sets forth conceptual development direction and guidelines for the whole area, not just selling-off individual parcels. In the case of River Works, this makes collaboration among all three property owners important. It also potentially creates a role for a master developer who can take responsibility for much of the upfront entitlement and infrastructure work, and set a direction for development of individual parcels by more specialized developers or end users themselves.

Beyond just the existence of a master development plan, establishing a unique identity for the development, along with commensurate amenities, will be a key recruiting tool for certain prospects – particularly for attracting users for whom image and visibility is important for their company and for attracting talent. This may create pressure to provide certain site amenities that current zoning does not fully permit, such as restaurants, coffee shops, select retail, fitness and recreational amenities, active open spaces, and other places of collaboration that generate energy and an identity for the district and can connect it with the adjacent community.

The master development plan must meet both market and community expectations. This River Works plan provides potential developers a clear vision of how both community and market expectations can be fulfilled, providing a path forward that reduces uncertainty, conflict and entitlement risk.

In the absence of a master development plan, community planners such a NBW and the City of Chicago will play a larger role in insuring coordination of and benefits from the various individual elements of the redevelopment as they occur.

5.1.5.E Prospect Recruitment

Private, public and community stakeholders all can play important roles in recruiting prospects for the River Works redevelopment. Methods for identifying and connecting with prospects are well-practiced within the private real estate community. Using traditional passive marketing tools such as listing the properties on electronic real estate services (CoStar, LoopNet, etc.), placing strategic print ads, having an electronic presence on the City's, State's and World Business Chicago's online marketing sites, etc., ensures that low-profile prospects can easily become aware of the opportunity, if not already aware through media coverage.

However, the most fertile recruitment ground is through active engagement of key prospects – companies and users known to public officials and the real estate community to be candidates for relocation or expansion. Select Chicago developers are already active in soliciting interest from larger corporate anchors from all around the country for similar opportunities in the city. Many of these companies are in higher-cost costal environments and are seeking to disperse their corporate presence to lower-cost – though still internationally-focused – urban areas.

Another critical potential pool of prospects is local companies needing to expand or relocate, and for whom the location is attractive, physical configuration is suitable, and costs are feasible. The high-profile nature of the site will help to ensure that local companies seeking to relocate are aware of the opportunity. North Branch Works and other local business organizations are critical links in identifying the needs of such companies and making connections to the City, relevant real estate resources, and to the development entity (or entities) that ultimately manages the redevelopment of the site.

5.1.5.F Mobility & Transportation Planning

For many years NBW's Infrastructure Task Force has played a leading role identifying and advocating for critical capital improvement needs in the North Branch Industrial Corridor. This familiar role has been a cornerstone of the River Works planning process and NBW used its own grant funds to identify the mobility issues in the planning area and to develop the initial strategy to address them.

CDOT is now seeking funding through CMAP's Local Technical Assistance (LTA) program to take the next step to build on NBW's work. Resources that exist to address larger area issues will require forethought and additional planning to begin identifying potential solutions. Through this, or through another means, collaboration among the City's Departments of Planning & Development and Transportation, the CTA, Metra, and other transportation agencies with the community can facilitate the creation of a transportation strategy for the North Branch Industrial Corridor and the surrounding neighborhoods. Creating better access to and through the site, enhancing mobility through multiple transport modes, and easing congestion in the area, are among the most frequently mentioned concerns by area residents, employers and employees alike. Access and congestion also double as key constraints to the development of the study area.

More detail on mobility and transportation issues and challenges can be found in Appendix [II](North Branch Industrial Corridor Transportation Framework Plan).

5.1.5.G Transportation Management Organization / Association

Transportation Management Organizations (TMOs) are typically membership organizations representing employers, business and neighborhood groups, and staffed by an executive director and small staff. A prime objective of many TMOs is to coordinate transit needs and rationalize services across a variety of user groups. TMOs additionally provide a forum for employers, residents, transit agencies and other governmental organizations to collaborate and establish policies and programs. A property tax surcharge on properties in the TMO service area provide the funding for their services.

The range of issues with which TMOs can be helpful include locating transit facilities, car sharing and bike amenities in locations that most efficiently serve multiple user groups, establishing Transportation Demand Management programs among employers to reduce vehicular use, and establishing stronger connections with nearby transit facilities through shuttle services, real-time transit information, and other strategies. Given the potential for closely aligned interests among residents, existing businesses and future business activities, a TMO could play an important role in coordinating effective transportation policies and services among all stakeholders on the near north side. NBW is using its grant funding to assess the TMO strategy for the area and to identify the steps needed to move it forward. An alternative to a TMO would be a Special Service Area (SSA). The pros and cons of a TMO versus an SSA are also being assessed by NBW.

5.1.5.H Community Benefits Agreement

Beyond participating in the mandated public involvement processes and hearings related to zoning and incentives, the community groups that participated in the River Works planning process should consider formalizing their involvement by negotiating a Community Benefits Agreement with the developer and the City to ensure that the benefits they envision from this redevelopment are realized, especially in exchange for any public subsidies, public investments or zoning flexibility provided to the developer.

Community benefits agreements (CBAs) are "legally enforceable contracts between a prospective developer and community representatives." These representatives most commonly include economic development and community organizations who wish to ensure specific benefits for the community during and after development. Community benefits that could be negotiated through a River Works CBA include:

- · Local hiring and living wage requirements;
- Affordable space for manufacturers;
- Incubator or maker spaces;
- · Use of local contractors;
- Continued community participation;
- Public access to the river trail;
- · Boat docks for public access to the river;
- Green space with public access on the site;
- · Congestion mitigation strategies;
- · Sustainability elements beyond those required;
- · Funds to support ongoing community involvement; and
- · Other neighborhood amenities

"In exchange for these community benefits, developers typically receive the support of the community coalition when negotiating with elected officials and city planning agencies. In most cases, coalition support helps to expedite the development planning process." ¹ Because of the public-private-community partnership needed to enhance the benefits of the River Works redevelopment there are many leverage points for negotiation—community support, zoning flexibility, incentives such as TIF, and public investments such as mobility improvements, boat launches, etc.—with the developer or end users.

Chicago is not new to CBAs. A CBA was negotiated when the city was vying for the 2016 Olympics. And, a sample of a CBA agreement, currently under negotiation for the Lakeside Development at the former US Steel site, is available online at the Alliance for Southeast Chicago website. ²

5.1.5.I Local Hiring Agreements

Local hiring agreements have been employed by NBW in the past to ensure that the end users located in new developments in the North Branch Industrial Corridor agree to work with NBW and / or other local organizations to identify, train and hire local residents for jobs created there. Companies such as Costco, Jetro and Fed Ex have entered into and benefited from these agreements with NBW in the past. This same strategy should be used at River Works as a way to direct the employment benefits of the development to the neighborhoods nearby.

66

Include clean and safe park space adjacent to the Chicago River for passive and recreation purposes. Collaborative art and music spaces could find a place here too.

- Outreach Meeting 2 Attendee

66

There's public access at the new boat house at Addison, and private access for rowers and kayakers at North Avenue, but there's no nearby public access at the river level for canoes or kayaks nearby.

 Dave Stanford Chicago Citizen

66

Opportunities for boating should be included. Activities geared towards the river encourage engagement with environmental themes. Could this be a location for a new boathouse? It would facilitate recreational & competitive use of the river.

- Outreach Meeting 2 Attendee

66

Add riverfront amenities. Recreation, commercial, and transit opportunities should be included in the plan.

- Outreach Meeting 2 Attendee

¹ http://www.law.unc.edu/documents/poverty/publications/mortonandlowepolicybrief.pdf p. 3

² https://asechicago.wordpress.com/category/lakeside-development/.

Could we consider multi-tenant, creative studio, or artisanal manufacturing facilities?

- Outreach Meeting 1 Attendee

66

Given the campus-like nature of the site, the plan for redevelopment should consider the possibility of prospective new owners / tenants sharing resources - from high-tech machinery to servers to cafeterias.

- Outreach Meeting 1 Attendee

66

Develop an advanced manufacturing demonstration center. This state of the art, advanced manufacturing demonstration center would showcase the manufacturing of the future.

- Outreach Meeting 2 Attendee

66

Often, when high tech businesses move into a neighborhood, they contract with either the city or utility companies to lay fiber optic cables in the area for faster internet speed and more bandwidth. The FCC has a program that allows schools and libraries to access high-speed internet lines in the neighborhood. The program is called E-Rate. Is there something similar for small businesses in the PMD?

- Cory Garfin Chicago Citizen

5.1.5.J Non-Profit Shared Production Spaces

Recently a wave of shared production spaces have been established in urban centers providing access to a variety of high tech and production equipment which would otherwise be too capital intensive for individuals and start-up business. These shared, or maker, spaces typically charge a small membership fee in exchange for host of resources: equipment and safety training, prototype and industrial design workshops, small business and marketing seminars, and networking opportunities. These non-profit operators typically receive some level of both public, private and foundation funding in order to keep rents affordable to manufacturers. A few examples of such spaces are Artisan's Asylum in Sommerville, Massachusetts, and Bozeman Makerspace in Bozeman, Montana. The benefit of these spaces is that they can incubate start up business and contribute to a vibrant urban production ecosystem. A direct potential benefit to a private developer is the potential pipeline of tenants that such a shared space can incubate and grow.

5.1.5.K High-Tech Manufacturing & Innovation Facilities

Public and quasi-public entities can attract advanced manufacturing and innovative industries by providing funding for, or by themselves developing, facilities to house such activities. A local example is UI LABS, recently established one half mile south of River Works on Goose Island in the North Branch Industrial Corridor. Since its opening in May, 2015, UI LABS has worked to create partnerships and collaborations between universities and industries to facilitate the development and application of solutions to economic and industrial challenges. The collaborative is currently comprised of two Labs, the national Digital Manufacturing and Design Innovation Institute (DMDII) and City Digital. A massive collaboration, DMDII brings together more than 40 global technology and manufacturing companies and 30 government, community, and university participants committed to innovative manufacturing and job creation. City Digital utilizes its partnerships between organizations and universities to concentrate on urban infrastructure issues including water, energy, and congestion concerns. From its Goose Island headquarters, UI LABS is emerging as a valuable collaborative resource.

5.1.5.L Fiber & Connectivity

According to fiber providers who were interviewed as part of this planning process, connecting fiber to the River Works study area would require about a mile of infrastructure from the existing backbone. Though speculative investment might be an option, private providers are motivated by short-term return on the upfront capital investment, which may in-turn require a partnership with a public entity. There is currently no publicly-funded fiber infrastructure in Chicago. One example of such public-private collaboration is PenRen, where Penn State and the federal government funded fiber infrastructure, to be paid-back through future user fees. Another federal program is E-Rate, where K-12 schools can apply to annually to provide connectivity. Awards are based partly on need, measured through federal school lunch participation. The program is supported through surcharges on area phone bills.

Additional study is needed to determine how to bring adequate internet capacity to the entire North Branch Corridor in order to meet the changing needs of existing and planned development in the area.

These twelve (12) public-private-community collaboration vehicles provide the foundation underlying the implementation recommendations above.

ATTACHMENT[1]

NORTH BRANCH RIVER WORKS

17-6-0400 PMD, Planned Manufacturing Districts.

17-6-0401 General.

17-6-0401-A Purpose. The "PMD", planned manufacturing district zoning classification is intended to:

- 1. foster the city's industrial base;
- 2. maintain the city's diversified economy for the general welfare of its citizens;
- 3. strengthen existing manufacturing areas that are suitable in size, location and character and which the City Council deems may benefit from designation as a PMD;
- 4. encourage industrial investment, modernization, and expansion by providing for stable and predictable industrial environments; and
- 5. help plan and direct programs and initiatives to promote growth and development of the city's industrial employment base.

17-6-0401-B Minimum Land Area. Only areas of 5 or more contiguous acres are eligible for designation as a planned manufacturing district.

17-6-0401-C Establishment. PMD zoning may be established only in accordance with the PMD rezoning procedures of Sec. 17-13-0700.

17-6-0401-D District Boundaries. The boundaries of PMD districts must be shown on the Official Zoning Atlas. Detailed legal descriptions must be included in the ordinance establishing the specific PMD.

17-6-0401-E Conflicting Provisions. When any provision of this section conflicts with a comparable provision concerning the same subject matter in another section under this Zoning Ordinance, the provisions of this section will govern.

17-6-0401-F Districts Established. The following planned manufacturing districts are established:

- 1. P.M.D. 1, Clybourn Corridor
- 2. P.M.D. 2, Elston Corridor
- 3. P.M.D. 3, Goose Island
- 4. P.M.D. 4, Kinzie Corridor
- 5. P.M.D. 5, Chicago/Halsted Corridor
- 6. P.M.D. 6, Lake Calumet
- 7. P.M.D. 7, Western/Ogden
- 8. P.M.D. 8, Stockyards
- 9. P.M.D. 9, Northwest
- 10. P.M.D. 10, West Pullman
- 11. P.M.D. 11, Pilsen
- 12. P.M.D. 12, Harlem
- 13. P.M.D. 13, Greater Southwest
- 14. P.M.D. 14, Kennedy
- 15. P.M.D. 15, Armitage

[amended: 05/26/2004, Council Journal: p. 25277, 25287, 25299; 01/11/2005, Council Journal: p. 41231; 03/09/2005, Council Journal: p. 44427-28; 11/30/2005, Council Journal: p. 62734]

6

⁵ Maximum 9,000 GFA for new buildings, or accessory to industrial use ⁶ Maximum of the lesser of 3,000 SF or 20% of GFA ⁴ Maximum 9,000 GFA for new buildings

 2 Maximum 3,000 GFA for accessory sale of goods produced on-site 3 Consumer accessible sales not to exceed 20% of GFA

¹ Maximum 3,000 GFA for new buildings

Sub-D	istrict A	Sub-Die	strict B
Permitted	Special Use	Permitted	Special Use
Postal Service	Parks & Recreation	Day Care	Parks & Recreation
Public Safety Services	Major Utilities & Services	Postal Service	Major Utilities & Services
Minor Utilities & Services		Public Safety Services	
		Minor Utilities & Services	
Animal Shelters & Kennels	Day Labor Employment Agency	Animal Shelters & Kennels	Day Labor Employment Agend
Stables	Inter-Track Wagering	Animal Sales & Grooming	Drive-Thru Facility
Building Maintenance Services	Car Wash & Cleaning	Veterinary	Inter-Track Wagering
Copying & Reproduction ¹		Stables	Participatory Sports & Recrea
Business & Trade Schools		Building Maintenance Services	Car Wash & Cleaning
Employment Agencies		Copying & Reproduction	Motor Vehicle Body Shop
Indoor Urban Farm ²		Business & Trade Schools	
Rooftop Farm ²		Employment Agencies	
Communication Service Est.		Indoor Urban Farm ²	
Building Materials Sales ³		Rooftop Farm ²	
Construction Storage Yard		Communication Service Est.	
Indoor Special Events - Class A		Building Materials Sales	
Indoor Special Events - Class B		Construction Storage Yard	
Medical Services ⁴		Restaurants	
Offices ⁵		Taverns	
High-Tech Offices		Small Entertainment Venues	
Electrical Data Storage		Indoor Special Events - Class B	
Non-Accessory parking		Financial Services	
Consumer Repair or Laundry		Food & Beverage Sales	
General Retail Sales ⁶		Medical Services	
Heavy Equipment Rental & Sales		Offices	
Motor Vehicle Repair		High-Tech Offices	
Motor Vehicle Body Shop		Electronic Data Storage	
Vehicle Storage & Towing		Non-Accessory Parking	
RV & Boat Storage		Personal Services	
		Consumer Repair or Laundry	
		General Retail Sales	
		Auto Supplies & Accessories	
		Light Equipment Rental & Sales	
		Heavy Equipment Rental & Sales	
		Motor Vehicle Repair	
		Vehicle Storage & Towing	
		RV & Boat Storage	
Artisan Manufacturing	Mining & Extraction	Artisan Manufacturing	Recycling Class III, & IVA
Limited Manufacturing	Recycling Class IVA, IVB, & V	Limited Manufacturing	Container Storage
General Manufacturing	Hazardous Mat'ls Disposal & Stor.	General Manufacturing	Freight Terminal
Intensive Manufacturing	Incinerators	Recycling Class I, II, & III	
Recycling Class I, II, & III	Liquid Waste Handling	Warehouse & Freight Movement	
Warehouse & Freight Movement	Demo Material Reprocessing	Wireless Communication Facilities	
Container Storage	Resource Recovery		
Freight Terminal	Sanitary Landfills		
Outdoor Storage of Raw Materials	Transfer Stations		
Wireless Communication Facilities			

6.3.1 Multiplier Effect

The multiplier effect is the number of times the income generated exceeds the initial expenditure made. This occurs through a chain reaction of expenditures resulting from the initial expenditure. For example, if a business pays an employee, the employee may spend their income on rent, food, entertainment, etc. These expenditures provide income to the landlord, the grocery store, the restaurant, etc. which, in turn, spend their income on other goods and services.

The Chicago Metropolitan Agency for Planning (CMAP) published a report in August 2013 which outlines specific incentives for investment in manufacturing industry. The report determined that office or manufacturing developments "typically provide... higher regional economic benefits. For instance, one manufacturing job supports between 1.7 and 4 jobs in other sectors and provides higher average wages." ¹ CMAP also reported an advantage in spill-over effects, stating that "these developments are more likely to spill over into other industries and to support employment in a range of sectors including business services, retail, and human services." ² Specifically, industries such as office and manufacturing with higher economic multipliers "tend to support jobs in industries with lower multipliers." ³ Conversely, lower multiplier jobs do not tend to support higher multiplier jobs in the same complimentary manner.

The Center for Urban Economic Development (CUED) at the University of Illinois in Chicago found in another report that "Input-output analysis indicates that **the manufacturing employment multiplier for the Chicago region is about 3.2.** For every "direct" manufacturing job created in the region, 1.2 "indirect" jobs are created in supplier companies that provide goods and services for manufacturing and one additional "induced" job is created to provide the consumer goods and services that the direct manufacturing employee purchases. Taken together, these three job impacts create a manufacturing job multiplier of 3.2 for the Chicago region." ⁴

This same result is true nationwide, the multiplier effect of industrial development creates healthy local economies. Newgeography America's New Manufacturing Boomtowns states that, "Looking across the country, it is clear that industrial expansion has been a key element in boosting some of our most successful local economies. The large metro areas with the most momentum in expanding their manufacturing sectors also rank highly on our list of the cities that are generating the most jobs overall..."

And, "Clearly America's nascent industrial revival still has not reached many parts of the country. But given the evident relationship between growing economies generally and a vibrant manufacturing sector, perhaps more regions will place greater emphasis on industrial employment as they seek to recover from the Great Recession." ⁵

 $^{^{\}rm 1}$ Chicago Metropolitan Agency for Planning. "Examination of Local Economic Development Incentives in Northeastern Illinois." Aug 2013. Page 5.

² Ibid

³ Ibid. Page 45

⁴ CUED "Multiplying Jobs: How Manufacturing Contributes to Employment Growth in Chicago and the Nation" Page 2.

⁵ http://www.newgeography.com/content/003707-americas-new-manufacturing-boomtowns

6.3.2 Competitive Advantage

Chicago has had a long standing, strong manufacturing base. A second CMAP publication outlines the characteristics and advantages of Chicago's manufacturing industry. This report from 2013 emphasized the global significance of the City's manufacturing industry. Simply stated, "[m]anufacturing matters because it enhances the very qualities that distinguish metropolitan Chicago on the world stage." ⁶ It, . . .

- "Creates the largest ripple effect of any industry (one manufacturing job supports at least two more in the region)
- Produces two-thirds of the region's exports
- · Leverages region's locational advantage as freight hub of the nation
- Influences nearly every major industry in the region"

CUED also examines the significance and future of manufacturing in Chicago. "The Chicago area has a large number of manufacturing jobs, and these make up an important part of the metropolitan area's economy. In 2011, the Chicago metropolitan area had about 411,000 manufacturing jobs, second only to metropolitan Los Angeles. Manufacturing also accounts for a disproportionately **high percentage of the metropolitan area's total employment**. In 2011 manufacturing made up 9.5 percent of all Chicago-area jobs, compared to only 8.5 percent of jobs nationwide. Thus, manufacturing's percentage of Chicago-area jobs was 1.11 times its percentage of all U.S. jobs. This indicates that metropolitan Chicago has a strong specialization in manufacturing compared to the nation as a whole." ⁷

CUED goes on to say, "Current enthusiasm for local and regional policies to strengthen manufacturing in metropolitan Chicago is well founded. Such policies make sense because the Chicago area is an important manufacturing center with specializations in many manufacturing industries, a manufacturing sector that on average offers higher-wage jobs than the rest of the area's economy, and a recent manufacturing job growth rate that exceeds the national average. That job growth can be expected to continue." ⁸

Critics of the PMD and Chicago's industrial policy often cite the decrease in manufacturing employment as proof of its failure. However, much of this employment decrease is due to productivity gains from advanced manufacturing technology. There is a critical change occurring in the mix, not level of activity, on the ground. The shift in employment away from traditional manufacturing and towards transportation and logistics, warehousing, and wholesale is widespread, but this shift is well accommodated within the land uses allowed in Chicago's PMDs and is not necessarily indicative of a weak manufacturing sector. As noted above, manufacturing remains an important part of Chicago's current and future economic base.

⁶ CMAP. "Metropolitan Chicago's Manufacturing Cluster: A Drill-Down Report on Innovation, Workforce, and Infrastructure." Feb 2013. Page 5.

⁷ Center for Urban Economic Development (CUED) at the University of Illinois at Chicago (UIC) created a report in February 2013 entitled, "Locating Chicago Manufacturing: The Geography of Production in Metropolitan Chicago" Page 5.

⁸ Ibid. Page 17

6.3.3 Innovation is Key

Innovation is cited often as the key to manufacturing's continued competitiveness in Chicago and in the United States. The River Works plan is built upon the base of innovation businesses already in the North Branch Industrial Corridor, the nearby workforce, and host of nearby amenities to develop an innovation park that supports CMAP, World Business Chicago, and the City of Chicago's recommendations below.

CMAP identifies manufacturing as a significant source of innovation, "in that they rely heavily on research and development. In fact, 85% of private research and development in northeastern Illinois comes from the region's manufacturing cluster." ⁹

CMAP also identifies the following strategies to support manufacturing innovation in Chicago:

- Increase technology commercialization to bridge the gap between the region's basic research assets and the private market.
- Develop capabilities in emerging manufacturing technologies such as nanotech to capture the next generation of advanced products and processes.
- Augment early-stage financing opportunities for the most innovative manufacturers.
- Provide R&D support, especially for small manufacturers, to better link the majority of the cluster to the innovation ecosystem.
- Reorient economic development strategies toward the cluster to capitalize on manufacturing's dominant contributions to innovation.

Similarly, the key components of World Business Chicago's strategy are:

- Accelerate growth in advanced manufacturing industries in which Chicago specializes (e.g., those with an LQ greater than 1).
- Help low-growth legacy manufacturers to repurpose assets and adopt advanced technologies.
- Expand workforce training programs to give workers the skills that manufacturers seek (but struggle to find).
- Make a clear commitment to support the region's manufacturers, in word and deed, through initiatives and more consistent and efficient zoning, permitting, and other business processes.

 $^{^9}$ CMAP. "Metropolitan Chicago's Manufacturing Cluster: A Drill-Down Report on Innovation, Workforce, and Infrastructure." Feb 2013. Page 46

¹⁰ Ibid. Page 25

¹¹ "A Plan for Economic Growth and Jobs", identifies ten proposed strategies for economic growth. The first strategy is to: "Become a Leading Hub of Advanced Manufacturing". Pages 37 and 38.

6.3.4 Organizational and Regulatory Infrastructure

The City of Chicago's "Chicago Sustainable Industries: A Business Plan for Manufacturing" identifies the organizational and land use regulations needed to support Chicago's industrial corridors. Included in the strategy: "Maximize Chicago's Location" are the following proposed policies:

- "Support entities with the mission of acquiring, developing and/or managing real estate within Industrial Corridors for manufacturing."
- "Maintain a strong zoning classification for manufacturing while ensuring that the range of compatible uses is clear, evolves with technology, and takes full advantage of local transportation infrastructure." 12

Similarly, the University of Wisconsin-Milwaukee Urban Planning Department recommends, that the City of Milwaukee's citywide policy plan, and land use policies include efforts to:

- "Strengthen commercial and industrial centers, districts, and corridors and expand commercial and industrial activity.
- "Preserve industrial land uses and revitalize the industrial economy for a changing global and regional economy. Consider clean and green industries, clean water technology, research and development, and eco-industrial parks as redevelopment options for vacant and underutilized industrial property.
- Support the industrial employment base by allowing and encouraging limited commercial development near industrial districts that complement the needs of employees and businesses." 13
- According to the Initiative for a Competitive Inner City (ICIC), Boston's successful program to develop its industrial base has four basic premises, the first is to "protect and create industrial land through planning and zoning." 14

^{12 &}quot;Chicago Sustainable Industries: A Business Plan for Manufacturing". Page 12.

¹³ University of Wisconsin Milwaukee "Industrial Waterfront Redevelopment" http://www.slideshare.net/sauerms/industrial-waterfront-redevelopment-milwaukees-inner-harbor-urban-design-and-redevelopment-strategies PDF

¹⁴ ICIC "Industrial Jobs Offer Living Wages with Low Barriers for Inner City Residents"

6.3.5 Tax Generators vs Tax Consumers

Initiative for a Competitive Inner City's (ICIC) "Jobs. Equity. Investment. What Works for Cities" report dispels the myth that residential development has more benefits to a city economically than industrial development. The chart below shows taxes generated versus taxes consumed for residential, non-industrial and industrial uses.

Expenditures Associated with Every Dollar of Revenue Generated, 2011

Development Type	Expenditures Associated with Every Dollar of Revenue
Residential	\$1.06 - \$1.15
Non-Industrial	\$0.77 - \$0.94
Industrial	\$0.60 - \$0.69

Source: ICIC Analysis

http://www.icic.org/ee_uploads/publications/INDUSTRIAL_MASTER_DECK.pdf

6.3.6 Higher Wages

Last, but not least, manufacturers and industry provide higher wages to their workers than other businesses. CMAP's 2013 "Metropolitan Chicago's Manufacturing Cluster" report states that Chicago's manufacturing industries provide wages "27 percent higher than the regional average" and generate "over \$65 billion annually," making it the second largest sector of the regional economy. 15

ICIC's infographic indicates that: "Focusing on industrial growth has the potential to create well-paying jobs that are accessible to a diverse workforce. Data from the U.S. Census Bureau shows that the median annual full-time salary for industrial jobs is \$45,000, which is a 200% increase over minimum wage and a 40% increase over median retail wages." 16



Figure 6.1

 $^{^{\}rm 15}$ CMAP's 2013 "Metropolitan Chicago's Manufacturing Cluster". Page 5.

¹⁶ "Industrial Jobs Offer Living Wages with Low Barriers for Inner City Residents" and Infographic http://www.icic.org/connection/blog-entry/blog-industrial-jobs-offer-living-wages-with-low-barriers-for-inner-city-residents.

6.4.1 Neighborhood Context

River Works, located in the North Branch Industrial Corridor, is situated between the Lincoln Park community to the east and Logan Square and West Town communities to the West. Cortland, which traverses the Chicago River, is one of the principal east-west connections between these thriving residential communities. The Bucktown Community Organization and Logan Square Neighborhood Association represent the adjacent neighborhoods to the west, while two neighborhood associations play active rolls in the adjacent neighborhoods to the east: Sheffield Neighborhood Association and RANCH Triangle, with Armitage as the boundary between them.

The following table provides demographic information on approximately one-square-mile portions of these neighborhoods. To the west, the Bucktown (part of Logan Square) and Wicker Park (part of West Town) include 12 Census tracts located between North (1600 N) and Fullerton (2400 N) Avenues, extending from the Chicago River to Western (2400 W). The Lincoln Park area includes 6 Census tracts with the same north-south boundaries, extending east from the Chicago River to Halsted (800 W). The following conclusions can be drawn:

These neighborhoods are relatively dense, although this portion of Logan Square/West Town has a population of 17,495, compared to 15,147 in Lincoln Park. Both areas show population increases from 2000-2013.

The presence of DePaul University's Lincoln Park campus impacts the Lincoln Park demographics, as students living in dorms and off-campus apartments combine with long-time homeowners. The median age is young, 27.1, while the median household income is high at \$101,066.

In Bucktown/Wicker Park, 54.6% of the households are renters, with an average household size of 2.0 persons. The median household income is \$75,384. The neighborhoods immediately east and west of River Works provide a highly educated workforce to area employers. In the larger Community Areas that are closest to the North Branch Industrial Corridor (Lincoln Park, the Near North Side, West Town, and Logan Square), nearly two-thirds of adults over the age of 25 have college degrees.

Farther west in the Study Area and beyond, within a couple of miles of River Works, the population is less affluent and there are fewer college graduates. Many of these Chicagoans are also stakeholders because they depend on employment opportunities in the industrial corridor to support their families.

Study Area Demographic Profile

	Bucktown / Wicker Park						
	2000 Census		2010 Census		2010 Census		Change from 2002-2013
Population	16,167		16,878		17,495		8.2%
Households	8,123		8,460		8,784		8.1%
Families	3,096		3,242		3,316		7.1%
Average Household Size	2.04		1.99		1.99		-2.5%
Owner Occupied Housing Units (%)	3,361	41.4%	4,039	47.7%	3,992	45.4%	18.8%
Renter Occupied Housing Units (%)	4,762	58.6%	4,421	52.3%	4,792	54.6%	0.6%
Median Age	31.2		31.5		31.6		
Median Household Income					\$75,384		
Average Household Income					\$108,083		

			Lincoln	Park		
2000 Census		2010 Census		2010 Census		Change from 2002-2013
14,648		14,956		15,147		3.4%
6,252		5,771		5,835		-6.7%
2,281		2,126		2,125		-6.8%
1.97		2.09		2.10		-6.9%
2,839	45.4%	2,652	46.0%	2,559	43.9%	-9.9%
3,413	54.6%	3,119	54.0%	3,275	56.1%	-4.0%
30.9		26.2		27.1		
				\$101,066		
				\$135,198		

Source: US Census and ESRI Business Analyst

6.4.1.A Real Estate Market

In the spring of 2013, U.S. Equities / CBRE evaluated industrial space throughout all of Chicago's industrial corridors for the City as part of the work done to support the Chicago Sustainable Industries Plan. At that time, the availability rate in the North Branch Corridor, shown on the map below in green, was 10.9%, compared to an average across all industrial corridors of 14.1%. One year later, the North Branch Corridor's availability rate has dropped to 6.3%, as illustrated in the table on the facing page.

The fact that the availability rate for two story buildings in the corridor is lower than for single story buildings is counter to intuition and the reverse of such rates in other corridors. While the sample size of buildings in the North Branch Industrial Corridor may be inadequate from which to draw a hard conclusion, the strength of demand from business and professional service firms and other office-type uses likely contributes to the high occupancy rates of upper-story space.

Developable land sites in the vicinity are very rare. Those that exist are typically sitting on the market with asking prices, ranging from \$55.00 to \$100.00 per sf, are banking on a change in zoning from PMD zoning. By far the most prominent of these opportunities is the 14.5-acre former Chicago Paperboard site at 949 North Ogden Avenue.

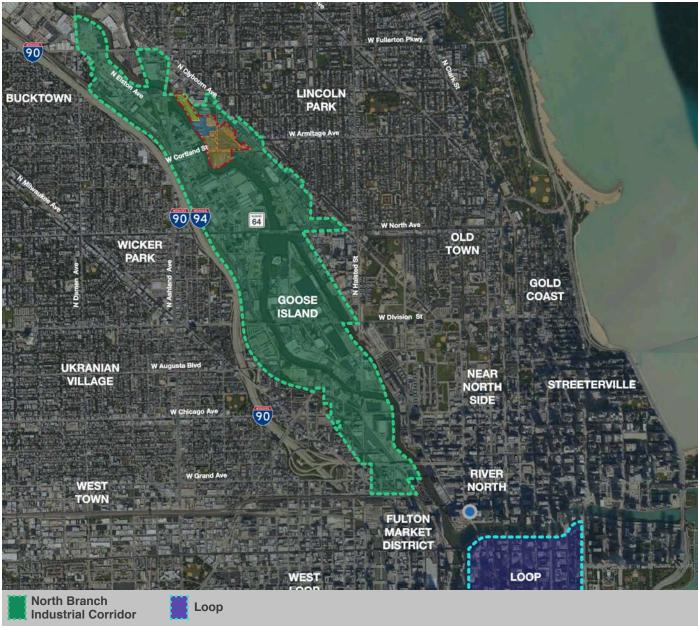


Figure 6.2

North Branch Industrial Corridor Availability Rate						
Building Type	Total Square Footage	Available Square Footage	Available %			
1 Story Buildings	3,681,576	365,914	9.9%			
2+ Story Buildings	3,966,272	114,869	2.9%			
All Buildings	7,647,848	480,783	6.3%			

Source: CoStar

6.4.1.B Business Sector Characteristics

The table below lists the 2-digit NAICS codes for businesses in the North Branch Industrial Corridor. The corridor boundaries capture significant retail employment along Clybourn Avenue and Elston Avenue north of Webster providing easy access to amenities for corridor businesses. Also notable is the significant Transportation and Warehousing, Manufacturing, and Professional, Scientific and Technical Services each of which comprise over 10% of the employment in this diverse industrial corridor. The location of the study area, both near the Central Business District and adjacent to amenity-rich neighborhoods, supports strong demand from large users as well as from a range of small-scale and entrepreneurial production firms, last-mile distribution and logistics companies, suppliers and vendors to other central-area businesses, research and technology companies, and other professional and business service firms.

2011 Employment – North Branch Industrial Corridor				
Sector	Count	Percent		
Retail Trade	3,069	17.3%		
Transportation and Warehousing	2,538	14.3%		
Manufacturing	2,163	12.2%		
Professional, Scientific, and Technical Services	1,965	11.1%		
Wholesale Trade	1,607	9.0%		
Administration & Support, Waste Management and Remediation	1,373	7.7%		
Finance and Insurance	1,076	6.1%		
Educational Services	829	4.7%		
Accomodation and Food Services	725	4.1%		
Construction	555	3.1%		
Real Estate and Rental & Leasing	465	2.6%		
Other Services (excluding Public Administration)	435	2.4%		
Health Care and Social Assistance	329	1.9%		
Arts, Entertainment, and Recreation	311	1.8%		
Information	309	1.7%		
Management of Companies and Enterprises	9	0.1%		
Utilities	2	0.0%		
Public Administration	1	0.0%		
TOTAL	17,761			

Source: U.S. Census Bureau, Center for Economic Studies

6.4.1.C Employment

There is a strong employment connection between the North Branch Industrial Corridor and the surrounding neighborhoods as well as with the City as a whole. An analysis of the where the 1,000 employees of CH Robinson, a freight forwarding company located near the River Works site, illustrates these connections. Nearly 20% (19.6%) of their employees reside within the Study Area itself; 41% live within three miles of their jobs and 74% live within the City of Chicago. Only 26% live in the suburbs. This is consistent with the historic employment data for the industrial corridor and indicates that the businesses located in the North Branch Corridor PMDs have a strong economic impact on the nearby neighborhoods and on neighborhoods throughout the City.

The City of Chicago's DPD's analysis of the North Branch Industrial Corridor's workforce corroborates these findings. The map below shows that the North Branch Industrial Corridor's workforce is well distributed and resides throughout Chicago.

North Branch Industrial Corridor: Residences of Corridor Workers

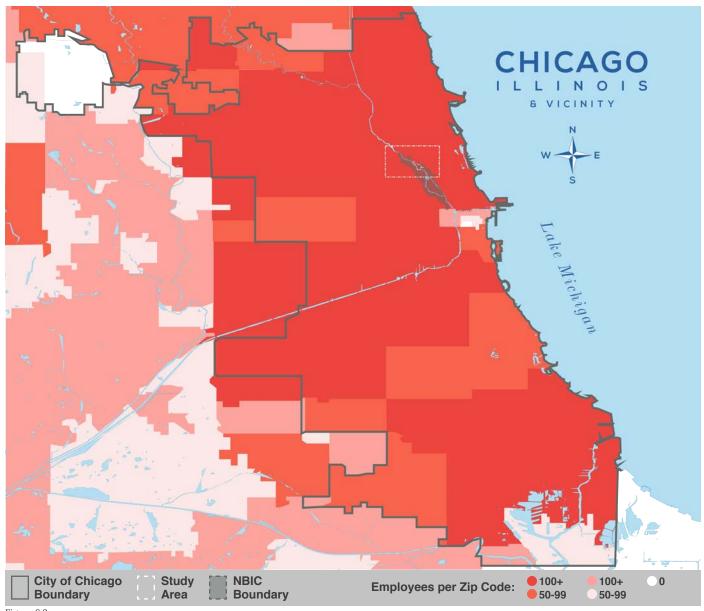




Figure 6.4



Figure 6.5



Figure 6.6



Figure 6.7



Figure 6.8

6.4.1.D Transportation + Mobility Conditions

Congestion is a perennial problem in the entire Study Area even though the catalyst sites are largely vacant. Traffic is stymied by limited through streets that are the result of the Chicago River, the size and location of bridges, and the Kennedy Expressway and railroad viaducts. The two arterial diagonal streets that border the industrial corridor, Elston and Clybourn Avenues, do not have bus routes. And, the large amount of big box retail to the east and north of the catalytic sites along Clybourn Avenue attracts significant traffic. Providing convenient transportation options for the neighborhood residents, retail shoppers, corridor employees and the future employees at River Works will be crucial. In addition, future projects are likely to be developed in the Industrial Corridor after River Works adding to the congestion. The transportation strategies should consider those traveling by automobile, truck, passenger rail (Metra Clybourn station), CTA buses and rapid transit stations, freight rail, barge, water taxi and bicycles, as well as pedestrians.

6.4.1.D.a Automobiles + Trucks

The Kennedy Expressway (I-90 / 94) is one of Chicago's most heavily trafficked highways with an average daily traffic count of 300,600. On and off-ramps at Armitage serve as access points to the River Works site.

Two elevated Union Pacific railroad lines cross Armitage between Ashland and the Kennedy Expressway (figure 6.10), constricting traffic to two lanes in both directions. Particularly during rush hour, automobile congestion is a problem in this area. Truck traffic is also impeded by low railroad viaduct clearance between the industrial corridor and the Kennedy Expressway.

Regarding the Armitage Avenue Railroad Viaduct, vehicles traveling to the east cannot proceed straight on Armitage. Instead, they must turn right on Elston and left on Cortland to cross the river. Trucks have difficulty at the ramps due to road widths that are constrained by railroad viaduct columns in the roadway.

66

There seems to be a constant traffic jam on the Cortland Street Bridge. Can anything be done to alleviate traffic?

- Outreach Meeting 1 attendee



Figure 6.9



Figure 6.10

Avoid land uses that create more automobile trips. Traffic generated by the Mariano's on Webster Avenue is terrible. The strip malls along Clybourn Avenue, by their nature, are built to serve more drivers - less pedestrians. Redevelopment should avoid uses that increase the amount of automobiles on the very crowded streets that surround the site.

- Outreach Meeting 2 Attendee

6.4.1.D.b Traffic Counts

The Chicago Department of Transportation (CDOT) has long recognized the need for improvements to the Ashland/Elston/Armitage/Cortland area. In 2000, a developer was negotiating with IKEA to open a store on Ashland where Best Buy and Kohl's are now located. Discussions held at that time included plans for IKEA to help pay for various roadway improvements, including enhanced Kennedy on-off ramps and shared parking connections to the Metra station. Neighborhood opposition to the traffic that IKEA would have generated eventually scuttled the deal. Since that time, CDOT has studied traffic patterns in this area on at least one other occasion, although no major plans to redesign the roadways are pending.

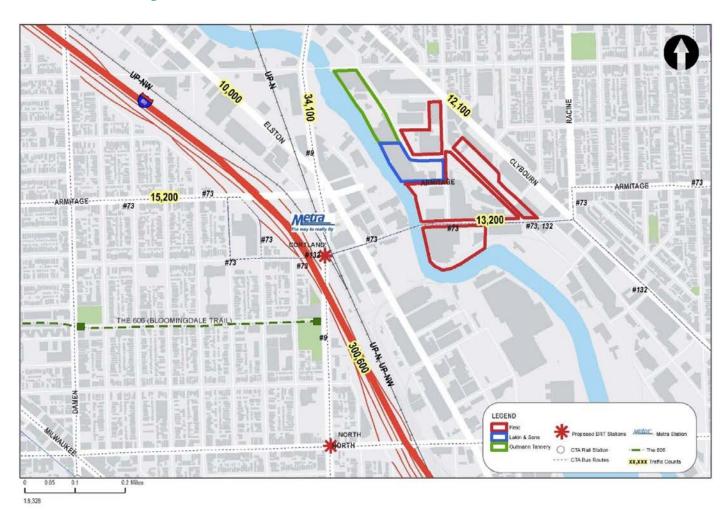


Figure 6.11

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6.4.1.D.c Clybourn Metra Station

The Clybourn Metra station (figure 6.12), located on the south side of Armitage between the two railroad bridges, serves both the Union Pacific / North Line (UP-N) and the Union Pacific / Northwest Line (UP-NW). The latest Metra weekday ridership counts indicate that a total of 1,466 passengers board both inbound and outbound trains at this location. Cracks in the stairs and platforms suggest that the station is in a state of disrepair.

A small surface parking lot (figure 6.13) with 12 spaces is located at the main station entrance to the station, across the street from the service entrance to a shopping center anchored by Best Buy and Kohl's. The Metra website identifies 20 additional parking spaces dispersed on nearby streets.

6.4.1.D.d CTA Bus Service

Currently, three CTA buses connect residents and workers to various rail stations and destinations throughout the Study Area.

The #132 Goose Island Express runs exclusively during weekday rush hour period and travels from the Metra Clybourn station on the north to the various Metra stations in the Loop.

The #73 Armitage bus travels along Armitage and portions of Cortland, from the Chicago History Museum on the east to Grand and Latrobe on the west. It connects riders to three rail stations, the Brown/Purple Line Armitage stop, Blue Line Western stop, and the Clybourn Metra station.

The #9 Ashland bus runs from Irving Park on the north to 104th and Vincennes on the south, connecting multiple CTA rail stations. More than 9.8 million riders rode the #9 bus in 2013, making it CTA's most travelled bus route. The City is currently looking to expand transit service on the Ashland corridor with Bus Rapid Transit.

In 1997, bus service was eliminated along Clybourn, the heavily trafficked retail corridor that serves as a buffer between the industrial corridor and the residential neighborhood to the east. When the 32-acre Lathrop Homes site at Clybourn and Diversey is redeveloped, the need for a CTA transit connection between the new residential development and employment centers including the North Branch Corridor will become more urgent.

The Elston Avenue bus was eliminated prior to the Clybourn Bus stopping service.

6.4.1.D.e Ashland BRT

Bus Rapid Transit (BRT) (figure 6.14) is an innovative form of transit that provides faster commute times through the use of dedicated travel lanes, limited stops, prepaid boarding, and priority signalization.

BRT is proposed for 16 miles of Ashland from Irving Park on the north to 95th Street on the south. The first phase will include 14 stations between Cortland Avenue and 31st Street. The proposed BRT will travel in the center of Ashland and stop approximately every half mile and at CTA 'L stations. Although an implementation timeline has not been formally established, the City continues to move forward with its planning efforts, including environmental assessments.

6.4.1.D.f CTA Rapid Transit Trains

CTA rapid transit train stations—brown line, red line, blue line and purple line—are all within one mile and surround the site, but none are within an easy quarter mile walking distance of River Works. Improved last mile connections to these stations are lacking.



Figure 6.12



Figure 6.13



Figure 6.14



Figure 6.15



Figure 6.16

Connecting this site into the 606 was suggested by a couple other people in comments on other ideas, so I'm adding it since it's a great idea on its own. The Bloomingdale Trail could be extended east over the Chicago River to connect with a new riverwalk/park providing walking and biking connections to local streets. The river interrupts the street grid, resulting in few safe and convenient routes for people to bike between neighborhoods on each side of the river - this would significantly improve the connection between the North Side and Near-Northwest Side. Southport should extend south of Cortland as a bike/pedestrian connection to the riverwalk and the 606, and protected bike lanes should be added on Cortland to connect people to the trail from Clybourn, Racine and Armitage.

> - Lee Crandell Chicago Citizen

6.4.1.D.g Bicycles

Elston is a heavily used bike route, with protected lanes south of North Avenue. CDOT is moving ahead with plans to extend a "buffered" or painted bike lane on Elston between North Avenue and Cortland, despite some initial concern from local business owners about the impact on trucking operations. A protected bike lane is also planned along Clybourn, which falls under the jurisdiction of the Illinois Department of Transportation. Cortland (figure 6.10) is a well-used east-west bike route that connects to the Armitage bike route.

For those biking to the Metra station, a bike rack is located near the small parking lot on the south side of Armitage. A Divvy bike sharing station is located at Cortland and Marshfield, just west of the Kennedy Expressway.

6.4.1.D.h The 606 (Bloomingdale Trail)

The 2.7 mile multi-use recreational trail and park (figure 6.16) recently opened along a former elevated rail line west of the Study Area. The eastern terminus of 606 is Walsh Park, located at 1722 North Ashland Avenue. This trail is expected to be heavily used by bikers, many of whom will be seeking to cross the Chicago River at Cortland Street and connect with the Armitage Avenue bike route. Safe passage for bicycles under the Kennedy Expressway and railroad viaducts should be considered in the next phase of the 606 Trail.

6.4.1.D.i Barges

Figure 6.18 below shows that there are three significant heavy industrial barge users adjacent to the River Works site—Ozinga Cement, Sims Metals Management and General Iron Industries—to the west and the south. Each barge uses carries the equivalent of 60-90 truckloads of materials thereby playing an important role in easing congestion in the area. Barge transport is currently the most cost effective way for these companies to move materials.





Figure 6.18

Derived from a diagram created by by Goodman Williams Group March, 2015. Source: Army Corps of Engineers, 2013.

6.4.1.D.j Summary

While the Study Area is served by a number of important transportation assets, the larger Ashland/Elston/Armitage/Cortland intersection and the Clybourn, Cortland, Racine intersection can, at best, be described as disjointed. Removing conflicts and enhancing multimodal circulation is critical to the successful redevelopment of the study area. Without service and capacity upgrades, transportation infrastructure is likely to be a constraint to both job density on the site and distribution-related uses.

A search of the Illinois Environmental Protection agency database confirmed that the Gutmann property received a "No Further Remediation" (NFR) letter from the Illinois Environmental Protection Agency in November of 2011. The remediation, which was performed by Gabriel Laboratories, was done to residential reuse standards with no engineered barrier requirements.

Site specific information is not available for the Lakin or the Finkl sites. In the absence of this information a general characterization of the issues that may be faced in the redevelopment of sites with former steel foundry and tire manufacturer were identified and indicate that some environmental remediation is likely to be necessary. In addition, there are substantial foundations underground that supported the forging operations at the Finkl site and will require consideration in any redevelopment plan.

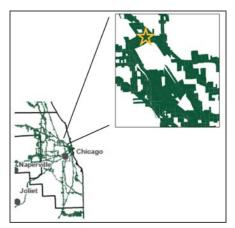


Figure 6.19

Source: Broadband Illinois

There do not appear to be any development constraints posed by electrical or natural gas service to the study area. In fact, electrical service is abundant, with Com Ed reporting 4 dedicated 12kV feeders and 24 MW of capacity to the Finkl site.

Broadband speeds in the area range from 25 megabytes per second (mbs) to 100 mbs, based on mapping done by the City's Chicago Sustainable Industries Initiative. These speeds are typical of many residential neighborhoods in the City. Enhanced graphics applications, 3D printing, and other emergent manufacturing technologies will demand ever-more reliable and high-speed communication technology. As a result, the City has recommended that all industrial corridors have access to minimum broadband speeds of 100 mbs.

Additionally, based on information from Broadband Illinois, the bulk of the study area has access to fiber-optic networking, with speeds in excess of 1 gigabyte per second. There are anecdotal stories of company prospects requiring fiber-optic speeds, particularly to link design programs to production applications where the two are housed in separate locations.

The star on the Zayo Group Fiber-Optic Map $(figure\ 6.19)$ to the left indicates River Works. Research for this report indicated that the broadband connections likely to be needed are currently $\frac{1}{2}$ mile from River Works.

Market Study Interview Subjects					
Company / Agency	Туре				
Argent Development	Developer				
CBRE	Broker / Manager				
CH Robinson	Local Business				
Concept Labs	Local Business				
Cushman Wakefield	Broker				
Garrett Realty	Broker				
General Iron (pending)	Local Business				
Grubb & Ellis	Broker				
Mark IV Realty	Broker				
Matanky Real Estate	Broker / Manager				
Midland Industries	Local Business				
Ozinga	Local Business				
RW Ventures	Consultant				
Suparossa	Local Business				
Sterling Bay	Developer / Manager				
Structured Development	Developer / Manager				
UIC, Center for Economic Studies	Academic				
Venture One	Developer				
Walbridge	Developer / Contractor				

6.7.1 Critical Supporting and Constraining Market Conditions

Key market conditions in the study area that support job-generating business investment include the following:

- A location that is proximate to neighborhoods in which a skilled, creative, entrepreneurial workforce lives and where companies can create the conditions to effectively compete for talent;
- Relative proximity to the central business district, as both an amenity and for business-to-business relationships with central area consumers of products and services, suppliers, vendors, and other business networks;
- The large size of River Works relative to comparable properties, which offers the
 possibility of accommodating a larger corporate presence or R&D campus, etc.,
 and/or of creating a multi-user district with a critical mass of activities that support
 shared services and creative collaboration.

- A location near a dense consumer market with a high-level of purchasing power.
 While there is typically a direct relationship between a retailer and consumer,
 an important network of secondary relationships exists for suppliers, vendors,
 entrepreneurs, artisanal industries, etc. that may not have direct interaction with
 consumers, but provide unique products and services for retail outlets and other
 consumer venues;
- A relatively more mixed-use neighborhood context than many other industrial corridors in the City, which are typically more separated and distant from commercial, dining, and cultural amenities.
- Access to the Chicago River, which is a critical asset to a small number of companies that depend upon non-perishable shipments of bulk materials to a dense and congested part of the City.
- While the true impact of the new UILABS / Digital Manufacturing Lab on Goose Island is yet to be known, it will undoubtedly add to the momentum of advanced technology and digital production – along with professionals with commensurate skill sets – being attracted to the larger area.

Challenges and constraining market conditions include the following:

- Congestion is increasingly an issue for area companies that rely on predictable shipments of inputs and distribution of products to customers. Congestion at the Ashland/Elston/Armitage intersection, and at the Armitage ramps to I-90/94 in particular, is a challenge to select existing companies in the area and – without substantial improvement -- will be disincentive to new transport-dependent uses.
- Public transportation, commuter, and multi-modal access (while good to the study area relative to many other industrial corridors in the city) is not adequate for the more dense employment profile of companies likely to be most suitable to this location. This places the study area at a disadvantage relative to directly competitive locations, such as the Kinzie Corridor / Fulton Market. The recent push to create a pedestrian bridge over the Chicago River to the former Goose Island Boatyard site is evidence of the importance of pedestrian and bike access to these emerging uses. For the River Works site, part of the solution could be the creation of better connections to already existing or funded infrastructure, such as to the Clybourn Metra stop and Bloomingdale Trail. Improvements, such as enhanced bus service and shuttle service to transportation hubs, should be explored.
- Real estate values in the North Branch Corridor have been historically strong relative to other industrial areas. Recently-announced investments in loft and other non-traditional office projects will create additional upward pressure on values that will make the area less competitive for industrial uses with low value density and larger land needs.
- Many of the market characteristics that make the site competitive for more
 intensive job-producing investment also make it attractive for other land uses,
 including residential, retail, hospitality, and entertainment uses. The resulting
 speculative land value creates additional upward pressure on actual land value,
 as well as more scarce land availability if property is being held for uses that are
 not currently permitted.

6.7.2 National Industrial Trends Summary of Research

- Advanced manufacturing technologies are providing opportunities for smaller scale production benefitting small and medium size enterprises that are more likely to locate in smaller spaces and/ or parcels in urban areas. (Howard Wial: New Manufacturing Technologies and Metropolitan Spatial Development and Costello and Egan: Small U.S. Industrial Properties Play an Important Role in a Complex Supply Chain)
- Advanced manufacturing technologies and the 'maker movement' of artisanal production are often quieter, cleaner forms of production which reduce the need for stricter separation of land uses. These small urban manufacturers, ranging from furniture builders, seamstresses, software developers and metal fabricators, benefit from being able to label their goods "Made in the USA", and often seek gritty, close-in locations in historic industrial zones. The shared use of equipment and prototyping facilities, such as is done at NextFab Studio in South Philadelphia, or at TechShop in multiple cities, allows very small producers to cluster and share the financial burden of capital equipment. (JoAnn Greco: Making Way for Makers. APA's Planning Magazine)
- Smaller scale producers wanting to be in urban areas close to customers, markets, and business services are repurposing older urban industrial districts which offer affordable space in central locations. Cities across the U.S. are supporting this revitalization by re-tooling zoning and land use codes to allow for these new types of businesses in older heavy industrial districts to retain urban production, while at the same becoming more integrated with the community fabric. Examples of this zoning rethinking include Philadelphia's Industrial Commercial Mixed Use (ICMX) District, which allows for production uses and restaurants, bakeries, etc. to co-exist and support one another, and Wilmington, North Carolina's Urban Industrial District that recognizes that makers "want to be where the action is..... where there is pedestrian traffic, and where they are also allowed to sell their wares on-site". (JoAnn Greco: Making Way for Makers. APA's Planning Magazine)
- Firms increasingly recognize the benefits of geographic clustering of related industries, educational and R&D institutions, business services, and a skilled labor force found in urban areas. In 2010 78.9% of moderately high-technology and 95% of very high-technology U.S. manufacturing jobs were located in metropolitan areas, which reflects the advantages urban locations provide. Clustering of manufacturers around the diversity of non-manufacturing activities found in central cities is also beneficial, as manufacturers can more easily access services such as engineering and R&D, finance, educational and labor institutions, and management consulting firms. (Helper, Krueger, and Wial: Locating American Manufacturing. Brookings Metropolitan Policy Program)
- Because advanced manufacturing technologies allow for greater customization and more frequent product iteration throughout the supply chain, it benefits firms to have designers and producers in close proximity to each other and to customers
- Renewed federal, state, and local initiatives and investment, as well as institutional and business support, are accelerating urban manufacturing market trends.
 All recognize the economic benefits; employment in manufacturing and related sectors provides competitive wages even for individuals without higher education degrees, is a strong job multiplier, and increases trade.
- Another relevant emerging trend is the growing technology sector in the U.S. and
 the increasingly important relationship between the technology and production
 sectors, this is most notable in the co-location of these sectors in urban 'Innovation Districts' bringing a range of entrepreneurs and start-ups working in proximity
 and collaborative space with each other.
 - Unlike technology campuses that were prevalent in the suburbs for decades

(isolated, auto-oriented, single-purpose), these new districts are typically more physically compact clusters of many companies and anchor institutions, with good transit access, and in mixed-use environments. Three types of Innovation Districts are identified by the Brookings Institute: 1) the "Anchor Plus" model of clustering around a major research campus, 2) the "Urbanized Science -- Park" where mixed uses are being introduced into suburban business parks, and 3) most relevant to this assignment -- the "Re-imagined Urban Area". This latter category is often found in historic industrial districts, along waterfronts, characterized by multi-modal transportation and supplemented (not anchored) by research institutions. (Katz and Wagner: "The Rise of Innovation Districts", Brookings Metropolitan Policy Program)

STAKEHOLDER MEETINGS

Land Owners

Gutmann Tannery Trustee A. Lakin & Sons

Community Organizations

Bucktown Community Organization
Lincoln Central Association
Lincoln Park Chamber of Commerce
Logan Square Neighborhood Association
Neighbors of River West
Near North Unity Program
Ranch Triangle
Sheffield Neighborhood Association
Wicker Park Bucktown Chamber
Wrightwood Neighbors

City

Alderman Bob Fioretti (Former) Ward 2

Alderman Walter Burnett Jr. Ward 27

Alderman Scott Waguespack Ward 32

Alderman Michele Smith

Department of Planning + Development Department of Transportation Chicago Transit Authority

Region

Chicago Metropolitan Agency for Planning

Regional Transportation Authority Metra

State

Illinois Department of Transportation

Federal

United States Environmental Protection Agency Office of United States Senator Dick Durbin United States Representative Mike Quigley

Advocacy Organizations

Active Transportation Alliance Center for Neighborhood Technology Friends of the Chicago River Trust for Public Land World Business Chicago

Research Organizations

Urban Land Institute

Academic Institutions

DePaul University

Technical

Farr Associates
PostivEnergy Practice
Smith + Gill

Process

Varied opportunities for stakeholder input were provided throughout the planning process and draft materials were posted on our planning website www.civicartworks.com/riverworks for ongoing review and comment by stakeholders during the entire process.

6

Three large community meetings were a cornerstone of the stakeholder engagement process. The first meeting was held on July 15, 2014 at Little Sisters of the Poor. The purpose of this meeting was to introduce the planning process and the Existing Conditions Report to the community and to get input regarding their key concerns. The second meeting was held at the Bucktown Library on November 19, 2014. At this meeting the draft Planning Principles and the Market Study were presented and participants selected small groups relating to the planning issues of greatest concern to them. The three proposed redevelopment scenarios and the implementation strategy were presented and discussed at the third community meeting which was held again at Little Sisters of the Poor on May 27, 2015.







Figure 6.20

Figure 6.21

Figure 6.22

In addition to the three large community meetings, meetings were held with 17 different community and civic groups addressing issues that impacted the plan. A list of groups engaged in individual meetings is included in Attachment E. Meetings were also held with the four Aldermen impacted by the plan as well as other elected and city officials. NBW actively sought, with only partial success, to engage all of the property owners during this planning process. Representatives of the Gutmann and Lakin site owners participated in the process, but the owners of the former Finkl property did not.

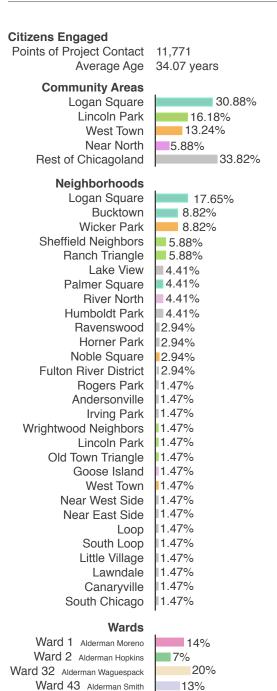
The planning process received significant media attention. A press release was issued about the EPA grant and the planning process once the grant agreement was signed and press coverage was generated by each community meeting and often in between. A sample of press coverage generated is available in Attachment F.

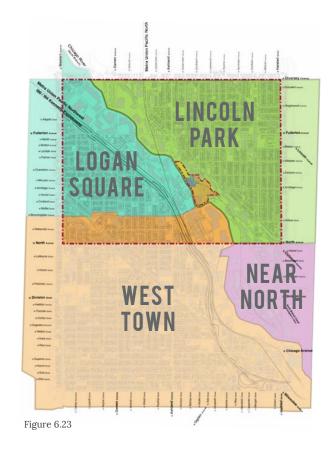
As of June 1, 2015 6,377 people (11,771 by January 2016) participated in the community outreach process. Their average age was 34. 31% lived in Logan Square, 16% in Lincoln Park, 13% in West Town, 6% in Near North and 34% in other Chicago communities. In addition to being invited to participate in the community meetings, NBW obtained input from local companies by soliciting feedback through their newsletter, meetings with individual companies, as well as at committee and board meetings.

Local Businesses

A. Lakin & Sons Chicago Terminal Railroad CH Robinson Dynamic Motion Control General Iron Industries Goltz Group / Artists Frame Shop Gutmann Tannery Trustee Innovation Machine
Iowa Pacific Railroad
Koval Distillery
Ozinga RMC
Prairie Materials
P3 Advisors
Sipi Metals Corporation

6.8





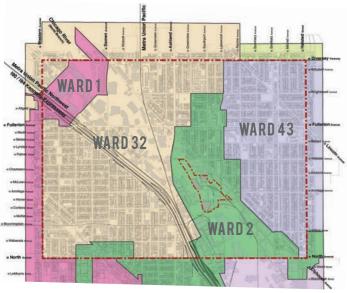


Figure 6.24

46%

Rest of Chicagoland







BREWERIES + DISTILLERIES

6.9.1 Precedent Images of Primary Land Uses





Koval Distillery - Andersonville - Chicago

Figure 6.28



Revolution Brewery - Logan Square - Chicago

Figure 6.29



Founders Brewing Company - Grand Rapids, Michigan

Figure 6.30

6.9.2 **Precedent Images of Primary Land Uses**



O'Brien Architectural Metals - Lincoln Park - Chicago





Local Foods - Chicago

Figure 6.32



Existing Industrial Flex Building On River Works Site - Lincoln Park - Chicago

Figure 6.33

MAKER SPACES

6.9.3 Precedent Images of Primary Land Uses



Palm Beach LED Laboratory of Experimentation & Design - Palm Beach, Florida

Figure 6.34



Tech Shop San Francisco - San Francisco, California

Figure 6.35



NuVu Studio, MIT - Cambridge, Massachusetts

Figure 6.36

6.9.4 **Precedent Images of Primary Land Uses**



South Street Capital - Goose Island - Chicago





Google Chicago Headquarters - Fulton Market - Chicago

Figure 6.38



1871 - River North - Chicago

Figure 6.39

6.9.5 Precedent Images of Primary Land Uses





Digital Manufacturing + Design Innovation Institute at UI Labs - Goose Island - Chicago, Illinois





Water Saver Faucer - Chicago, Illinois

Figure 6.41



Capital One Innovation Lab - Arlington, Virginia

Figure 6.42

AMENITIES

ANCILLARY COMMERCIAL

6

6.10.1 Precedent Images of Amenities



Hannah's Bretzel - Chicago [Restaurant]



Figure 6.43



[Commercial Product Fabrication + Retail Stores]

Figure 6.44

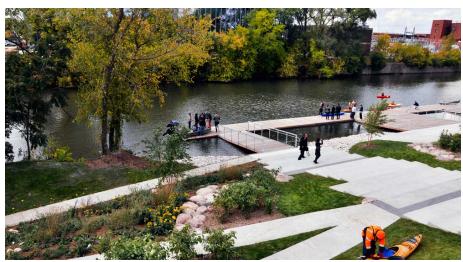


Heritage Bicycles + Coffee - Lakeview - Chicago

Figure 6.45

MASTER PLANNED PARK

6.10.2 Precedent Images of Amenities



Canoe + Kayak Launch - Clark Playlot Park - Chicago

Figure 6.46



Boathouse - Ping Tom Memorial Park - Chinatown - Chicago

Figure 6.47



A. Montgomery Ward Park - River North - Chicago

Figure 6.48

PUBLIC URBAN RIVER TRAIL

(+Pedestrian / Bicycle-only Bridge)

6

6.10.3 Precedent Images of Amenities



00 West Chicago across from Goose Island - Near North - Chicago





Indianapolic Cultural Trail - Indianapolis

Figure 6.50

URBAN BICYCLE LANE TYPES

6.10.4 Precedent Images of Amenities



South Dearborn Street - Loop - Chicago

Figure 6.51



North Milwaukee Avenue - West Town - Chicago

Figure 6.52



Kinzie Street - River North - Chicago

Figure 6.53

EMPLOYEE CALCULATIONS LEGEND



3-Story **Tech Office**

1 Employee / 150 SF



4-Story **R & D**

1 Employee / 400 SF



1-Story **Maker Space**





1-Story **Brewery/Distillery**

1 Employee / 400 SF



1-Story **Industrial Flex** 1 Employee / 1,000 SF

Gross Area = Footprint Area * Stories

Net Area =

[Gross Area - (Gross Area * Efficiency Number)]

Maximum Employees = Net Area / Employee SF







Employee Calculations

- A) 37,553 (1) = [37,533 (37,553*.2)] / 150 = 75 Employees
- B) $94,922(1) = [94,922 (94,922 \times .2)] / 1000 =$ 75 Employees
- C) 53,484 (1) = [53,484 (53,484*.2)] / 1000 = 42 Employees
- D) 26,459 (1) = [26,459 (26,459*.2)] / 250 = 84 Employees
- E) 40,666 (1) = [40,666 (40,666*.2)] / 150 = 867 Employees
- F) Parking
- G) 15,753(1) = [15,753 (15,753*.2)] / 250 =50 Employees
- H) 83,419 (4) = [333,676 (333,676*.2)] / 150 = 1,779 Employees
- I) 22,675 (4) = [90,700 (90,700*.2)] / 150 = 75 Employees
- J) 37,494 (4) = [149,976 (149,976*.2)] / 150 = 799 Employees
- K) 44,877 (4) = [179,508 (179,508*.2)] / 150 = 957 Employees
- L) 13,425 (1) = [13,425 (13,425*.2)] / 150 = 10 Employees
- M) 106,319 (4) = [425,276 (425,276*.2)] / 150 = 850 Employees

Total Employee Estimate = 6,078

- A) 107,553 (1) = [107,553 (107,553*.2)] / 1000 = 215 Employees
- B) 220,142 (4) = [880,568 (880,568*.2)] / 400 = 1,761 Employees
- C) Parking
- D) 40,697(1) = [40,697 (40,697*.2)] / 250 =130 Employees
- E) 51,281 (3) = [205,124 (205,124*.2)] / 250 = 130 Employees
- F) 51,583 (3) = [154,749 (154,749*.2)] / 150 =820 Employees
- G) 57,447 (3) = [229,788 (229,788*.2)] / 150 = 1,225 Employees
- H) 13,425 (1) = [13,425 (13,425*.2)] / 1,000 = 10 Employees
- I) 58,561 (3) = [234,244 (234,244*.2)] / 150 = 1,249 Employees
- J) 31,611 (1) = [31,611 (31,611*.2)] / 400 = 63 Employees

Total Employee Estimate = 5,682

- A) 37,553 (1) = [37,533 (37,553*.2)] / 150 = 75 Employees
- B) 50,193 (4) = [200,772 (200,772*.2)] / 150 = 1,070 Employees
- C) 53,484 (1) = [53,484 (53,484*.2)] / 1,000 = 42 Employees
- D) 294,809 (4) = [294,809 (294,809*.2)] / 400 = 2,358 Employees
- F) 13,425 (1) = [13,425 (13,425*.2)] / 1,000 = 75 Employees
- G) 67,807 (1) = [67,807 (67,807*.2)] / 150 = 1,446 Employees
- H) 19,823 (1) = [19,823 (19,823*.2)] / 250 = 63 Employees

Total Employee Estimate = 5,067



Cortland Street / Ashland Avenue



Cortland Street / Chicago River



3 Cortland Street / Clybourn Avenue



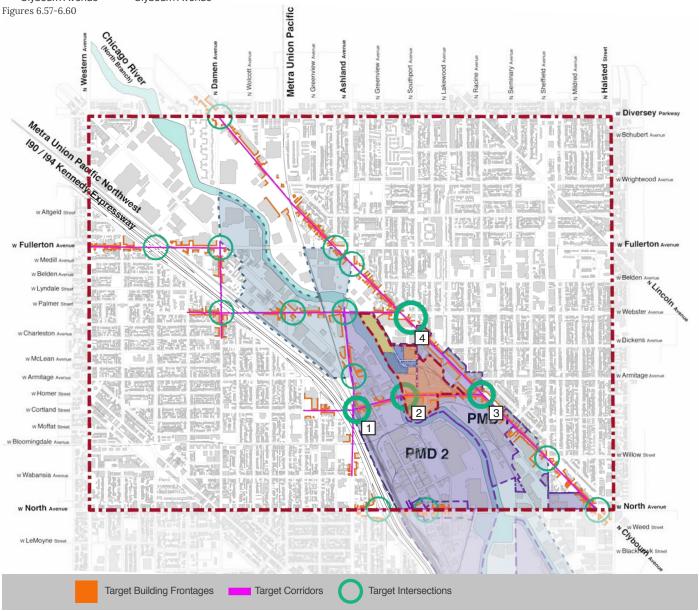
Webster Avenue / Clybourn Avenue

6.12.1 Walking

Many intersections, streets and building frontages throughout the Study Area need improvement. Chicago's Complete Streets and Streetscape Guidelines should be implemented improve the pedestrian experience in the area. The connectivity map below shows areas targeted for improvement. The intersections identified on the map in dark green are the intersections most impacted by the River Works site. They include Cortland Street and Clybourn Avenue, Cortland Street and the Chicago River, Cortland Street and Ashland Avenue and Clybourn Avenue and Webster Avenue.

Particular attention should be paid to the Cortland Street frontage of the ultimate River Works redevelopment plan. This would be the best location for the ancillary restaurant and retail amenities on the site and the streetscape should be well lit, pleasant and well used even after dark.

Walkability should also be encouraged within the site. Preferably it will have well landscaped greenspaces and paths with permeable pavers and attractive sitting areas.



Figures 6.61

6.12.2 Bicycling

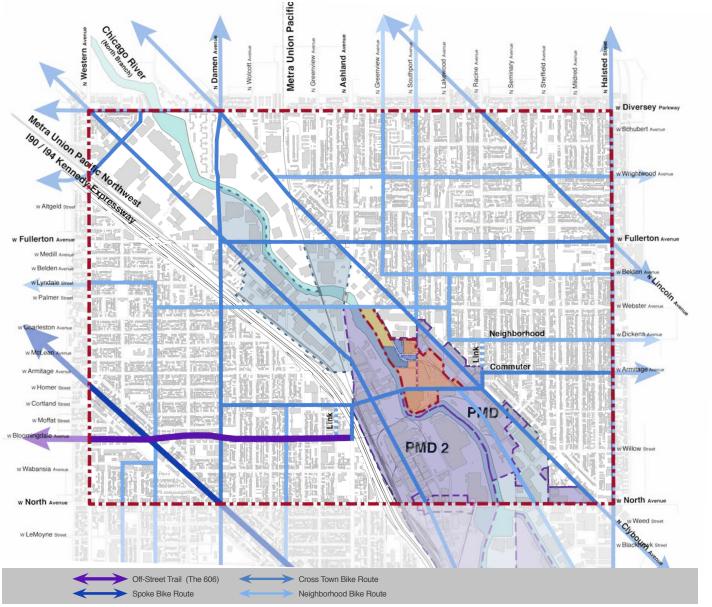
The Bike Routes Diagram below shows the existing bike routes in the Study Area by type—Spoke, Crosstown and Neighborhood.

Phase 1 of the newly opened 606 /Bloomingdale bike trail ends one half mile west of the River Works site. Phase 2 will continue east with some difficulty because of the railroad and expressway embankments and the two lane bridge over the river at Cortland. The Trail would then travel through the River Works site.

Bicycle routes to and through the site, especially the problem of Cortland Street, generated a lot of concern.

The three scenarios provide different options for routing bike traffic through the River Works site. Scenario 2 raises the possibility of creating a separate bike bridge over the river south of Cortland Street to connect with the 606 Trail and provide an alternative to biking across the Cortland Bridge.

Alternative bike paths to and through the River Works site depend on the building and street layout as shown in the three scenario plans on the following page. Photographic examples of the different types of bike lanes are also shown a part of Attahcment [I] (6.10 Amenities Precedent).

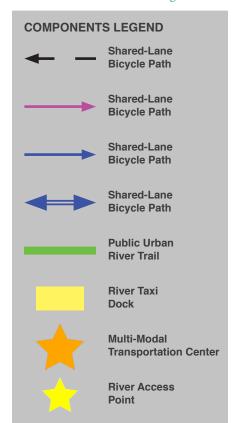


Figures 6.62

ATTACHMENT [1]

Cortland is already a key route for people trying to cross the river by bike, because it's one of the few non-arterial bridges over the river with less traffic, but it's still an intimidating ride. Let's make it comfortable to bike over the river for average, non-spandex folk. Add a protected bike lane on Cortland, connecting from the end of the new Bloomingdale Trail at Ashland over the river to Clybourn, with a spur north on Southport where many people currently cut through the cul-de-sac. This would provide a much needed connection for biking between Wicker Park/Bucktown and Lincoln Park/Lakeview!

- Lee Crandell Chicago Citizen





Figures 6.63



Figures 6.65

6.12.3 Transit

Public transit improvements are critical. Reactivating the Clybourn and Elston bus lines is a key strategy to improve mobility and reduce congestion in the Study Area, the North Branch Industrial Corridor and at the River Works Site. A Clybourn bus would connect with the North and Clybourn stop on the heavily travelled CTA Red Line as well as enable residents both north and south of the area to ride the bus east of the Chicago River to work or to shop in the area.

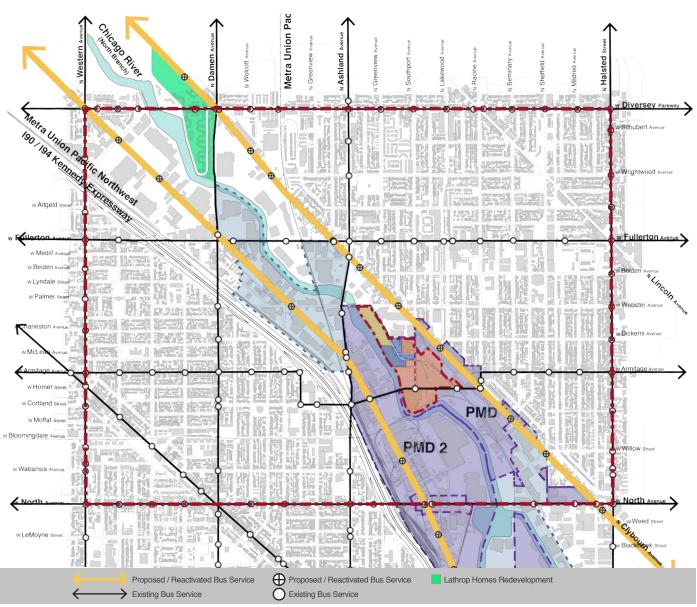
An Elston bus would provide a similar connection to employment and shopping west of the Chicago River.

Figure 6.50 (below) shows the proposed Clybourn and Elston Bus routes in relation to the Study Area.

66

Alongside other public transportation improvements that should happen within and nearby the site, the CTA should resume service along Clybourn Avenue.

- Outreach Meeting 2 Attendee



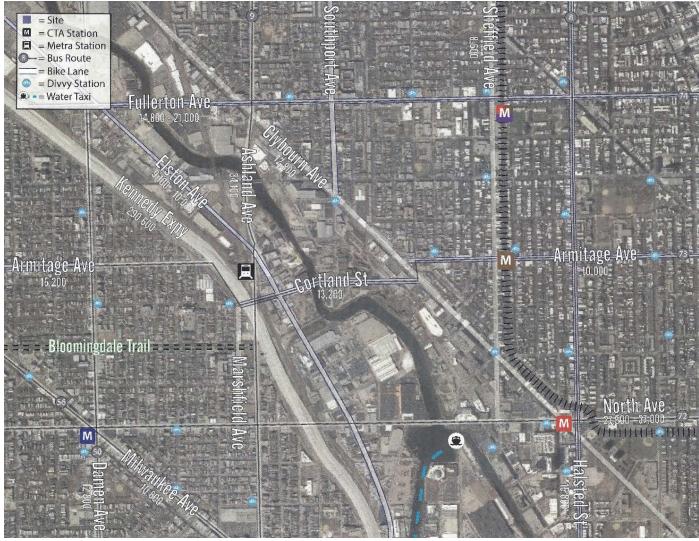
Figures 6.66

Could we ensure that, if there will be more activity and redevelopment in the area, public transportation be added / rerouted?

- Outreach Meeting 1 Attendee

Another critical transit improvement is to provide faster and more direct last mile connections from River Works to the numerous CTA rapid transit stations in the Study Area. Expansion of the 132 Goose Island bus or new shuttle-type services should be explored to improve these last mile connections.

Figure 6.51 (below) shows the existing transit assets including Metra's Clybourn Station, CTA bus lines, CTA rapid transit stations, Divvy stations, and water taxi stops and their proximity to River Works.



Figures 6.67

6.12.4 New Transportation Hub At Elston, Ashland and Cortland

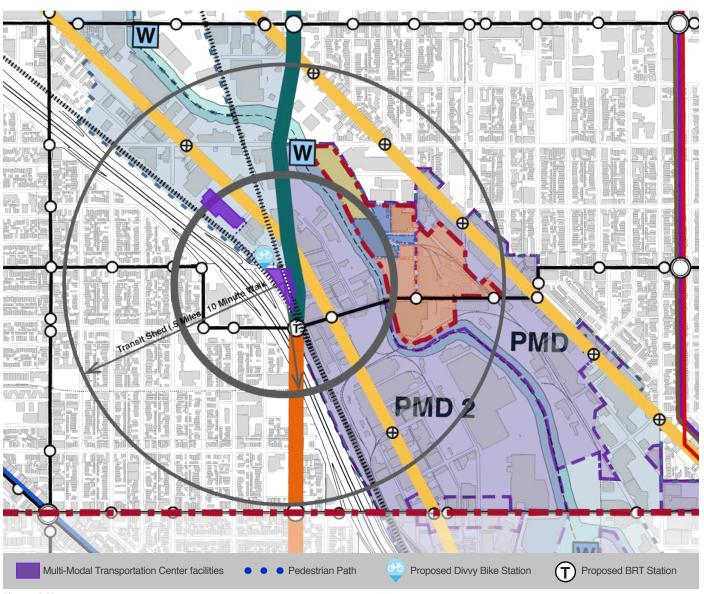
A transit hub near the Clybourn Metra Station should be established on Ashland Avenue between Cortland Street and Ashland Avenue. A reactivated Elston Avenue bus as well as the Armitage Avenue bus and the Ashland bus or BRT could all stop here. This would help residents, businesses and employees access public transit to and from the area. A Divvy bike sharing station should be located at the hub and commuter parking should be established nearby most likely in the underused Kohls/Best Buy parking structure one block north of Armitage Avenue on Elston Avenue.

A Divvy station should also be located on the River Works site to encourage bike riding between the transit hub as well as nearby CTA train stations and the River Works site. Car sharing stations should also be located at the transit hub and on the River Works site. A trolley or shuttle could also be established between the transit hub, CTA rapid transit stations and River Works (and additional territory if desired). The entire River Works property is located within the half mile transit shed of the proposed transit hub.

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A multimodal center could serve new development and existing residents and businesses. Metra, CTA buses, and bicycle amenities could be included.

- Outreach Meeting 2 Attendee



Figures 6.68

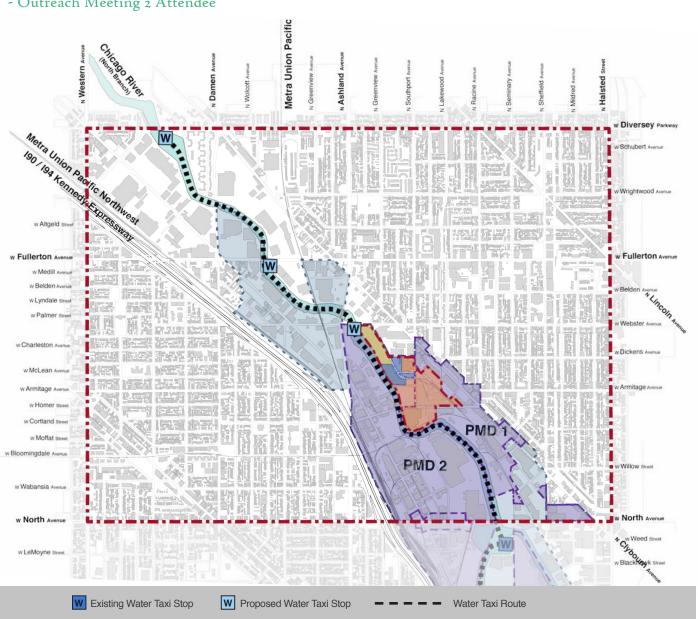
Would it be possible to have a water taxi dock adjacent or nearby the site? It would serve those who may be employed at a business within the site (or nearby) and nearby residents — both of which would be traveling to and from the Loop (rail stations or places of employment / entertainment / shopping, etc.)

6.12.5 **Water Taxi**

Water taxis, such as those operated by Wendella Boats, have recently expanded service from downtown to neighborhood and industrial areas along the river near the loop such as River North and Goose Island. These new stops are providing another transportation alternative for residents and employees along the route. Water taxis should be encouraged to stop further north on the river from North Avenue to Di-

The most likely stop for a water taxi at the River Works site is just south of Webster Avenue where the river is wider and there are no existing commercial barge users are nearby.

- Outreach Meeting 2 Attendee



Figures 6.69

The three scenario maps below depict the transit improvements proposed in the vicinity of the River Works site.



Figures 6.70



Figures 6.71



COMPONENTS LEGEND Existing CTA Bus Route Proposed CTA Bus Route Proposed River Taxi Route **Proposed Trolley** Route **River Taxi** Dock Multi-Modal **Transportation Center**

6.13.1 Transportation Considerations

6.13.1.A Modal Options

Given the central urban location of the site, bicycle, pedestrian, new bus routes, a multi-modal transit hub, shuttles, water taxis, alternative fuel vehicles, and enhanced right-of-way connectivity can be optimized, resulting in reductions in congestion and carbon intensive auto-dependence. Employer incentive programs to encourage bike, pedestrian, and transit commuting, further reduce auto-dependence.

6.13.1.B Freight

Consideration should be given to how freight enters and leaves the site. Users requiring significant freight traffic should be located at the outer edges of the site that are also non-arterial streets such as Dominick and Kingsbury. A shared warehouse could be considered as part of the development plan.

6.13.2 Site Considerations

6.13.2.A Stormwater Management & Green Infrastructure

Stormwater management and flooding have been cited as a significant problem for the site and the larger area. 'Green infrastructure' strategies include site grading, bio-swales, wetlands, naturalized river edge, rain gardens, green space and trails, green roofs including rooftop urban farming, rainwater catchment, graywater systems and permeable pavement to minimize impervious surfaces and maximize onsite stormwater retention and infiltration. These strategies reduce the burden on the City's sewer – or grey infrastructure – system and also protect the river from run-off pollution. The City of Chicago provides a variety of resources for green infrastructure. Implementation of these strategies also reduce stormwater impact fees for projects.

Sustainable landscaping practices and habitat restoration: These strategies include reducing the amount of water intensive turf grass, and instead replacing it with native and adapted plants that require minimal additional irrigation and/or pesticides to thrive. Other plant selections can restore habitats for native insects (e.g. bees, butterflies, other pollinators) and wildlife (e.g. birds) as appropriate.

Phytoremediation (remediation through vegetation and their related organisms): Given the possibility of environmental contamination on parts of the site, a program of phytoremediation could be considered for parcels where development is scheduled for later phases.

6.13.3 Waste Considerations

Composting, recycling, rainwater harvesting and gray water systems are all potential strategies for reducing waste generation at the River Works site. In addition, building reuse if and where feasible, reduces the dependence on virgin material inputs in building construction. In cases where the remaining existing buildings cannot be reused, deconstruction, which generates reuseable materials, rather than demolition, which generates waste from the building components, should be considered.

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During heavy rainstorms flooding occurs throughout nearby neighborhoods. Can future redevelopment incorporate sustainable stormwater mitigation strategies or, at the very least, not cause the situation to get any worse?

- Outreach Meeting 1 Attendee

6.13.4 Energy Considerations

6.13.4.A Energy Efficiency

Since most the River Works redevelopment will be new construction, there is a considerable opportunity to employ green building features to reduce the buildings' energy consumption. Energy efficient design includes siting the buildings to maximize natural light and ventilation as well as passive solar gain. Energy efficient building systems such as HVAC and lighting are also key components of green buildings.

6.13.4.B Renewable Energy

Solar, geothermal, combined heat and power systems and urban wind turbines are the most commonly used options. However, new cutting edge technologies such as LucidPipe microhydro, Pavegen's modular floor tiles that harvest energy from human movement, and Tesla's Powerwall battery storage system are possible components. Finally, certain potential users, such as a brewery have the potential to power microbial fuel cells and create biogas. The maximum benefit would be gained from these systems if they are planned into the site redevelopment in the initial designs of the ultimate end users. Depending on how long it will take for the redevelopment to be complete, revenue could be generated from land held for future development through power purchase agreements (PPA) for power generation, which in-turn would provide for equipment to be redeployed if / when parcels are ready for development.

6.13.4.C Building Considerations

Green building: All of the sustainability strategies above must be integrated together for the entire redevelopment as well as each individual building to maximize energy and water efficiency, deploy renewable energy technology, enhance indoor environmental quality, and optimize site orientation and development. Building materials such as insulation, skylights, low VOC paints, low-e windows and other products improve energy efficiency, worker productivity and indoor air quality.

The United States Green Building Council's widely recognized LEED rating system has codified best practices in green construction into a voluntary certification program; many municipalities, Chicago included, require certain LEED credits or certification for larger development projects and those that receive financial incentives. The City of Chicago's Sustainable Development Policy outlines such requirements for Planned Developments and for projects receiving incentives such as TIF funding. Portions of the City's 'Green Matrix' are included in section 5 Implementation of the plan. In addition, projects can obtain energy efficiency incentives from ComEd and People's Gas which offer both technical expertise and monetary incentives for new construction of high performance buildings.

- Intake meeting between the applicant and Department of Planning + Development (DPD) to discuss proposal and receive preliminary feedback;
- 2. Formal filing of the Planned Development (PD) application;
- Forwarding of the PD application to the City Clerk, once completeness if verified by DPD. The Clerk then introduces the application to the City Council at the Council's next scheduled meeting, at which it is referred to the Council Committee on Zoning, Landmarks, and Building Standards;
- 4. Review of the application by DPD, which typically takes 90-120 days, depending on the number of public hearings scheduled for community input; Note that any community process deemed necessary to secure neighborhood support and aldermanic approval should be concluded prior to the conclusion of DPD review and formal submittal to Plan Commission. Often it is the community process, and not departmental review, that defines the overall timeline.
- 5. Simultaneous with DPD review, review by other departmental agencies, including CDOT, the Chicago Fire Department. Law Department, and Mayor's Office for People with Disabilities (MOPD);
- 6 Preparation of a hearing packet by the applicant, including all required documentation and incorporating comments and revisions as a result of departmental review and public hearing;
- 7 Placement on the agenda of the Chicago Plan Commission, once the packet is determined to be complete;
- Notices of the of the upcoming Plan Commission hearing by DPD at least 15 days prior to the hearing, notice by the applicant no more than 20 days and not less than 15 days prior to the hearing, and posted notice of the hearing by the applicant not less than 10 days prior to the hearing;
- 9. Plan Commission public hearing;
- I O . Recommendation by the Plan Commission to the City Council Committee on Zoning, Landmarks, and Building Standards, and public hearing by the Committee; and
- II. City Council vote.

Federal Partnerships | Brownfields and Land Revitalization | US EPA

Page 1 of 3



http://www.epa.gov/brownfields/partners/federal_partnerships.htm Last updated on Wednesday, August 20, 2014 Brownfields and Land Revitalization

You are here: EPA Home Brownfields Partnerships Federal Partnerships

Federal Partnerships

Federal agencies recognize the value of brownfields revitalization and the value of brownfields revitalization projects to community renewal and economic redevelopment. Many federal government funding and technical assistance programs can promote and enhance many aspects of local revitalization and redevelopment efforts. Local communities often can take advantage of federal resources to identify and address

You will need Adobe Reader to view some of the files on this page. See <u>EPA's</u> <u>PDF page</u> to learn more.

bureaucratic barriers to addressing local needs, and pilot-test new approaches and model projects. Federal funding opportunities often can be used to attract and leverage additional local and regional investments in land revitalization projects. For more information on funding available for brownfields revitalization project across a wide range of federal agencies, consult the <u>Brownfields Federal Programs Guide (PDF)</u> (90 pp, 3.29M).

One example of a strong federal partnership is the <u>Partnership for Sustainable Communities</u>, an unprecedented agreement to coordinate federal housing, transportation and environmental investments; protect public health and the environment; promote equitable development, and help address the challenges of climate change. Since 2009, EPA, the U.S. Department of Housing and Urban Development (HUD) and the Department of Transportation (DOT) are working together to promote more sustainable development in communities by more effectively targeting federal resources and removing existing federal regulatory and policy barriers to smart and sustainable development.

Other Federal Partnerships:

- Advisory Council on Historic Preservation
 Independent agency that oversees Section 106 regulatory process for reviewing effects of Federal and federally-permitted projects on historic properties. Also administers Preserve America program on behalf of the White House.
- * Agency for Toxic Substances and Disease Registry
 "ATSDR announces availablity of Funds for "Enhancement of State, County or Local
 Public Health Departments Participation in Brownfields Decisions and Action"

The Agency for Toxic Substances and Disease Registry (ATSDR) announces the availability of fiscal year (FY) 2001 funds for a Cooperative Agreement program for a pilot activity with a select number of local health departments to demonstrate effective public health actions around Brownfields properties. This program addresses the "Healthy People 2010" focus area(s) of Environmental Health.

- Federal Register Notice (Vol. 66, No. 124, p. 34201), June 27, 2001
- ATSDR Announces Availability of Funds for Public Health Interventions Around Brownfields Properties
 Federal Register Notice (Vol. 63, No. 126, pp 35933-35937), July 1, 1998
- Appalachian Regional Commission

http://www.epa.gov/brownfields/partners/federal partnerships.htm

5/19/2015

Federal Partnerships | Brownfields and Land Revitalization | US EPA

Page 2 of 3

* Federal Housing Finance Board
The Community Investment Cash Advances (CICA) programs of the twelve Federal
Home Loan Banks (FHLBanks) offer funding, including low-cost, long-term funds for
member financial institutions (banks and thrifts) and other eligible lenders to use to
provide financing for projects that are targeted to certain economic development and
housing activities. Economic development projects include commercial, industrial,
manufacturing, social service, infrastructure projects, and public facility projects and
activities.

A standby Letter of Credit (LOC) can be a useful tool for housing finance and community lending for economic development, as well as with other credit needs. An LOC is a financial instrument in which the issuing bank promises to pay a third party on behalf of a second party. The Federal Home Loan Banks (FHLBanks) may issue standby LOCs on behalf of member lenders (banks and thrifts) and certain housing associates, under which the FHLBank agrees to honor drafts or other demands for payment from a third-party beneficiary in the event that the lender cannot fully honor its obligations directly. By guaranteeing the credit obligations and performance of the lender with the AAA credit rating of the FHLBank, the FHLBank's standby LOC allows the lender to borrow funds from other sources on relatively favorable terms.

- National Endowment for the Arts In 2002, the program will award up to \$1.25 million to support as many as 20 design competitions, with a focus on school projects. New Public Works will provide up to \$75,000 each to as many as 10 school design projects, in addition to 10 general projects that will receive up to \$50,000 each. The deadline for letters of interest is January 11, 2002.
 NEA's New Public Works Webpage (ARD)
- Preserve America Administration initiative that promotes community revitalization, tourism, and public education through preservation and creative use of heritage resources, such as historic mills. Includes programs for community recognition, grants, awards, and education.
- · U.S. Army Corps of Engineers
 - * Environmental Program EXT Disclaimen
- U.S. Department of Commerce
 - * Economic Development Administration's Brownfields Redevelopment
 - * National Oceanic and Atmospheric Administration
 - * News Release, January 15, 2003
- * U.S. Department of Energy
 - U.S. Department of Energy Energy Department Announces National Initiative to Redevelop Brownfields with Renewable Energy; Innovative New Approach Utilizes Solar Energy To Turn Brownfields Into Brightfields Fact Sheet
- * U.S. Department of Housing and Urban Development
 Department Of Housing and Urban Development Invites Applications for Seven Urban
 Empowerment Zones and Forty Renewal Communities
 - The Community Renewal Tax Relief Act of 2000 (CRTR Act) authorizes the designation of nine Round III Empowerment Zones (EZs). Seven of the Round III EZs are to be designated in urban areas by the Secretary of HUD. The remaining two Round III EZs are to be designated in rural areas by the Secretary of Agriculture. This Notice invites applications for designation of

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5/19/2015

Federal Partnerships | Brownfields and Land Revitalization | US EPA

Page 3 of 3

nominated areas as Empowerment Zones.

Federal Register Notice (PDF) (5 pgs, 169K)
 (Vol. 66, No. 139, p. 37877), July 19, 2001

Additionally, the CRTR Act authorizes HUD to designate up to 40 Renewal Communities within which special tax incentives would be available. The Notice invites applications for designation of nominated areas as Renewal Communities.

- Federal Register Notice (PDF) (7 pgs, 177K)
 (Vol. 66, No. 152, p. 41432), August 7, 2001
- HUD's Initiative for Renewal Communities, Empowerment Zones, and Enterprise Communities
- <u>Economic Development Initiative</u>
 Information on availability of \$28 million for FY 1998 EDI grants under SuperNOFA II.
- Brownfields Economic Development Initiative
 Super Notice of Funding Availability (SuperNOFA) for Economic Development and Empowerment Programs.
- * HUD's Brownfields Economic Development Initiative (BEDI) Homepage
- Other HUD Economic Development Programs
- * U.S. Department of the Interior
 - * National Park Service
 - Office of Surface Mining
- * U.S. Department of Justice
 - Operation Weed & Seed A strategy within the U.S.Department of Justice's Office of Justice Programs that incorporates community-based initiatives. It is an innovative and comprehensive multi-agency approach to law enforcement,crime prevention, and community revitalization.
- U.S. Department of Labor
 - * Gateway to Information on the Workforce Investment Act
- * U.S. General Services Administration

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5/19/2015

Overview of Brownfields Federal Programs

FEDERAL AGENCY		INANCIAL ASSISTANCE	Τ	ECHNICAL ASSISTANCE
Appalachian Regional Commission	ŀ	Grants through state programs for economic development and brownfields redevelopment	•	Technical assistance to address brownfields, including mine-scarred lands, in the 13 Appalachian states
Department of Agriculture, Rural Development		Loan guarantees for rural businesses	٠	Technical assistance and training for rural businesses
	-	Loans for small businesses		
	-	Rural business development grants		
	ŀ	Renewable energy grants		
Department of Agriculture, U.S. Forest Service		Financial assistance to plant and maintain trees for beautification or remediation of brownfields		Technical assistance for planting trees on mine-scarred lands and for phytoremediation
				Technical assistance for planting trees for open space, parks, and land conservation projects
Department of Commerce, Economic Development Administration		Grants for infrastructure and building reuse in distressed areas	٠	Assistance with economic development planning
		Grants for economic development planning		
	.	Economic adjustment grants		
		Assistance for development of re- newable energy, energy efficiency and "green" reuse and restoration		
Department of Commerce, National Oceanic and Atmospheric Administration	on en	Site-specific projects focused on coastal management and environmental issues, including brownfields	٠	Assistance with the restoration of contaminated coastal sites
			٠	Special projects relating to coastal resource management
Department of Defense, U.S. Army Corps of Engineers	•	Congressionally mandated water resource civic works		Reimbursable water- and land-related engineering technical assistance
				Watershed and ecosystem planning support for states
			Ŀ	Centers of expertise
Department of Defense, Office of Economic Adjustment	<u> </u>	Grants for planning for the redevel- opment of closed military facilities		Assistance with planning for the redevelopment of closed military facilities
Department of Energy		Grants and tax incentives for energy efficiency, combined heat-		Research to reduce building energy use
		ing and cooling, and renewable energy		Facilitation of the transition of brownfields clean sites to beneficial reuses, including energy parks and renewable energy technologies
			•	Feasibility studies for renewable energy projects

Brownfields Federal Programs Guide



FEDERAL AGENCY	FINANCIAL ASSISTANCE	TECHNICAL ASSISTANCE
Department of Health and Human Services, Agency for Toxic Substances and Disease Registry	 Grants to assess health issues associated with redevelopment plans 	 Technical assistance to public health agencies
	 Limited health pilot awards for brownfield and reuse sites 	 Assistance to review and assess environmental sampling data and other site data
		 Health-related information sharing in reviewing environmental assessment data
Department of Health and Human Services, National Institute of Environmental Health Sciences	 Grants to develop innovative health and safety training programs 	 Training workers for hazardous materials handling and disaster preparedness
	Research grants to seek solutions to health and environmental	Advanced technology training program
	issues ,	Training for minority workers in environmental restoration
Department of Health and Human Services, Office of Community Programs Services	 Job training program grants 	Technical assistance for rural water facilities
	 Grants to small communities for training and technical assistance for rural water facilities. 	racinties
	 Assistance to community development corporations 	
Department of Housing and Urban Development	 Nationwide block grant for community development 	
	Loan guarantees for community development	
	Grants to stabilize neighborhoods affected by abandoned housing	
	Grants for brownfields economic development	
	Affordable housing block grants	
	Lead-based paint abatement grants	
Department of the Interior, National Park Service	Transfer of surplus federal land to state and local governments for park creation	Technical assistance for conserva- tion and recreation projects
Department of the Interior, Office of Surface Mining	Grants to reclaim streams affected by acid mine drainage	 Technical assistance and capacity- building for watershed developmen
	Grants to states and tribes to reclaim abandoned mine lands	Watershed remediation internship
Department of Justice, Community Capacity Development Office	Grants to promote revitalization activities in distressed small com- munities	Technical assistance to help sites achieve their strategic goals with professional guidance, consultation,
	Limited discretionary grant resources to promote comprehen- sive strategies to reduce crime and revitalize communities	and team-building approaches

Brownfields Federal Programs Guide

FEDERAL AGENCY	FINANCIAL ASSISTANCE	TECHNICAL ASSISTANCE
Department of Labor	Job training grants	Technical assistance to states, localities and community organiza- tions on workforce development
		Technical assistance to states on readiness for brownfields redevel- opment job needs
Department of Transportation, Federal Highway Administration	Grants for transportation projects and planning	Technical assistance for long-range transportation planning
	Grants for air quality improvement and congestion mitigation	
	Grants for transportation enhancement	
Department of Transportation, Federal Transit Administration	Grants for public transportation capital projects	Technical assistance to transit agen- cies working with other state and
	Grants for fixed guideway (e.g., rail) and bus facilities	local governmental agencies on transit projects involving brownfields
	Grants for multimodal transporta- tion planning	
Environmental Protection Agency	Grants for brownfields assessment, cleanup, and for capitalizing revolv- ing loan funds for brownfields cleanup	Brownfields and Land Revitalization Technology Support Center Information dissemination on use of innovative technologies
	Loans for water quality improve- ment projects	Technical assistance to brownfields communities
	Grants to states and tribes to enhance response and brownfields programs	Communica
	Grants to conduct hazardous materials handling training	
	Targeted brownfields assessments	
Federal Housing Finance Agency	Loans for housing and economic development that benefits low- and moderate-income families	
	Loans and grants for affordable housing	
General Services Administration		Assistance to match underused federal properties and surplus fed- erally owned brownfields with local revitalization objectives
Small Business Administration	Loans to small businesses to invest in major fixed assets, such as land and buildings	Technical assistance for small business development
	Loans to small businesses for general business purposes	

Brownfields Federal Programs Guide viii

ATTACHMENT [11]

NORTH BRANCH INDUSTRIAL CORRIDOR TRANSPORTATION FRAMEWORK PLAN

NORTH BRANCH RIVER WORKS

North Branch Industrial Corridor Transportation Framework Plan

January 5, 2016





1. Introduction	••••••		03
2. Stakeholder N	Meetings	••••••	04
3. Framework R	ecommei	ndations	05
4. Conclusions			11

Introduction

The North Branch Industrial Corridor (the "Corridor) is a successful industrial corridor and one of the most important business districts in Chicago. The location of the Corridor (bounded by Fullerton Avenue to the north, Chicago Avenue to the south, Clybourn Avenue to the east and the Kennedy Expressway to the west), with close proximity to the Union Pacific rail line, the Kennedy Expressway, and the Chicago River, and the nearby growing communities of Lincoln Park, Bucktown, and the Near North have made it attractive to a variety of businesses. This location will serve as a primary catalyst for the redevelopment of a number of properties, including the A. Finkl & Sons Steel site and the Tribune property.

However, the location of the Corridor is also the reason it is one of the most challenging areas in Chicago to travel to or through, regardless of the mode of travel. The rail line, the expressway, and the River all create large barriers to connectivity, which create numerous issues from street congestions, to unsafe intersections, to lack of facilities for pedestrians and bicyclists.

Addressing the transportation challenges in the Corridor will be necessary to help support growth of jobs in the area as well as mitigate the impact of more people accessing an already a dense, congested neighborhood. There is no silver bullet to accomplishing this. A variety of solutions that address all aspects of transportation are needed to help manage the future transportation demand.

North Branch Works (NBW) is a delegate agency of the Department of Planning and Development. NBW was awarded a \$200,000 Brownfield planning grant by the United States Environmental Protection Agency to make recommendations and develop a plan for the redevelopment of the former A. Finkl & Sons, A. Lakin & Sons and Gutmann Tanner sites. NBW retained Sam Schwartz Engineering (SSE) to study the existing transportation conditions along the Corridor and develop a framework for these future solutions. A comprehensive transportation study is needed in the area to better understand all of the issues in the Corridor, better understand the feasibility of a number of the recommendations, and prioritize the recommendations. This study is meant to serve as an initial step towards addressing the transportation mobility challenges in the Corridor.

Stakeholder Meetings

As part of the process, the project team met with a number of the agency and neighborhood stakeholders that have interest in transportation in the Corridor. These stakeholders included:

- Chicago Department of Transportation (CDOT)
- Chicago Department of Planning and Development (DPD)
- Chicago Transit Authority (CTA)
- Regional Transportation Authority (RTA)
- Metra
- Illinois Department of Transportation (IDOT)

The project team presented the findings of this study to the North Branch Infrastructure Task Force, which includes local businesses and city agencies, and neighborhood stakeholders to get additional feedback before completing the draft study.

Transportation affects all aspects of life for everyone. For a larger study, a more robust outreach process will be needed that better understands the challenges that residents and businesses face in the area and the benefits each potential improvement would have.

Framework Recommendations

Hundreds of ideas were provided through this process, both by agency stakeholders as well as the public outreach held by North Branch Works for the Finkl/Riverworks project. All of these ideas were evaluated and used to develop the framework recommendations. The individual recommendations are categorized by one of six overall planning principles.

1. Focus on improving the first and last mile connections to transit

The area proximate to the North Branch Industrial Corridor has a number of rail lines, including the CTA Red and Blue Lines and the Metra UP-North and UP-Northwest lines. However, getting from the stations that serve these lines to destinations in the Corridor can be challenging due to numerous reasons. These first and last mile connections are an important part of the transit trip and factor heavily into a person's choice on whether they drive or take transit. Improving these connections will help support more transit use and reduce the traffic and parking impact of future development in the area.

A. Increase the number of Divvy bike share stations in the area.

Divvy bike share has proven to be an excellent first/last mile solution in Chicago. Adding more bike share stations in the Corridor could encourage more transit use and reduce travel times for residents and employees as well as provide more access for businesses. This could be accomplished either through future expansions of the Divvy system or by private businesses sponsoring stations.

B. Evaluate potential of increased fixed bus route service (CTA, private circulator, hybrid)

A significant portion of the businesses on the Corridor are located along Elston Avenue and Clybourn Avenue, neither of which has fixed bus route service. CTA once ran service on both of these streets but no longer does. Increasing fixed bus route service would help people circulate around the area and connect between rail stations and their destinations. This type of service could be provided by the CTA or a private vendor. An analysis will be necessary to understand the demand of a fixed route service in the area, the type or service that should be provided, and the costs as well as how to fund the service.

C. Extend Water Taxi Service

The Water Taxi service provides reliable connections between Ogilvie and Union Stations and locations along the Chicago River from March through November. There is the potential to extend this service up the North Branch to serve businesses located along the Corridor and provide direct connections to the major commuting stations. Allowing water taxi fares to be included as part of Ventra trips could help increase usage of this service.

D. Develop Agreement with Uber/Lyft/Others for High Capacity Transportation Service Over the last few years, a number of transportation network providers, such as Uber and Lyft, have launched services that support last mile connections. These providers offer a number of different service, from point to point rides similar to taxis, to ridesharing services where drivers pick up multiples passengers going to the same destination.

There is the potential for these providers to serve as a local transit option with costs being split between the user and businesses.

2. Fill street connectivity gaps

One of Chicago's best assets is its gridded street system that distributes traffic and gives people choices on how to best access their destination. However, this grid dis interrupted by the River and I-90/94 in the Corridor and causes a number of transportation challenges. There are only seven lanes of traffic in each direction connecting over the Chicago River and numerous north-south streets do not connect due to the River or the Expressways. Increasing connectivity in the Corridor will help relieve the pressure on the few streets that connect through the entire Corridor.

A. Evaluate Feasibility of Additional River Crossing

All traffic travelling east-west in the area is funneled into one of the six crossings between Fullerton and Chicago Avenues. This not only impacts east-west connections, but also north-south as it reduces green time at intersections with the through east-west streets. An additional crossing could help ease the bottlenecks created by the limited crossings. It is recommended that any additional crossing maintain the Corridor-wide capacity for vehicles as it is today but increase the capacity for transit, bicyclists, and pedestrians. This could be accomplished by allowing vehicles to use a new crossing and restricting Cortland Street for buses, bicyclists, and pedestrians.

There are a number of challenges with a project of this size, from the overall cost of construction to the feasibility of building a new crossing between Clybourn Avenue and the Chicago River through existing and future businesses. A feasibility study of this connection is the next step for this process.

B. Encourage Future Developments to Build Out the Grid Network

As redevelopment occurs in the area, there will be the opportunity to increase the density of the grid network by extending existing streets and adding new local connections. This improvement will help relieve the pressure on arterial streets and create more walkable developments in the area.

3. Manage future traffic and parking demand

There will be a considerable amount of development throughout the Corridor in the next few years and one of the byproducts of this growth is additional future traffic and parking demand. In order to encourage development but not the traffic and parking impact it can bring, a number of strategies should be considered to help reduce the number of cars in the Corridor and support additional transit in the area.

A. Evaluate the feasibility of a Transportation Management Association

A Transportation Management Association (TMA) is a public-private nonprofit comprised of vested businesses, local government agencies, and community organizations that are interested in improving mobility and advocating for transportation issues. They fill a need for better transportation options when traditional solutions, such as fixed-route bus service, cannot be supported. The associations pool their available resources and

utilize them to mitigate the unique issues that affect the area while improving the overall quality of transportation.

A TMA is similar to Chicago's Special Service Areas that focus on improving specific areas and providing additional transportation options. TMAs can accomplish a number of different goals and be funded a number of ways. Additional information is provided in the attachment to this report. A feasibility and implementation study is the next step towards the development of a TMA.

B. Require Developers to Complete Transportation Demand Management Plans New developments are typically required to complete traffic studies as part of the city's approval process. It is recommended that the studies completed for developments in the Corridor be required to include Transportation Demand Management (TDM) plans that discuss ways in which developments will reduce their traffic and parking demand and contribute to multi-modal improvements. These should include providing accommodations that encourages non-motorized transportation.

C. Evaluate the Impact of a Mobility Hub

A number of transportation assets are located in close proximity to the Clybourn Metra station, including the existing CTA Ashland Bus Route, the proposed Ashland Bus Rapid Transit line, the CTA Armitage Bus Route, the 606 and the parking lot that serves the Best Buy/Kohl's development. Linking all of these assets with a Mobility Hub, that included car share, Divvy, a bike center, and transit information could help connect the entire area. The potential impact of this improvement should be analyzed before any investment is made into a Mobility Hub.

D. Conduct a Parking Study of the area

A parking study should be completed of the entire study area to better understand the parking demand of individual stakeholders and how the parking trends of different land uses.

E. Complete a Robust Targeted Data Collection Effort

Any future study should include a robust data collection process, including volumes of all modes of transportation during weekdays and weekends, origin-destination, qualitative data on mode choice, and crash data.

4. Improve the bicycle and pedestrian connectivity and experience

The target job market for future developments in the area is likely city-based, with a high percentage of workers expected to come from a distance of less than five miles. Many of these people will have the ability to bike or walk to their job. While this area has always had a lot of bicycling activity compared to other neighborhoods in Chicago, the opening of the 606 elevated trail in 2015 created a new opportunity to connect the Corridor to numerous Northwest side neighborhoods. The Corridor also has significant needs for improved infrastructure for pedestrians of all ages and abilities.

A. Evaluate the Feasibility of Extending the 606 Trail

The 606 elevated trail currently terminates at Walsh Park, just west of Ashland Avenue. Extending the 606 to the Corridor would have tremendous connectivity benefits, but would be a challenging design with regards to crossing the Expressway, rail tracks and the River. A feasibility study should be undertaken to analyze how this would be accomplished and understand all of the costs necessary to do so. If a grade separated crossing is not feasible, alternative designs should be considered and evaluated.

B. Enhance Cortland Avenue for Bikes

Cortland Avenue is one of Chicago's great neighborhood streets for bicycling, connecting Lincoln Park to Bucktown across the Chicago River and under the Expressway. The potential exists to enhance this connection and make it an east-west route that works for bicyclists of all ages and abilities. The most challenging part of biking on Cortland Street is between Ashland Avenue and Clybourn Avenue as many more vehicles use this section to cross the River than they do anywhere else along the street. Intersection improvements and lighting could improve safety at critical locations; additional tactics to reduce cut through traffic on Cortland, such as narrowing lanes and traffic circles, would make it more comfortable for biking.

C. Develop Pedestrian Improvement Plan at Transit Stations

All of the CTA and Metra rail stops in the area have challenges with pedestrian access. The Metra Clybourn stop is located near dark viaducts that create safety and security issues. The Chicago Avenue CTA Blue Line Stop is disconnected from the Corridor by the River and rail lines. The North/Clybourn CTA Red Line Stop is next to a challenging intersection for pedestrians to cross. Improving the intersections around these stations for pedestrians will create a better gateway to the Corridor as well as encourage more people to use them. A pedestrian improvement plan should be developed for each location to identify specific infrastructure solutions, such as ways to reduce crossing distance, better pedestrian signals, improved lighting, etc.

D. Evaluate the Feasibility of Additional Connections to Goose Island

There is currently one way in and out of Goose Island from each direction. Providing additional pedestrian connections to the area would reduce the distance pedestrians have to travel in order to reach their destination. A feasibility study would better evaluate the costs/benefits of these potential connections as well as where they should be located.

E. Improved Streetscape on Clybourn Avenue

A number of retail and food options exist on Clybourn Avenue, both north of North Avenue and in the New City development. However, the experience of walking along Clybourn Avenue could be improved through wider sidewalks, trees, and lighting. A new streetscape design on Clybourn Avenue would have a large impact on the pedestrian experience of this Corridor.

F. Improved Streetscape on All Streets

Improving the streetscape on all streets in the area that serve as pedestrian connections

should be encouraged.

G. Build out the River Trail

Development in the area should be required to build out segments of the Chicago River Trail, or at least set aside right-of-way, to ensure a future connected trail in the future.

- 5. Improve reliability of travel times and ensure reliable freight connections
 No one likes to be stuck in congestion. However, this feeling is exacerbated when the
 congestion is unexpected or it is much worse than normal. This applies not just for cars, but
 also the thousands of people who ride the bus through the Corridor every day. Improving
 the reliability of travel times for all users will be an improvement.
 - A. Evaluate Feasibility of Increasing Clearance Distance Under the North Avenue Viaduct

The rail viaduct at North Avenue only allows for clearance of 12' 10", which is not large enough for most large trucks to get under. The project team observed trucks getting stuck under this viaduct on numerous occasions. A feasibility study should be undertaken to determine if the grade of North Avenue could be modified to increase the clearing distance at this location.

- B. Understand Impact of Prohibiting Left-Turn Movements at Six-Way Intersections The numerous diagonal streets in the Corridor often intersect with north-south and east-west streets at the same location. These six-way intersections become choke points in the grid because of the number of signal phases that occur. Most of these intersections allow left-turns, but do not have a protected only phase. This leads to left-turning vehicles "sneaking" through signals, which reduces the amount of green time for through traffic and creates a safety concern.
- C. Identify Bus Slow Zones and Determine Improvements to Remove Them CTA buses experience the same delay as vehicles, although numerous people experience that amount of delay per bus. Slow zones refer to locations, typically at intersections, where buses experience higher than expected delay. The CTA is currently identifying these locations and what improvements can be made. The businesses in the Corridor should work with the CTA to complete this work in the Corridor.
- D. Traffic Signal Coordination and Optimization

Coordinating traffic signals can have considerable impacts on reducing delay and emissions. However, many traffic signals in Chicago need to be upgraded to allow for these improvements. Signal improvements on the arterial roadways in the Corridor would help move traffic more consistently.

E. Minimize Truck Travel Times

The North Branch Corridor continues to be a jobs-centric Industrial Corridor that generates a lot of truck activity. This activity is vital to the businesses located along the Corridor. Making sure trucks can access the businesses as easily as possible while minimizing impact to non-truck traffic should be done. Almost all trucks access the

corridor from the Division Street exit at the Expressway. Improvements should be made to minimize the amount of time and miles trucks travel on city streets.

6. Intersection safety

Intersections are where the majority of crashes occur and improving them would be great. The City should strive for zero fatalities in the Corridor, including traffic safety.

A. Identify Intersections with Safety Issues and

A crash analysis should be completed for all modes of traffic in the Corridor to identify intersections with high crash rates. This information should be shared with the business community and neighbors to inform and alert all stakeholders of the safety issues.

B. Develop Improvement Plan

An infrastructure plan should be developed to address intersection safety issues.

Conclusion

Addressing and managing the existing and future transportation challenges in the Corridor will be necessary to help support growth of jobs in the area and maintain the existing quality of life. There is no silver bullet to accomplishing this. It will require improving access to all modes of transport, but particularly improving transit to the area and access to existing transit lines. The study provides the framework to manage the future transportation demand that will be generated by up to 5,000 new jobs as part of the redevelopment of the former A. Finkl & Sons, A. Lakin & Sons and Gutmann Tanner sites, as well as other developments located in the Corrido.

Six planning principles were developed to guide transportation in the corridor, and recommendations were developed to support the principles, all of which are listed below.

1. Focus on improving the first and last mile connections to transit

- A. Increase the number of Divvy bike share stations in the area.
- B. Evaluate potential of increased fixed bus route service (CTA, private circulator, hybrid)
- C. Extend Water Taxi Service
- D. Develop Agreement with Uber/Lyft/Others for High Capacity Transportation Service

2. Fill Street Connectivity Gaps

- A. Evaluate Feasibility of Additional River Crossing
- B. Encourage Future Developments to Build Out the Grid Network

3. Manage Future Traffic and Parking Demand

- A. Evaluate the feasibility of a Transportation Management Association
- B. Require Developers to Complete Transportation Demand Management Plans
- C. Evaluate the Impact of a Mobility Hub
- D. Conduct a Parking Study of the area
- E. Complete a Robust Targeted Data Collection Effort

4. Improve the Bicycle and Pedestrian Connectivity and Experience

- A. Evaluate the Feasibility of Extending the 606 Trail
- B. Enhance Cortland Avenue for Bikes
- C. Develop Pedestrian Improvement Plan at Transit Stations
- D. Evaluate the Feasibility of Additional Connections to Goose Island
- E. Improved Streetscape on Clybourn Avenue
- F. Improved Streetscape on All Streets
- G. Build out the River Trail

5. Improve Reliability of Travel Times and Ensure Reliable Freight Connections

- A. Evaluate Feasibility of Increasing Clearance Distance Under the North Avenue Viaduct
- B. Understand Impact of Prohibiting Left-Turn Movements at Six-Way Intersections
- C. Identify Bus Slow Zones and Determine Improvements to Remove Them
- D. Traffic Signal Coordination and Optimization
- E. Minimize Truck Travel Times

6. Intersection Safety

- A. Identify Intersections with Safety Issues and
- B. Develop Improvement Plan

There is a need to complete a comprehensive transportation plan for the area. North Branch Works should work with CDOT and DPD to identify funding for future this future study, and also include the CTA, Metra, IDOT, CMAP and the RTA in assisting with scoping and funding. All agencies should continue to play a role in guiding transportation improvements in the corridor.

North Branch Works should also work with CDOT, DPD, and the RTA to complete the next steps in launching a Transportation Management Association. NBW should survey major employers to better understand their employees' origins and mode of transportation and complete a TMA feasibility study with the RTA, CDOT, and DPD.

This study should also serve as a guiding document for NBW's infrastructure committee. It is recommended that one principle be discussed at each meeting to get input from participants on specific issues and work together to develop solutions.

ATTACHMENT [111]

TRANSPORTATION MANAGEMENT ASSOCIATION

NORTH BRANCH RIVER WORKS

Transportation Management Associations

A Transportation Management Association (TMA) is a public-private nonprofit comprised of vested businesses, local government agencies, and community organizations that are interested in improving mobility and advocating for transportation issues. They fill a need for better transportation options when traditional solutions, such as fixed-route bus service, cannot be supported. The associations pool their available resources and utilize them to mitigate the unique issues that affect the area while improving the overall quality of transportation.

Areas with a high concentration of businesses and/or retailers that experience heavy congestion, difficult last mile connections, and limited parking are ideal candidates for a TMA. Depending on the unique challenges, there are many services and levels of involvement a TMA can implement to accomplish their goals and all depend on the needs of the area. An initial and/or low level effort a TMA could implement is to facilitate resources and provide information to its members in one space, such as a website. The website can include tips for smart commuting, linking members to transit agency websites, and establishing commuting options. Another initiative a TMA can undertake is providing incentives to commuters or encourage alternative modes of transportation. If the area requires a high demand for a TMA, the amount of services can vary in complexity and be handled by a dedicated staff. These more complex efforts can include, running a car or vanpool matching service, implementing a shuttle service, and working with public agencies to improve transit options are all viable options once enough resources have been allocated.

The first step vested businesses must undertake is to perform a feasibility study to determine the issues and understand what potential services could alleviate these problems. If the feasibility study indicates a TMA would be plausible, the interested businesses must take these results and use them to recruit other businesses and secure seed funding. When enough businesses have expressed interest, an executive board will be needed to manage membership fees, initiate services, and oversee growth. Most TMAs are mainly funded through annual membership dues which can have varying levels each with their own benefits. To help offset the operating costs, TMAs can work with local public agencies to win federal grants, such as Congestion Mitigation and Air Quality (CMAQ) grants. The role of the board can evolve to coordinate with local officials, transit agencies, and other transportation providers to advocate transportation issues, improvements for the area, and manage its services. Potential benefits a site area can experience as a result of a TMA include reductions of single vehicle trips, transit improvements, and freight transportation management. As the TMA evolves and membership increases, the amount of resources and the services offered can continue to influence the service area to manage ongoing transportation issues.

As a result of an established TMA, current employers can reduce their involvement in managing private commuting options and focus on retaining and attracting new employees, while employees will be able to benefit from reduced commuting costs and the stress of travel. As TMAs grow and employees take advantage of its services, the amount of congestion will

decrease and the service area can become more attractive to potential new employers and a destination spot for visitors.

Case Studies

The City of Cambridge, MA saw traffic congestion and limited land as major issues and in order to mitigate their impact, the Parking and Transportation Demand Management Ordinance was enacted. This ordinance ensures that any new development must create a plan to offset their potential congestion and alleviate their impact on parking. As a result of this ordinance, many businesses have turned to the *Charles River Transportation Management Association* for assistance. This TMA offers benefits to 21 participating employers and includes services such as: emergency rides home, car and vanpool matching, bicycle and pedestrian incentives, and operates the EZRide Shuttle, which connects three train lines to major area employers and a university campus. In 2006, the combined efforts of TMAs of Massachusetts have reduced over 37 million total vehicle miles and had coordinated over 400 education and outreach events. As more TMAs were created throughout the years, they were able to increase that reduction to eliminate over 109 million vehicle miles and coordinate over 1,000 education and outreach events in just eight years.

Similarly, the City of Santa Monica, CA, adopted a forward-thinking Land Use and Circulation Element (LUCE) strategy that establishes the goal of achieving a "No Net New Evening Peak Period Vehicle Trips." This bold plan ensures only developments that maintain the citywide level of vehicle miles traveled can be built. In order to achieve this lofty goal, the City created the Santa Monica Transportation Management Association website that is used as a resource for commuters, employers, and developers. The website gives developers the tools to reduce travel demand, incentivize shared parking, and promote alternative modes of transportation. Commuters can also use the website to compare commuting options, find car/vanpools, and visualize their health benefits gained by commuting. Even employers use the website to search for carpools, track and compete with other companies, and manage/communicate with their employees.

The TMA of Lake-Cook County, IL is an extensive not-for-profit business association that was formed in 1989 and manages the successful Shuttle Bug Program. This public-private partnership works with Pace Bus and Metra Commuter Rail to operate the Shuttle and serves 40 companies between fourteen PACE routes, seven Metra stations, and one CTA station and touted over 1,000 daily trips in 2014. The TMA also works with government entities, local organizations, and communities to improve mobility in the area and advocate for funding. In 2014, working with Pace, the TMA was able to add two new routes which service a development in Downers Grove, IL while continuing to evaluate new routes.

North Branch Works TMA Existing Conditions The current transportation landscape surrounding the North Branch site is rife with commuter options. Within a mile radius of site exists, a water taxi, a Metra station servicing 2 lines, 5 CTA stations servicing 3 lines, the 606 Trail, 10 bus routes, 28 Divvy stations, and a variety of bike lanes. These options are all being used to service a mix of uses including: freight, visitors, employers, and tourists and experience heavy use. A North Branch TMA could leverage these existing transportation options to expand commuter access without adding more congestion to the area. A full feasibility study should be conducted to determine if a TMA would be a good solution in this area. The study should determine the following elements:

Potential Service Area

With the vast array of businesses and transit services surrounding the North Branch site, a TMA could potentially connect 3 CTA stations servicing 3 lines, the Clybourn Metra Station, 6 bus lines, and a handful of Divvy bikeshare stations.

Member Employers

The feasibility study should begin to gauge interest in the TMA among the current and any known future employers. Within this area exist large swathes of businesses along the Clybourn, Elston, and Cortland corridors that may be potential members.

TMA Structure & Services

Depending on the needs for the North Branch service area, several programs could be implemented and mixed and matched to accommodate the results of the feasibility study. Below are just a few of the potential efforts a TMA could establish at a low, medium, and high-level of engagement:

Educational Outreach

Services: At this basic level, the TMA could create an online clearinghouse for participating companies that encourages the use of existing programs and services and promote the benefits of alternative modes of transportation.

Staff Resources: Could be managed by a volunteer TMA board. Annual costs would include creating, updating, and hosting the website.

2. Engagement

Services: At this level, the TMA would develop and oversee new programs and low-cost services, such as targeted incentive programs for employees to use alternative modes of transportation or employers establishing flexible work schedules. Services could include providing carpool matching services or coordinating a carsharing or bikesharing program.

Staff Resources: Full-time or part-time staff will be needed to oversee the programs and coordinate between member employers. Staff will also be responsible for advocating for additional programs or transportation infrastructure and potentially

seeking funds to support the services provided. A volunteer board would guide the TMA.

3. Service Implementation

Services: At this level, the TMA would introduce new services to the study area, either be administering the service privately or through coordination with local providers. For instance, a new service in this study area could include a new transit circulator bus or trolley administered through cooperation with the CTA to link the existing transit stations to employers.

Staff Resources: Two full-time staff would likely be needed to administer and manage the new service(s). Staff would also be responsible for advocating for additional services and/or infrastructure, monitoring the success of the service and unmet needs of the service, and seeking funding as necessary.

TMA Costs

As the needs and the services of the TMA grow, the costs to properly fund them will increase. Low effort programs such education outreach will be the most affordable; operating costs would include funding the website domain and any staff time to manage it. More services would require additional time and staff could be hired to manage the association full time. High effort programs such as a trolley service would require larger operating costs to maintain the trolley, cover insurance, and handle incidentals.

	Educational Outreach	Engagement	Service Implementation
Website fees	\$	\$	\$
Salaries		\$\$	\$\$\$
Office Expenses		\$	\$
Operation Costs	\$	\$\$	\$\$\$
Taxes	\$	\$	\$\$
Insurance	\$	\$	\$\$
Incidentals		\$	\$\$

Funding

Funding for a TMA comes from membership dues and outside sources, which could include local matching funds or state or federal grants. Membership dues are generally

collected on an annual basis. Participating companies are typically charged a flat fee dependent on the number of employees and a per employee fee for larger TMAs. If members require fewer services, a tiered membership could be implemented that grants limited access to the programs. As TMAs grow and demand more services, they can partner with local transit agencies to apply for CMAQ grants or receive matching grants from the city to help supplement their operating costs.

The feasibility study should explore the ideal membership due structure and identify any additional funding needs and opportunities, pursuant to the service needs identified.

If you have questions regarding the *River Works: A Plan for Community, Jobs and Innovation*, please contact Mike Holzer, North Branch Works Executive Director, via email (mike@northbranchworks.org) or phone (773-929-5552 x225).



