

An aerial photograph of the Seattle city skyline, showing numerous high-rise buildings. In the foreground, a proposed waterfront development is overlaid on the image, featuring a curved promenade with green spaces, trees, and a pedestrian path. The development is situated along the waterfront, adjacent to the city's existing buildings and the water. The Great Wheel is visible on the right side of the image, near the waterfront.

BEYOND REAL ESTATE INCREMENT: THE VALUE OF THE CENTRAL SEATTLE WATERFRONT

A STUDY OF THE ECONOMIC, FISCAL, AND COMMUNITY BENEFITS OF SEATTLE'S NEW REGIONAL WATERFRONT

FEBRUARY 2019

HR&A
Analyze. Advise. Act.

friends
of WATERFRONT SEATTLE

Waterfront Seattle is a 26-block transformative open space and roadway improvement project that will reconnect Downtown Seattle, the City, and the region with its waterfront, generating new economic activity and improving the quality of life for the surrounding community and region.



EXECUTIVE SUMMARY

ECONOMIC & FISCAL IMPACTS

EQUITY

CITY BUILDING & TALENT RETENTION

TECHNICAL APPENDICES

EXECUTIVE SUMMARY | SCOPE OF WORK

HR&A Advisors was engaged to perform a detailed analysis of the projected benefits of the Waterfront Seattle project. This analysis and report serves as an update to HR&A's earlier analyses and reflects the more detailed project plans now available.¹

PROJECT CONTEXT

Updated Program
**Updated Capital & Operating
Budget Analysis**
**Local Equity Challenges
Research**

BENEFITS ANALYSIS

**Economic & Fiscal Impact
Analysis**
**Friends' Equity Agenda
Definition**
**Equity & Quality of Life
Benefits Definition**

NEXT STEPS

Waterfront Seattle Completion
**Friends' Equity Agenda
Implementation**
Performance Tracking

1. Past HR&A Studies: 2013 Economic Impact Study, 2013 Visitation Study, 2016 Programming & Business Concept Plan.

OPPORTUNITIES

The project presents a significant opportunity to strengthen the Seattle waterfront and its ability to produce benefits for the surrounding community and region.



CONSISTENT OPEN SPACE

Link neighborhoods along the waterfront through connected open space



WATERFRONT CONNECTION

Reinforce the Seattle region's connection to its waterfront



ECONOMIC & FISCAL BENEFITS

Generate new economic activity through construction, operations, visitation, and business activity



EQUITY

Drive toward equity goals in the surrounding neighborhood, city, and region



QUALITY OF LIFE

Enhance city brand and improve quality of life for residents and employees

EXECUTIVE SUMMARY | WATERFRONT SEATTLE

Waterfront Seattle will create a contemporary open space unlike any existing park in Seattle.

SIGNATURE OPEN SPACE



Signature design in a highly-utilized area distinct from past Seattle parks

WATERFRONT CONNECTION



Waterfront experiences spanning 26 urban blocks, including event space, kiosks, walking, and biking pathways, and connections to the bay

ACTIVE AND PASSIVE SPACE

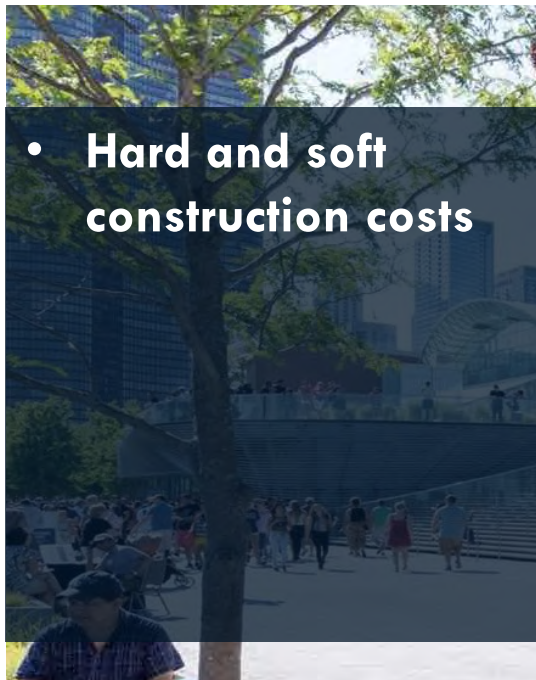


Programming, natural space, and connections to make all feel welcome

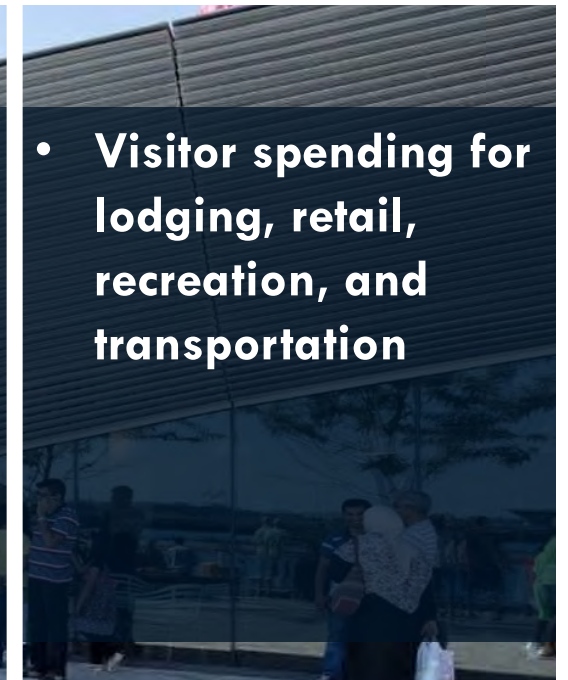
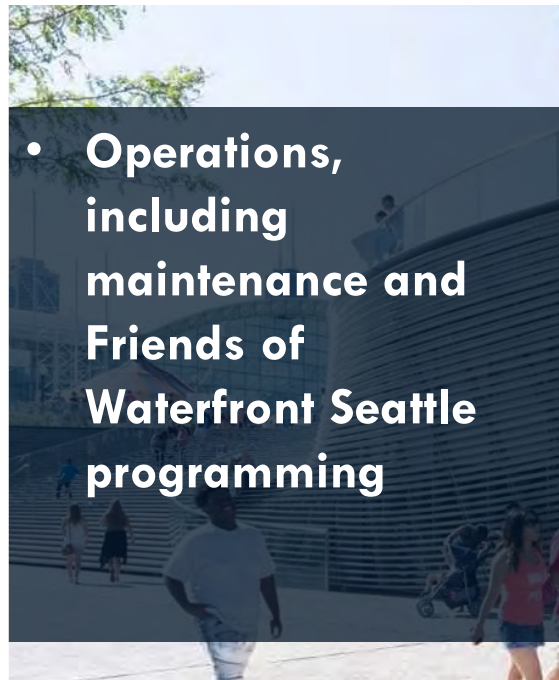
EXECUTIVE SUMMARY | ECONOMIC & FISCAL BENEFITS

The project will generate both one-time and ongoing economic and fiscal impacts from a range of activities.

ONE-TIME IMPACTS



ONGOING IMPACTS



EXECUTIVE SUMMARY | ECONOMIC & FISCAL BENEFITS

One-time construction of Waterfront Seattle and ongoing impacts of the project will generate meaningful economic impacts for the City of Seattle, including job creation and wages.

ONE-TIME ECONOMIC IMPACT (NPV \$2018)

\$1.1B
ECONOMIC IMPACT

6,240
JOBS (FTEs)¹

\$376M
WAGES

\$30M
LOCAL TAXES²

ONGOING ECONOMIC IMPACT (Stabilized Year)

\$288M
ECONOMIC IMPACT

2,385
JOBS (FTEs)

\$103M
WAGES

\$10M
LOCAL TAXES²

1. Over the period of construction, anticipated to occur over the five year period 2018 – 2022.

2. Includes local Sales & Use Tax and Business License Tax; please refer to the Technical Appendix for a full accounting of all tax rates included in this analysis.

Waterfront Seattle Benefits Study | 8

EXECUTIVE SUMMARY | EQUITY

Waterfront Seattle provides a once-in-a-lifetime opportunity to address key equity challenges facing the immediate area and the city and confer social benefits to the community.

- Friends of Waterfront Seattle holds several equity goals for the project: **access and inclusivity**, **economic empowerment**, and **outreach** to underserved populations in the surrounding neighborhoods and region.
- For each equity goal, HR&A examined the following:

CONTEXT	RESPONSE	TOOLS
 <p>What current conditions drove the Friends to set their equity objectives?</p>	 <p>How is the Waterfront Seattle project responsive to these challenges?</p>	 <p>What tools and tactics can the Friends use to measure success in achieving its goals?</p>

EXECUTIVE SUMMARY | EQUITY FINDINGS

ACCESS & INCLUSIVITY

ECONOMIC EMPOWERMENT

OUTREACH

CONTEXT

44,000

RESIDENTS WITHIN 1/2 MILE
OF WATERFRONT SEATTLE

42%

LOW-INCOME HOUSEHOLDS



RETAIL RENTS



INVENTORY OF SMALL
SPACES



VACANCY RATES

LIMITED ACCESS TO
LOANS

LARGE HOMELESS &
ADDICTED POPULATIONS

MULTIPLE EXISTING
SERVICES AND ACTORS
PROXIMATE TO THE
WATERFRONT

RESPONSE

26-BLOCK WELCOMING OPEN
SPACE WITH DIVERSE
RECREATION OFFERINGS

MICRO-BUSINESS
PROGRAMMING
SUPPORT

CONTINUE AS A PARTNER IN
OUTREACH TO VULNERABLE
POPULATIONS

EXECUTIVE SUMMARY

ECONOMIC & FISCAL IMPACTS

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CITY BUILDING & TALENT RETENTION

TECHNICAL APPENDICES

ECONOMIC & FISCAL IMPACT | SUMMARY

The Waterfront Seattle project will create meaningful economic and fiscal impacts for the City of Seattle.

\$1.1 B

**ONE-TIME
IMPACT¹**

\$288M

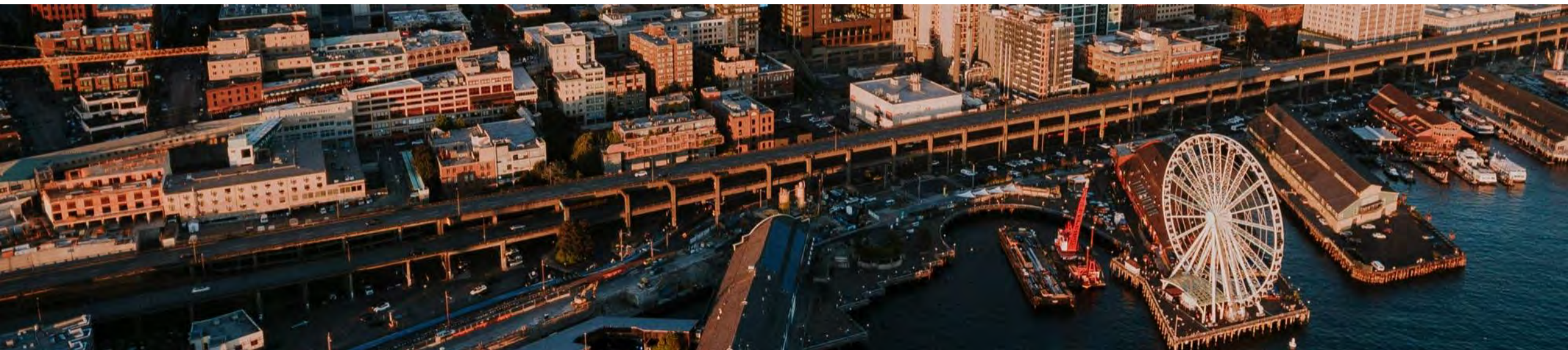
**ONGOING ECONOMIC
IMPACT²**

2,385

**PERMANENT
JOBS²**

\$10M

**ONGOING
LOCAL TAXES²**



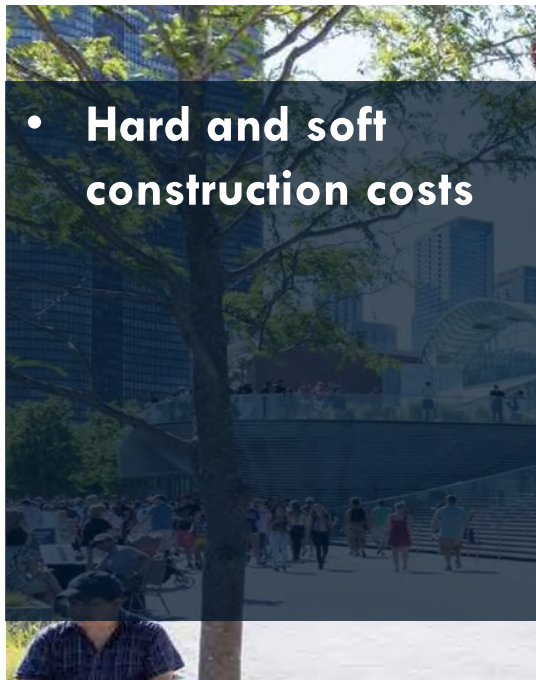
1. One-time impacts refer to impacts accruing during the project's construction period.

2. Ongoing and/or permanent benefits are estimated for a single year, using the assumed stabilized year of operations.

ECONOMIC & FISCAL IMPACT | METHODOLOGY

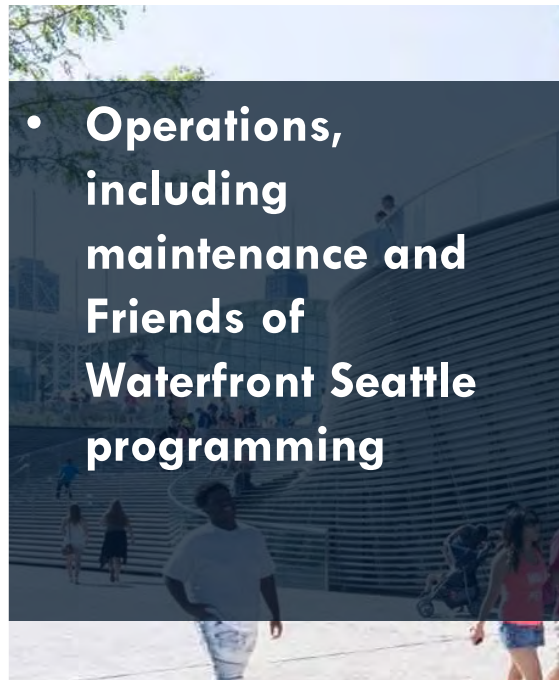
HR&A examined both one-time impacts (construction) and ongoing impacts (operations, activity driven by park amenities, and visitation), which will occur each year, to estimate total economic and fiscal impacts.

ONE-TIME IMPACTS



- **Hard and soft construction costs**

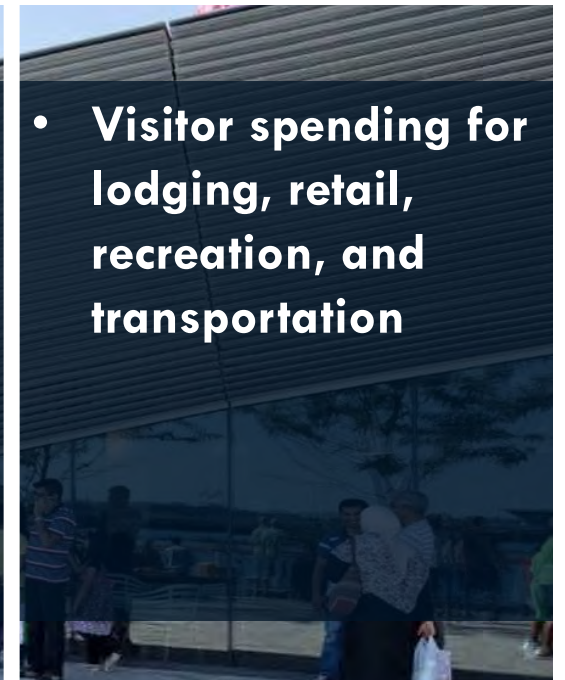
ONGOING IMPACTS



- **Operations, including maintenance and Friends of Waterfront Seattle programming**



- **Activity from park amenities, including:**
 - **Food & beverage services (linked to entrepreneurial programming)**
 - **Public and private event programming**



- **Visitor spending for lodging, retail, recreation, and transportation**

ECONOMIC & FISCAL IMPACT | OPERATIONS & MAINTENANCE

Once completed, the project will support new jobs and economic activity associated with its operations and maintenance.



ONGOING OPERATIONS & MAINTENANCE

145

JOBS¹

\$8M

WAGES

\$165K

LOCAL FISCAL IMPACT

- Routine maintenance and landscaping
- Program administration, including Friends of Waterfront Seattle staff

1. HR&A estimated Full Time Equivalent jobs (FTEs) based on analysis of a joint delivery model between Seattle Parks and Recreation and Friends of Waterfront Seattle. This estimate is informed by the total level of spending associated with operations and maintenance per the initial Operations & Maintenance Report prepared by ETM Associates, HR&A's extrapolation of these costs to additional areas of the waterfront, projected to be maintained at the same level of investment, and Friends' assumptions for staffing to support programming, enhanced security, administrative, and development staff, as well as multiplier jobs. Project areas included are shown on page 70.

ECONOMIC & FISCAL IMPACT | CONSTRUCTION

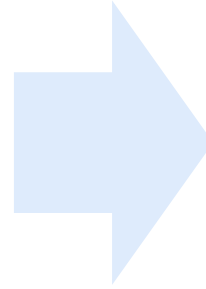
Construction of Waterfront Seattle began in late 2017, with the rebuild of Pier 62/63, and is expected to continue through 2022.

\$781M

DIRECT IMPACT

\$316M

MULTIPLIER IMPACT



\$1.1B

**TOTAL ONE-TIME
ECONOMIC IMPACT**

6,240

ONE-TIME JOBS¹

\$30M

LOCAL FISCAL IMPACT²

1. FTEs: An FTE is the hours worked by one employee on a full-time basis. The concept is used to convert the hours worked by several part-time employees into the hours worked by full-time employees. On an annual basis, an FTE is considered to be 2,080 hours, which is calculated as: 8 hours per day. x 5 work days per week.

2. Includes Local Sales & Use Tax and Business License Tax

ECONOMIC & FISCAL IMPACT | ONSITE PARK AMENITIES

Programming led by Friends of Waterfront Seattle and its local partner, Ventures, will provide business support and resources for local entrepreneurs and provide F&B and event operations throughout the project.



ONGOING AMENITY ACTIVITY

30

JOBS¹

\$1M

WAGES

\$90K

LOCAL FISCAL IMPACT

- Entrepreneurs engaged by micro-business support programming
- Public and private events
- Kiosk and restaurant employees

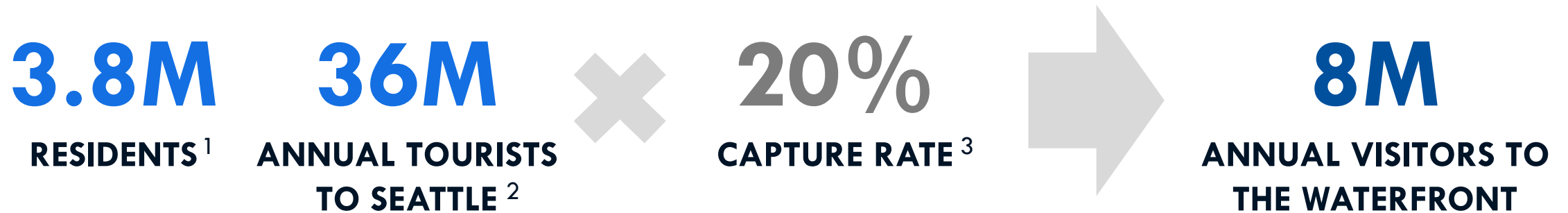
1. Full-Time Equivalent (FTE) jobs. Note: This number of jobs is based upon the IMPLAN analysis of economic activity associated with four F&B kiosks, F&B services at the Washington Street boat landing, the anticipated micro-business support programming (location TBD), and anticipated public and private events during the first year of operations. Based on the program typologies and associated employees per square foot, the estimated number of jobs (non FTEs) is 40. Estimates are based on a conceptual business plan, and employment, wage, and fiscal impacts could evolve over time in step with the potential evolution of the business plan following the launch of amenity offerings.

ECONOMIC & FISCAL IMPACT | NET NEW VISITATION

Residents from the surrounding area and annual tourists will visit Waterfront Seattle at rates similar to other waterfront, linear, and signature downtown open spaces across the country.

Based on current population and tourism figures, an estimated 8M people are likely to visit the Waterfront each year. This likely does not account for all new net visitation activity, which may also benefit from the brand value created by a revitalized Waterfront.

POTENTIAL VISITOR MARKET



1. Population defined as within the Seattle metropolitan area. Source: Bureau of Economic Analysis

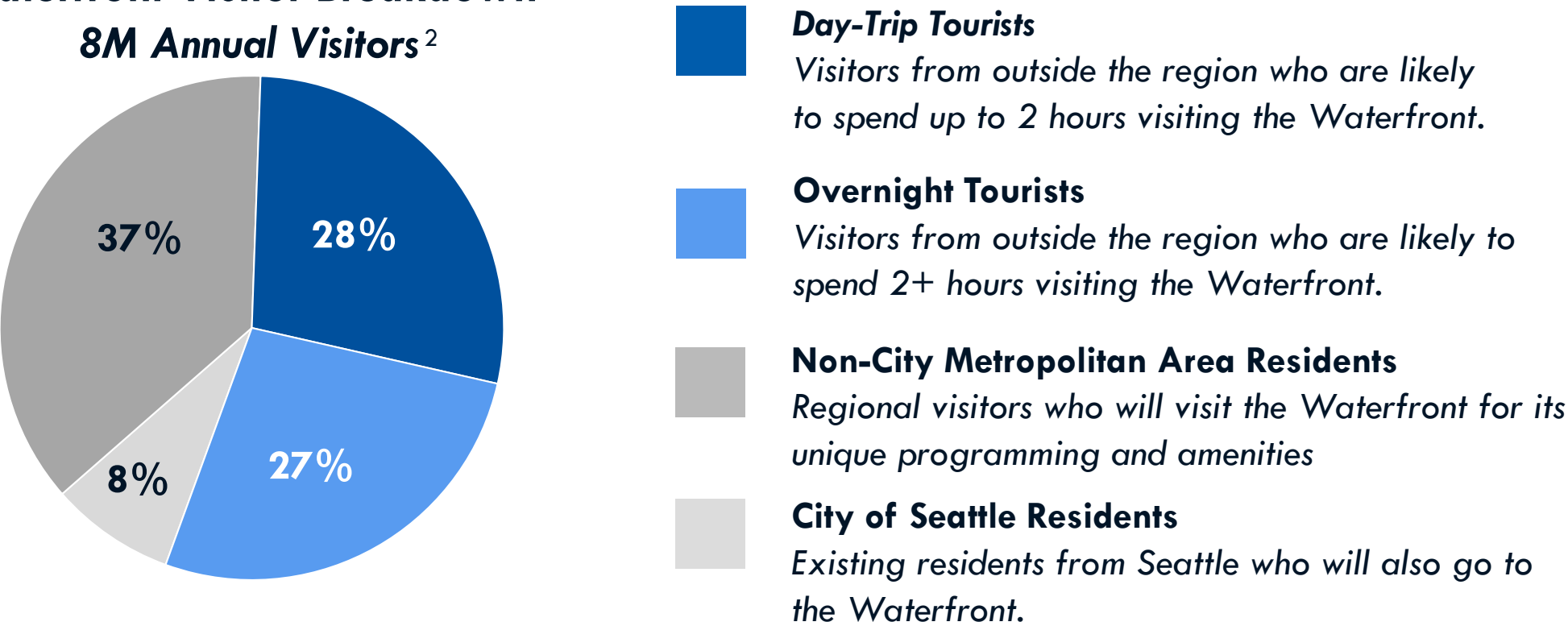
2. Daytime and overnight tourists to the City of Seattle in 2016, based on the 2016 Longwood Tourism Study.

3. Average capture rate of the visitor market based on comparable waterfront, linear, and downtown destination parks. Methodology is detailed further in the Technical Appendix.

ECONOMIC & FISCAL IMPACT | VISITOR TYPES

Visitors to the Waterfront Seattle program are comprised of regional residents and out-of-region tourists, who will spend varying amounts of extended time on the Waterfront.¹

Waterfront Visitor Breakdown
8M Annual Visitors²



1. Estimates refer to regular, annual visitation totals only and are based on: i) visitation precedents of comparable parks nationwide, and ii) local and regional population shares. In addition, the Friends of Waterfront Seattle place strong emphasis on developing special events programming oriented to local residents that may attract greater numbers of regional visitors. Preliminary surveys of visitors indicate visitation from zip codes across the city, but additional future tracking and surveys will be required to fully understand actual visitation breakdowns.

2. Based on comparable research of regional vs. out-of-region park visitation, population data from the U.S. Census Bureau, and the 2016 Longwood Tourism Study for the City of Seattle. Further detail available in the Technical Appendix.

ECONOMIC & FISCAL IMPACT | NET NEW VISITATION

Based on the amount of time each visitor type is likely to spend at the Waterfront, this equates to 1.5M net new visitors days.

This net visitation figure is an increase from HR&A's 2013 analysis. Growth in Seattle's resident and annual tourist population, as well as updated visitation estimates for Downtown Seattle, drove this increase.

8M
ANNUAL
VISITORS

- *Day-trip tourists*
- *Overnight tourists*
- *Non-City Metropolitan Area Residents*
- *City of Seattle Resident*



**ESTIMATED TIME VISITING
THE WATERFRONT¹**

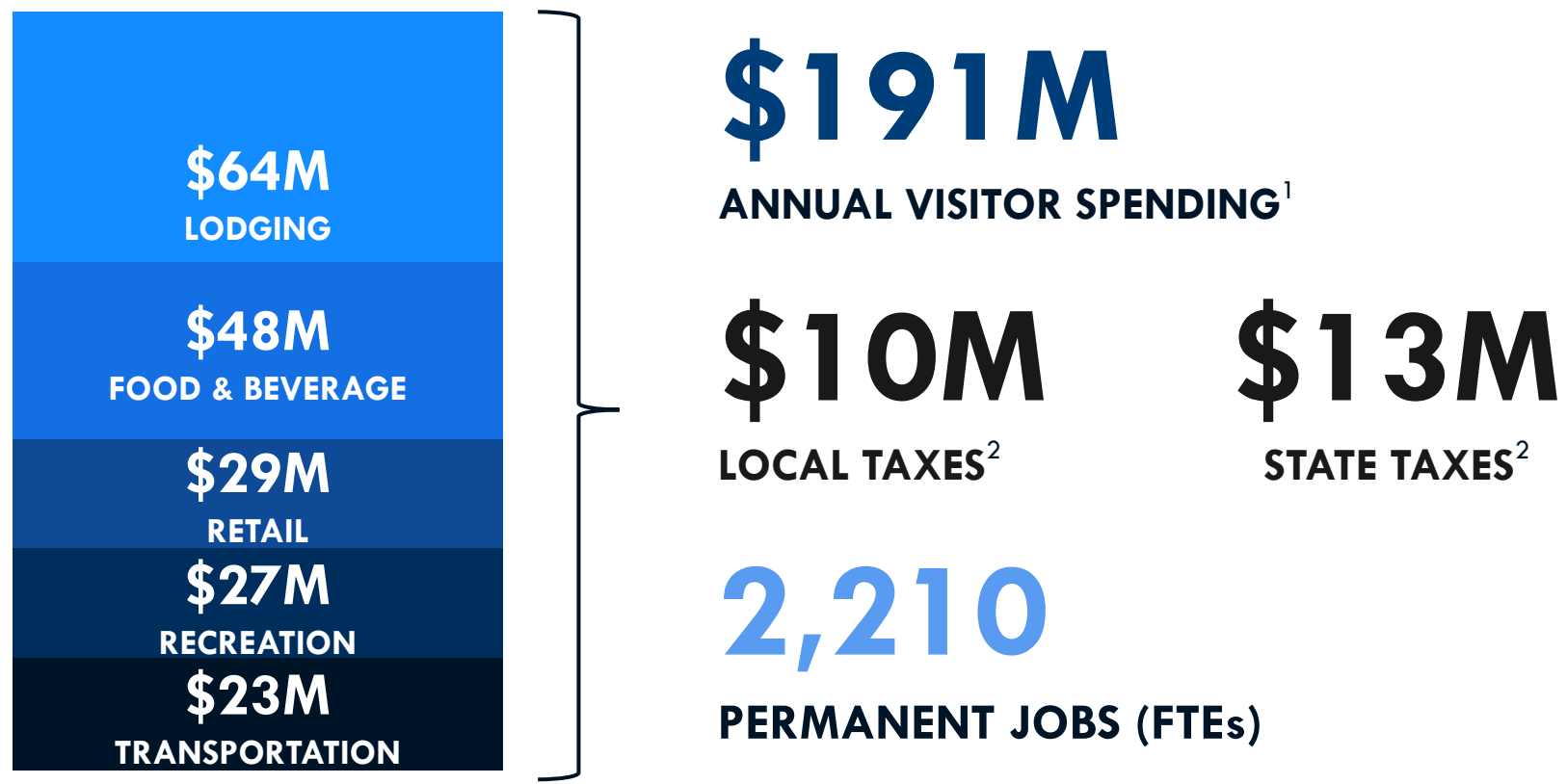
1.5M
NET NEW
VISITORS²

1. HR&A assumption for different visitor populations, based on precedent analysis as discussed on the previous page.

2. HR&A's 2013 Visitation Study estimated 950K net new visitor days.
Further detail available in the Technical Appendix.

ECONOMIC & FISCAL IMPACT | VISITOR SPENDING

Based on typical visitor spending patterns, 1.5 million net new day and overnight visitors associated with the Waterfront Seattle are estimated to generate \$191 million in spending.



1. Excludes visitor spending captured by on-site commercial activity. Based on an analysis of the 2016 Longwood Tourism Study, spending was assumed to average \$78 per person for day trips and \$275 per person for overnight trips. These averages were then multiplied by the net number of new visitor days for both day and overnight visitors.

2. Sales & Use taxes (including Convention & Trade Center taxes at the local level) and Business & Occupation taxes.

EXECUTIVE SUMMARY

ECONOMIC & FISCAL IMPACTS

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EQUITY | BACKGROUND

The City of Seattle and its partners are focused on advancing equity and inclusivity.

EQUITY GUIDELINES & INITIATIVES



EQUITY | GOALS

Equity is a key component of the Friends' mission for Waterfront Seattle.

ACCESS & INCLUSIVITY

Provide programming that invites diverse groups to use the waterfront as a canvas, bringing their own palettes. This is a park that is relevant and used by the whole city.

Through cultural, educational, and recreational programming, **build a place where the community can come together to learn, play, create, and enjoy each other.**

Partner with the City on Operations & Maintenance and augment public funding to keep the waterfront clean, beautiful, safe, and welcoming in all seasons.

ECONOMIC EMPOWERMENT

Work with a local partner to create micro-business support programming that empowers lower income entrepreneurs through business ownership.

Create and grow an organization that shares leadership with all ethnicities, races, and socioeconomic levels.

Create career paths in park programming and operations for diverse communities.

SUPPORTING OUTREACH

Support partners' efforts to meet people in need where they are by providing outreach and social services to the unsheltered and addicted.

EQUITY | BACKGROUND

Best-in-class urban parks are now considering public space impacts through the lens of equity and inclusion. The Friends has joined this precedent-setting conversation.

HIGH LINE NETWORK



EQUITY | GOALS

Some equity impacts can be projected today, while other metrics should be tracked and measured as the project begins operating.

The Friends may set targets and outline tactics in the following areas:

ACCESS & INCLUSIVITY



INCLUSIVE GROWTH



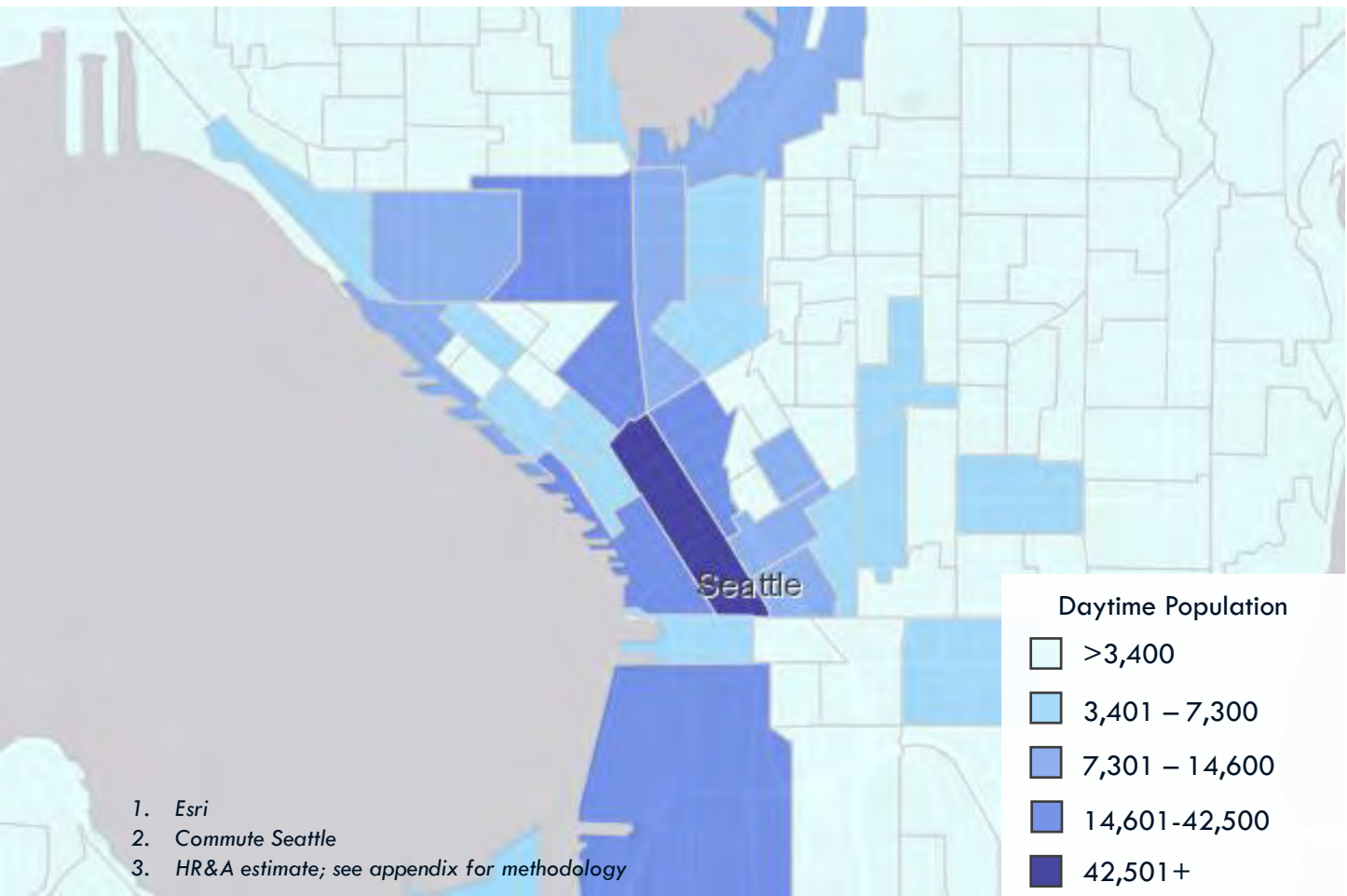
SUPPORTING OUTREACH



EQUITY | ACCESS & INCLUSIVITY: COMMUNITY ENRICHMENT

The Waterfront Park will serve over 44,000 people living within a 1 /2 mile, as well as a robust worker and visitor population served by robust transit offerings, building a diverse community of regular users.

DAYTIME POPULATION



1. Esri
2. Commute Seattle
3. HR&A estimate; see appendix for methodology

44K
LOCAL RESIDENTS¹

45K
NEW WORKERS IN DOWNTOWN AND
SURROUNDING AREA BETWEEN 2010 - 2016²

3.6M
ANNUAL REGIONAL VISITORS³

EQUITY | ACCESS & INCLUSIVITY: COMMUNITY ENRICHMENT

The Waterfront Park will be an important community-strengthening asset, offering free programming and improving quality of life for neighboring communities which are less affluent and more diverse than Seattle on average.

42%

**STUDY AREA POPULATION LOW
INCOME (<\$35K)¹**

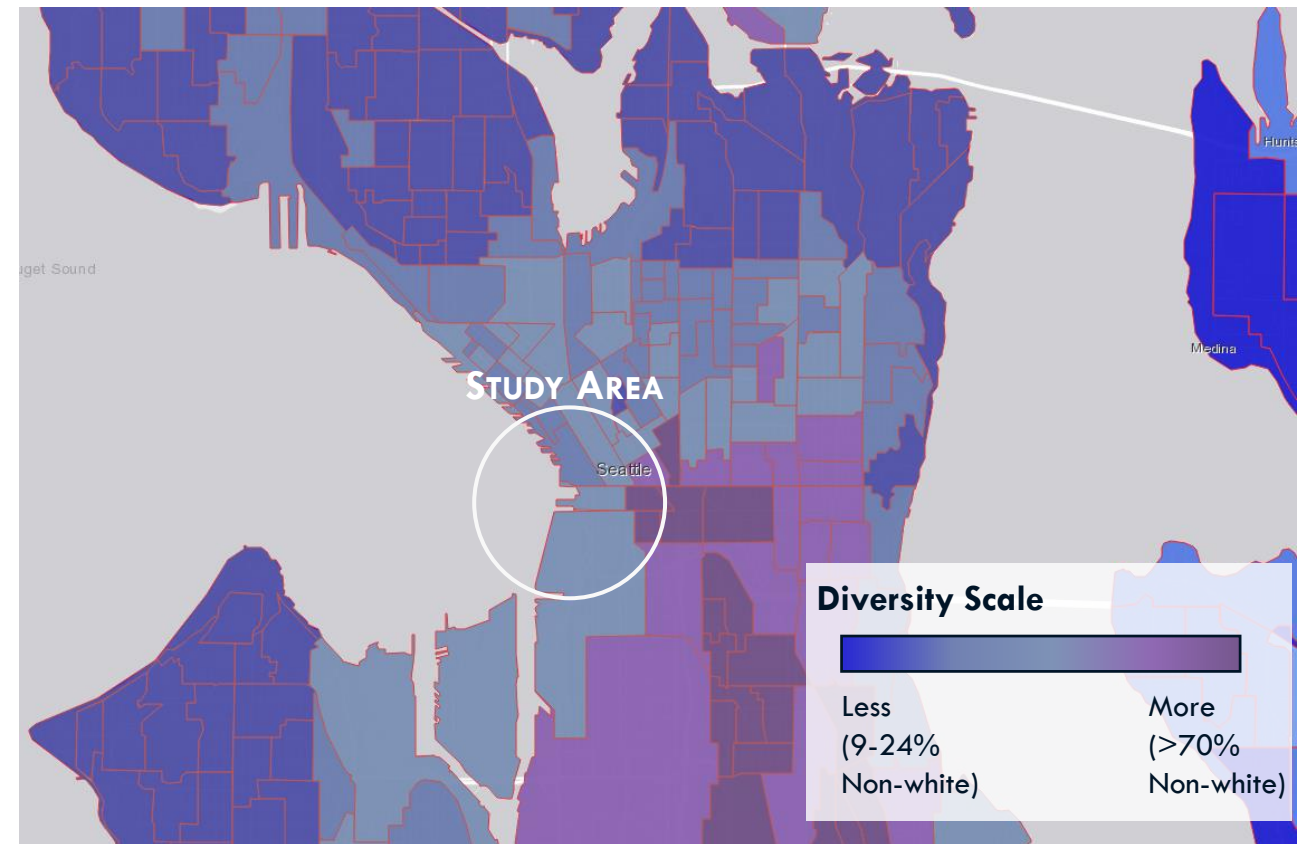
\$43,600

**STUDY AREA
MEDIAN HH INCOME¹**

\$83,500

**SEATTLE AVERAGE
MEDIAN HH INCOME¹**

NON-WHITE POPULATION



1. Source: Esri

Note: The study area was defined a ½ mile radii (10 Min Walk) of Park Access Points. Equity analysis in the following slides was conducted using The Trust for Public Land's geodesign application the "Park Evaluator™," an online tool for city park planners.

EQUITY | ACCESS & INCLUSIVITY: CULTURE & EDUCATION

The 20-acre urban park will offer a diverse set of event space and cultural amenities not currently available in a central city location, building upon existing programming and providing opportunities for collaborative partnerships.

Habitat Beach



Promenade



Pier 58



Kiosk at Union Street



Overlook Walk



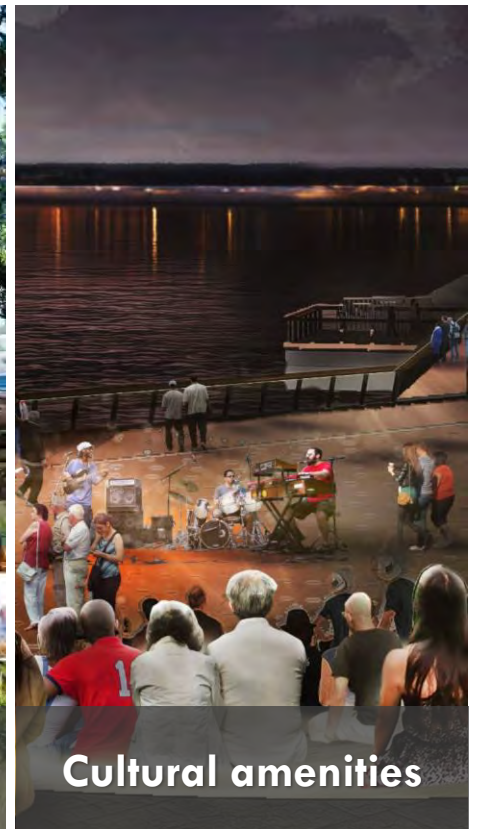
Pier 62



DRAFT FOR DISCUSSION

EQUITY | ACCESS & INCLUSIVITY: RECREATION

The Waterfront program will provide both passive and programmed space that is well-maintained to create a welcoming public area and valuable public asset that is appealing to and attracts a diversity of users.



EQUITY | ACCESS & INCLUSIVITY: RECREATION

The Waterfront program will build upon existing programming and special events that have begun to activate portions of the waterfront in advance of new infrastructure investments, working in collaboration with partners to create programming that is appealing to a diversity of visitors from across the city.



Initial Survey Results

36%

SURVEYED VISITORS VISIT
AT LEAST MONTHLY

70%

SURVEYED VISITORS REACHED THE
WATERFRONT BY FOOT, PUBLIC TRANSIT,
BICYCLE, OR RIDE SHARE,
WITH **47% WALKING**

EQUITY | ACCESS & INCLUSIVITY

The Waterfront's accessibility and inclusivity, including the diversity and reach of its programming, cannot be measured yet but should be going forward. To track relevant metrics, the Friends should:

1 Set specific targets.

- Set targets for **community enrichment; culture and education; and recreation**
- Identify target populations to serve

2 Establish the baseline.

Take inventory of existing cultural and historic assets and programs

3 Track progress.

Conduct annual and event-specific surveys to measure:

- Reach and demographic audience of parks programs
- Visitation trends (time of year, time of day, duration of visit)
- User satisfaction and perceptions of accessibility
- Community engagement (volunteer hours, donations)
- Crime rates and perceptions of safety around waterfront
- Outcomes regarding targets for Women- and Minority-Owned Business Enterprises (WMBE) contracts, vendors, and concessions

EQUITY | INCLUSIVE GROWTH: ECONOMIC EMPOWERMENT

Many small businesses face a number of challenges operating and surviving downtown.



Rising retail rents

At an **average of \$37.50 PSF**, retail rents in near the waterfront are the highest in Seattle.



Declining inventory of small spaces

Only **25%** of existing buildings have available **spaces under 1,000 SF**.



Falling vacancy rates

Since 2012, retail vacancy rates have declined from **2.9% to 1.9%**.



Limited & unevenly distributed loans

Areas with a concentration of low-income, minority, and immigrant-owned businesses receive **<10% of loan dollars per capita** of more affluent areas.

EQUITY | INCLUSIVE GROWTH: ECONOMIC EMPOWERMENT

In partnership with Ventures, Friends of Waterfront Seattle will provide micro-business support programming to create economic opportunities for small businesses. Ventures empowers low-income entrepreneurs with limited resources and unlimited potential to improve their lives through small business ownership.

Small Business Development



Support Services



EQUITY | INCLUSIVE GROWTH: ECONOMIC EMPOWERMENT

Friends of Waterfront Seattle and Ventures’ partnership will empower entrepreneurs from underserved populations and generate economic activity for the City.

MICRO-BUSINESS PROGRAMMING ONGOING ANNUAL IMPACT ¹

ECONOMIC
IMPACT **\$3M**

WAGES **\$1M**

JOBS (FTE) ² **30**

SHARE WMBE ³ **80%**



1. Micro-business support programming impact is included in on-site commercial activity, discussed earlier in this study.
2. Based on the IMPLAN analysis of economic activity. Before conversion to FTEs, based on the anticipated program and associated employees per square foot, the estimated number of jobs (non FTEs) is 40.
3. Per preliminary business planning by Friends of Waterfront Seattle and partners.

EQUITY | ECONOMIC EMPOWERMENT

With the ramp up of Waterfront Seattle, the Friends will advance its goal of creating economic opportunity for diverse and low-income populations. To track relevant metrics, the Friends should:

1 Set specific targets.

- Set **economic empowerment** goals, including job creation
- Identify target populations to serve

2 Establish the baseline.

- Utilize existing inventories of WMBE and small businesses currently located in downtown

3 Track progress.

Use annual reporting to measure:

- Jobs created by micro-business support and parks operations, at management and junior levels
- Demographic composition of supported micro-business members and staff at all levels
- Number of workforce and training opportunities available
- Success rate and trajectory of micro-business support program graduates

EQUITY | OUTREACH: SUPPORT OUTREACH & ENGAGEMENT

Friends can continue to act as a partner to existing programs run by the City and other local organizations to serve downtown's vulnerable populations, which remain in critical need of support.

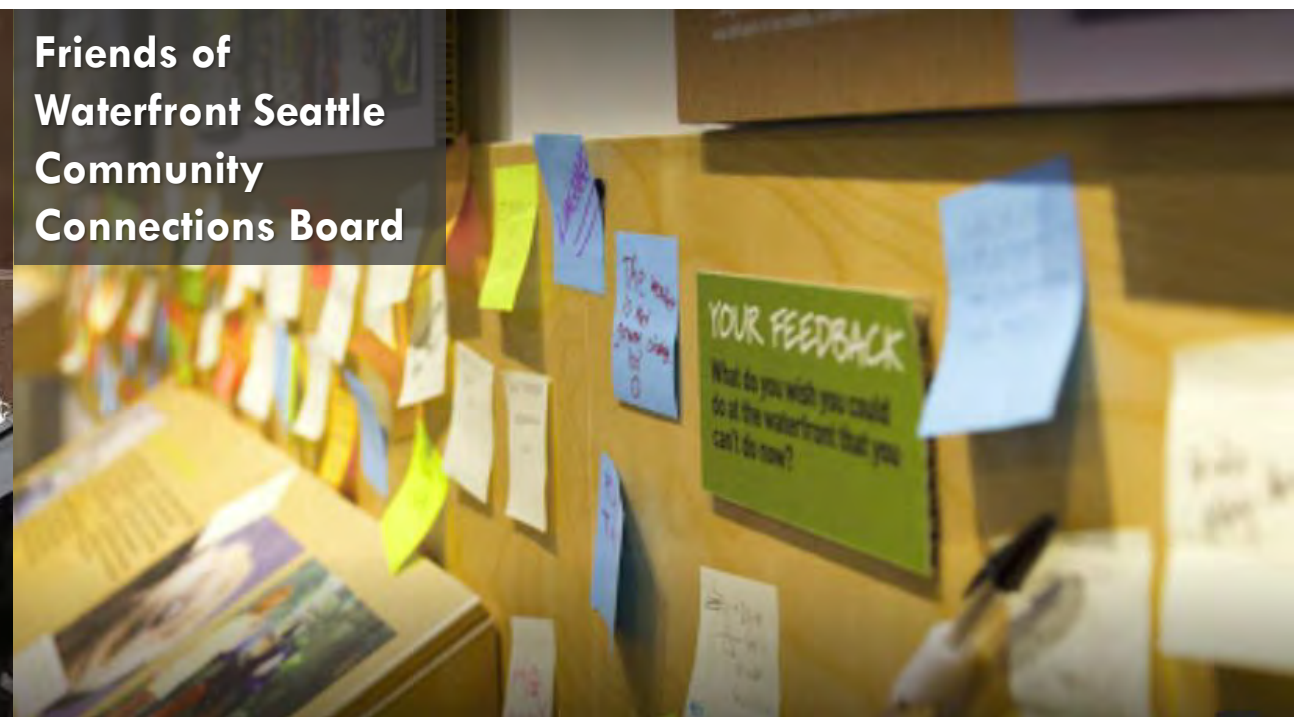


Waterfront focus
for LEAD

30%
DECREASE IN ARRESTS AND
CITATIONS SINCE 2016

16%
DECREASE IN OVERALL CONTACT
HOURS

Spearheading collaboration with the Police Department to refer and serve vulnerable populations where they are



Friends of
Waterfront Seattle
Community
Connections Board

Standing committee meetings to achieve deep and wide engagement of all Seattleites & underserved populations

EQUITY | OUTREACH

Friends should continue to act as an on-the-ground partner to organizations leading outreach to vulnerable populations, including the homeless and addicted. To track these metrics, the Friends should:

1 **Set objectives.**

- Set targets for outreach & engagement
- Identify target populations to serve and potential partner organizations with which to collaborate

2 **Establish the baseline.**

- Record instances in which Friends directly assists in outreach and identify key partners

3 **Track progress.**

Ensure that Friends employees record key information about relationships with existing partners to leverage new or useful resources

EQUITY | NEXT STEPS

Develop and maintain a system for tracking metrics on an ongoing and annual basis through surveys and other forms of data collection.

Measuring equity impact should be a central part of the Friends' business plan and mission going forward.

EXECUTIVE SUMMARY

ECONOMIC & FISCAL IMPACTS

EQUITY

CITY BUILDING & TALENT RETENTION

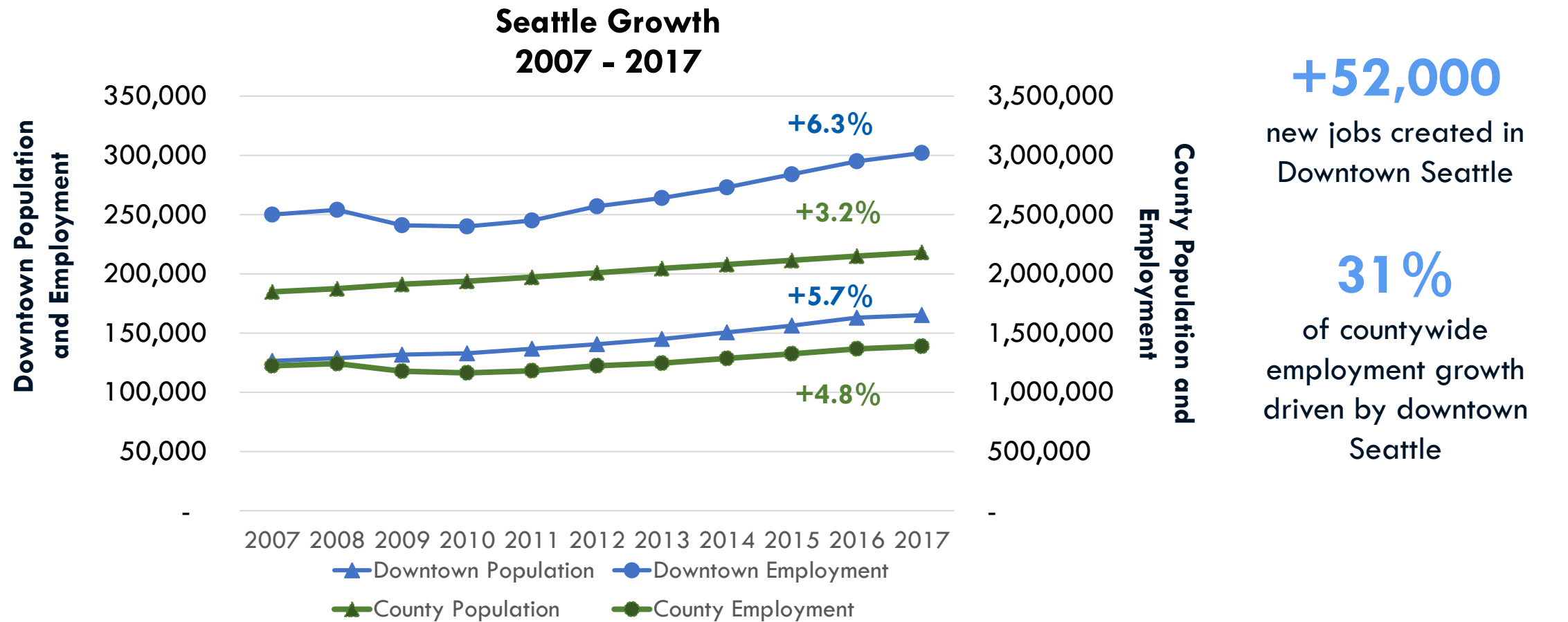
WORKER ATTRACTION

WORKER RETENTION

TECHNICAL APPENDICES

WORKER ATTRACTION | DOWNTOWN SEATTLE

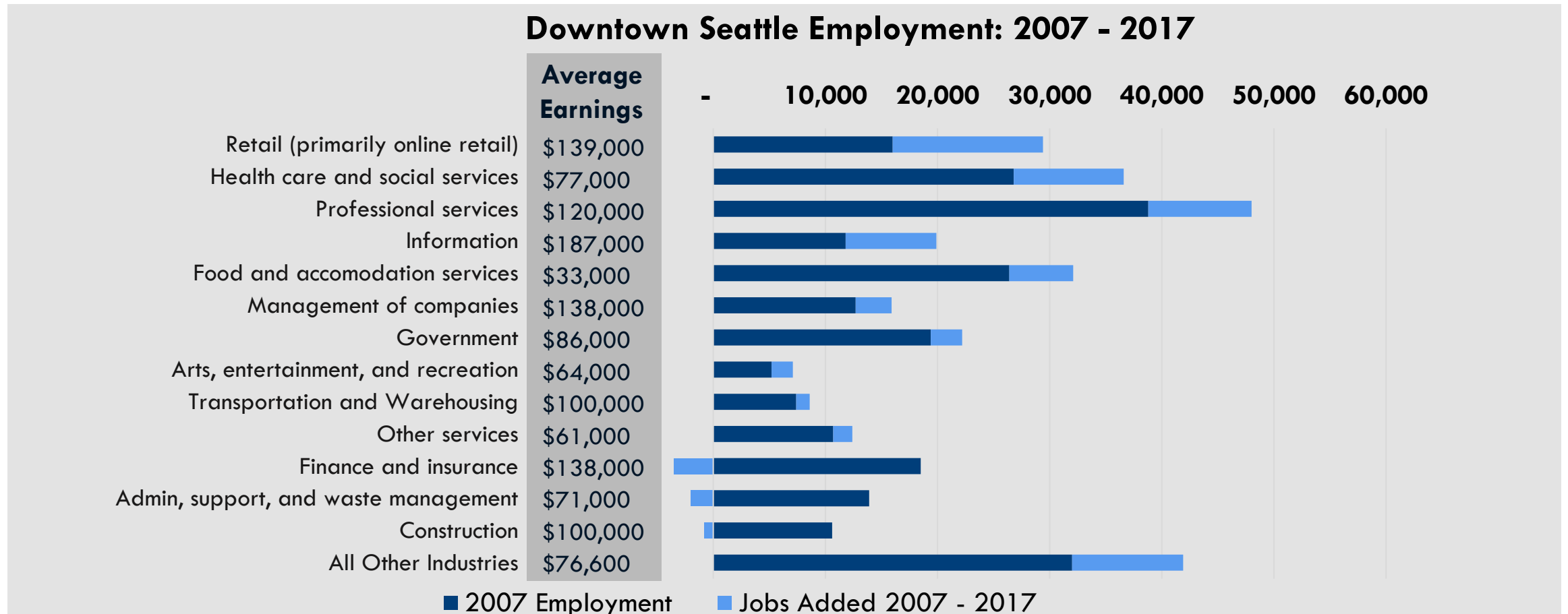
Sustained employment and population growth downtown, within the area surrounding the Waterfront Seattle project, serve as major engines of growth for the county.



Source: Emsi

WORKER ATTRACTION | DOWNTOWN SEATTLE

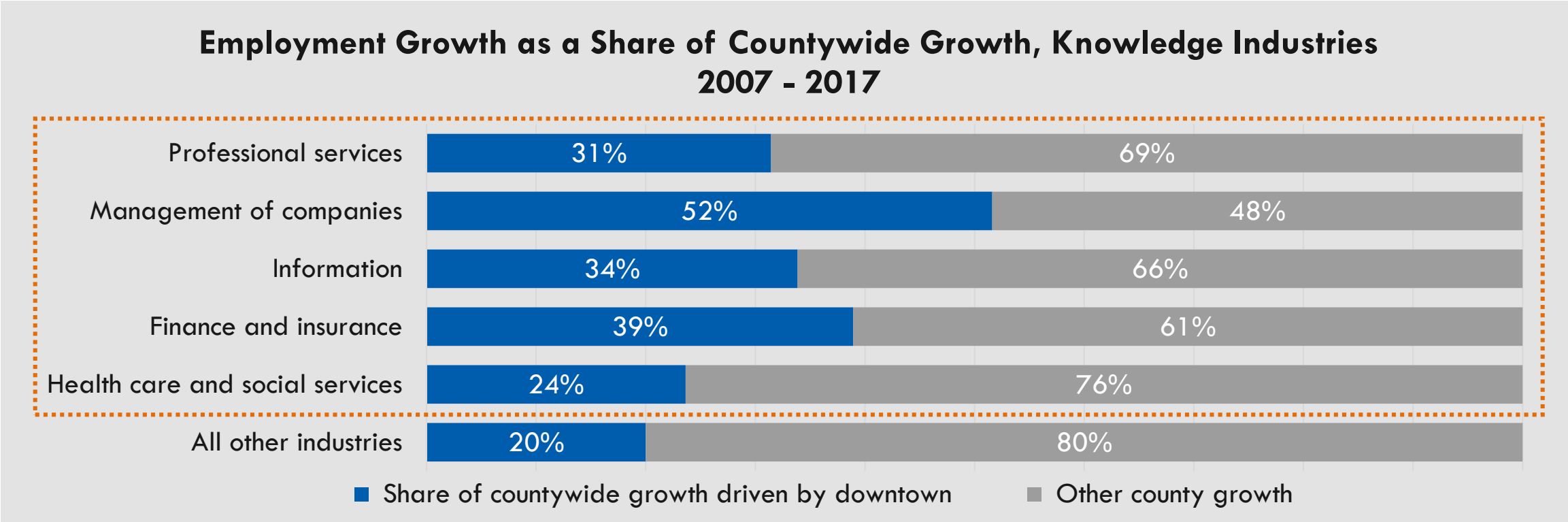
A base of high-skill industries has expanded since the recession, increasing the number of high wage jobs. Together with population growth this has driven increases in the food and accommodations and the arts, entertainment, and recreation industries.



Source: Emsi; Retail jobs added since 2007 are primarily Amazon-related (online retail).

WORKER ATTRACTION | DOWNTOWN SEATTLE

Downtown has also accounted for a higher share of new regional “knowledge economy” employment growth than across all other industries.



 Knowledge economy industry

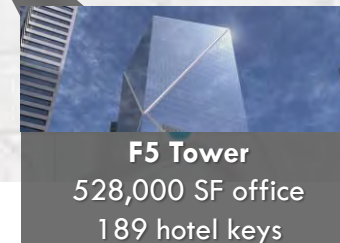
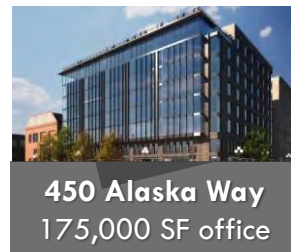
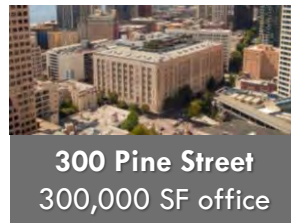
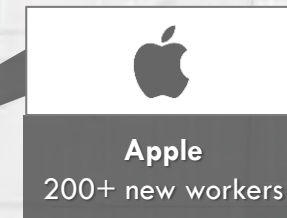
Source: Emsi. HR&A defines knowledge economy industries as those comprising knowledge-intensive activities that contribute to an accelerated pace of technical and scientific advance, with a greater reliance on skills than on physical inputs or natural resources. Jobs within these industries tend to pay higher average wages than traditional manufacturing and services industries. The strength of specific knowledge economy industries varies regionally dependent on regional strengths including access to talent and educational infrastructure. A full definition and industry codes are included in the appendix.

WORKER ATTRACTION | SEATTLE

Employment growth in the downtown core is supported by significant commercial investments, including new Class A office space and corporate campuses.

Recent Downtown Development and Corporate Relocations

- Recently completed commercial development
- Select corporate relocations/new regional offices



WORKER ATTRACTION | NATIONAL TRENDS

Nationally, innovation economy workers want to live and work in dense, walkable, and mixed-use environments with quality open space that facilitates social interaction. Waterfront Seattle has the potential to reinforce these qualities in Downtown, strengthening the area's draw for companies and employees.

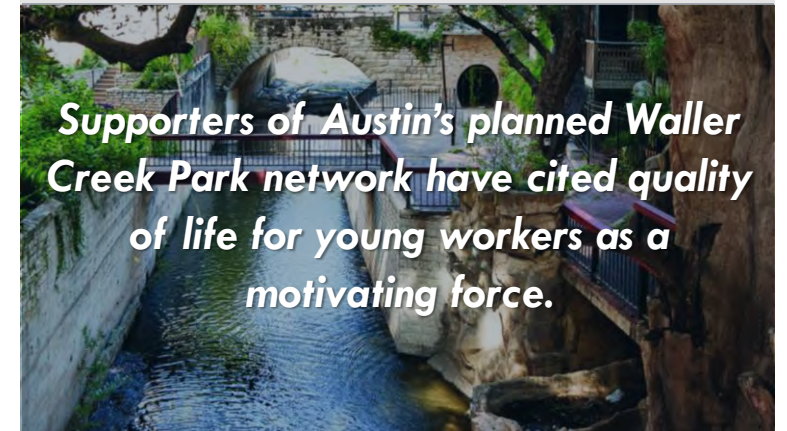
Open space is the **#5** driver of site selection for commercial tenants and investors.¹



1 in 5 leaders of fast-growing companies named quality of life as a key factor for business location.²



Place-based investments are more important to young workers than to older workers, by as much as **50%**.³



1. Gensler, "Investing in Open Space," 2012
2. Insight Endeavors: *What Do the Best Entrepreneurs Want in a City?*, 2014
3. *Journal of Social Science & Medicine: Happiness and health across the lifespan in five major cities: The impact of place and government performance*, 2015.

WORKER ATTRACTION | EVALUATION OF PRECEDENTS

To understand the impact of large-scale open space investments on attraction of workers, HR&A analyzed total and “knowledge economy” employment trends for comparable open space investments in peer cities. A broad range of parks were analyzed to understand the range of benefits generated in the period following park construction.



**The High Line
Manhattan**



**Klyde Warren Park
Dallas**



**Brooklyn Bridge Park
Brooklyn**



**Millennium Park
Chicago**



**Yards Park
DC**



**Rose Kennedy Greenway
Boston**

Impacts considered:

- Role of open space investment in attraction of new commercial investment
- Changes in park impact area employment relative to regional employment trends
- Changes in knowledge economy employment trends.¹

¹.As defined on Slide 5, this includes professional services, management of companies, information, finance and insurance, and health care and social services.

WORKER ATTRACTION | EVALUATION OF PRECEDENTS

Across the studied projects, significant urban open space investments have had a positive effect on employment in the immediate area, and are particularly reinforcing for innovation economy job growth. HR&A observed this effect in cities with growing employment—Seattle’s peers—and for those in decline.

ROLE OF OPEN SPACE IN URBAN MARKETS

Mitigate Losses in Existing Commercial Districts



**Millennium Park,
Chicago**



**The High Line,
Manhattan**



**Yards Park
DC**

Strengthen Existing Commercial Districts



**Brooklyn Bridge
Park, Brooklyn**



**Klyde Warren
Park, Dallas**



**Rose Kennedy
Greenway, Boston**

 Seattle Peer Case Study

WORKER ATTRACTION | MITIGATE LOSSES

Even in cities where overall employment is declining, signature urban open space helped to stem loss, attracting new corporate investment that resulted in lower employment declines in the immediate area than countywide.

Mitigate Losses in Existing Commercial Districts



**Millennium Park,
Chicago**

In the presence of signature open space investments:

- Significant new residential real estate development attributable to park development confirmed the desirability of a live-work-play neighborhood and provided workers with new places to live.
- Major corporate entities, citing access to talent and amenities, relocated or opened major offices following park development.
- Losses in employment were observed to be significantly lower than across the county.
- Wages in key innovation economy industries were higher in the immediate area than countywide.

WORKER ATTRACTION | ANCHOR NEW DISTRICTS

In other cities, the development of signature open spaces was observed to anchor new commercial districts, supporting the branding of new live/work/play neighborhoods and the attraction of major new tenants.

Anchor New Commercial Districts



**The High Line,
Manhattan**



**Yards Park,
DC**

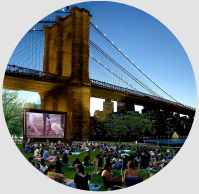
In the presence of signature open space investments:

- New commercial districts achieved employment growth consistent with countywide averages in a short period of time.
- First-mover major corporate tenants relocated to benefit from proximity to new amenities, creating momentum for other commercial investment and employment growth.
- Wages in key innovation economy industries achieved parity with, or exceeded, countywide wages in a short period of time.

WORKER ATTRACTION | STRENGTHEN EXISTING DISTRICTS

In a third category, particularly relevant to Seattle, the development of signature open spaces was observed to bolster growth in existing commercial districts, reinforcing areas of strength.

Strengthen Existing Commercial Districts



**Brooklyn Bridge
Park, Brooklyn**



**Klyde Warren Park,
Dallas**



**Rose Kennedy
Greenway, Boston**

In the presence of signature open space investments:

- Major corporate tenants relocated to benefit from proximity to new amenities, creating momentum for new commercial investment, redevelopment, and employment growth.
- In established residential neighborhoods, more commercial investment emerged.
- Commercial districts achieved employment growth that exceeded countywide averages in a short period of time, including in key innovation economy industries.
- Wages in key innovation economy industries achieved parity with or exceeded countywide wages in a short period of time.

WORKER ATTRACTION | THE HIGH LINE

The **High Line** transformed elevated rail tracks into an iconic open space that spans several distinct neighborhoods, providing unique program offerings and catalyzing new commercial and residential development.



Source: EMSI

Park Construction: 2006 – 2017; first phase opened 2009.

Signature Elements: Landscaping on former elevated rail tracks provides a unique urban experience; the park provides signature community and arts programming.

Resulting Investment:

- The High Line has catalyzed new investment, attracting flagship offices to new construction.
- For example, Google established a 400,000 square foot headquarters at the Chelsea Market and has acquired the building for \$2.4B. The company also purchased 111 Eighth Avenue for \$1.8B, and leases additional space in the neighborhood.
- Facebook has followed, leasing approximately 900,000 square feet to support 5,000 jobs.

WORKER ATTRACTION | THE HIGH LINE

In a former residential and industrial district, the High Line catalyzed employment growth that has outpaced Manhattan-wide growth rates overall and for innovation economy industries. New jobs overall pay high wages, with information workers earning more on average in the district than throughout Manhattan.

Total New Employment Growth:

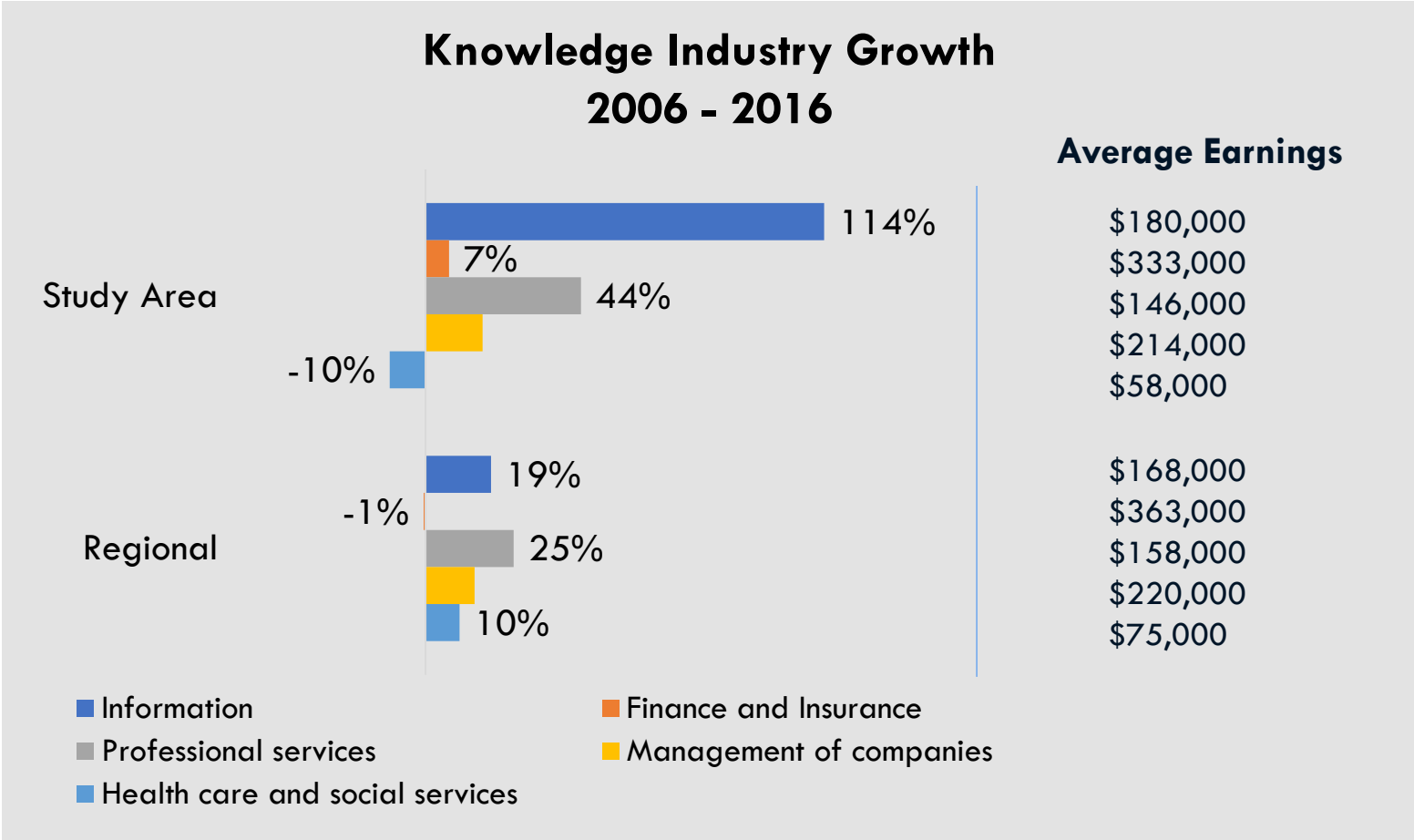
23,000 new jobs following park development, a 24% increase versus 5% across Manhattan.

Average Regional Wage:

\$135,052 (average Manhattan wages include those of some of the highest-paid workers nationwide, including in Midtown and the Financial District)

Average Wage of New Park District Jobs: \$106,000

Source: EMSI



WORKER ATTRACTION | YARDS PARK

Formerly part of a Navy yard, today the **Yards Park** anchors a vibrant, new mixed-use district along the Capitol Riverfront near downtown. Aquatic recreation and regular programming appeal to workers and residents, while a pedestrian bridge provides connectivity to surrounding areas.



Yards Park, DC

Source: EMSI

Park Construction: Commenced 2007; park opened 2010.

Signature Elements: Pedestrian pathways and signature design provide connectivity to the waterfront and host regular programming.

Resulting Investment:

- Confirming the area's new status as the city's fastest-growing neighborhood, at full build-out the area will contain 37 million square feet of new office, retail, and residential space and is projected to add 12,000 new residents.
- Taking advantage of larger footprints, government relations firms and contractors, including Watkinson & Miller and defense contractor Asset Inc., have relocated from downtown.
- Broadcast company CBS Radio leased 33,000 square feet, including a ground floor performance studio to host talent. The National Association of Broadcasters has also relocated.

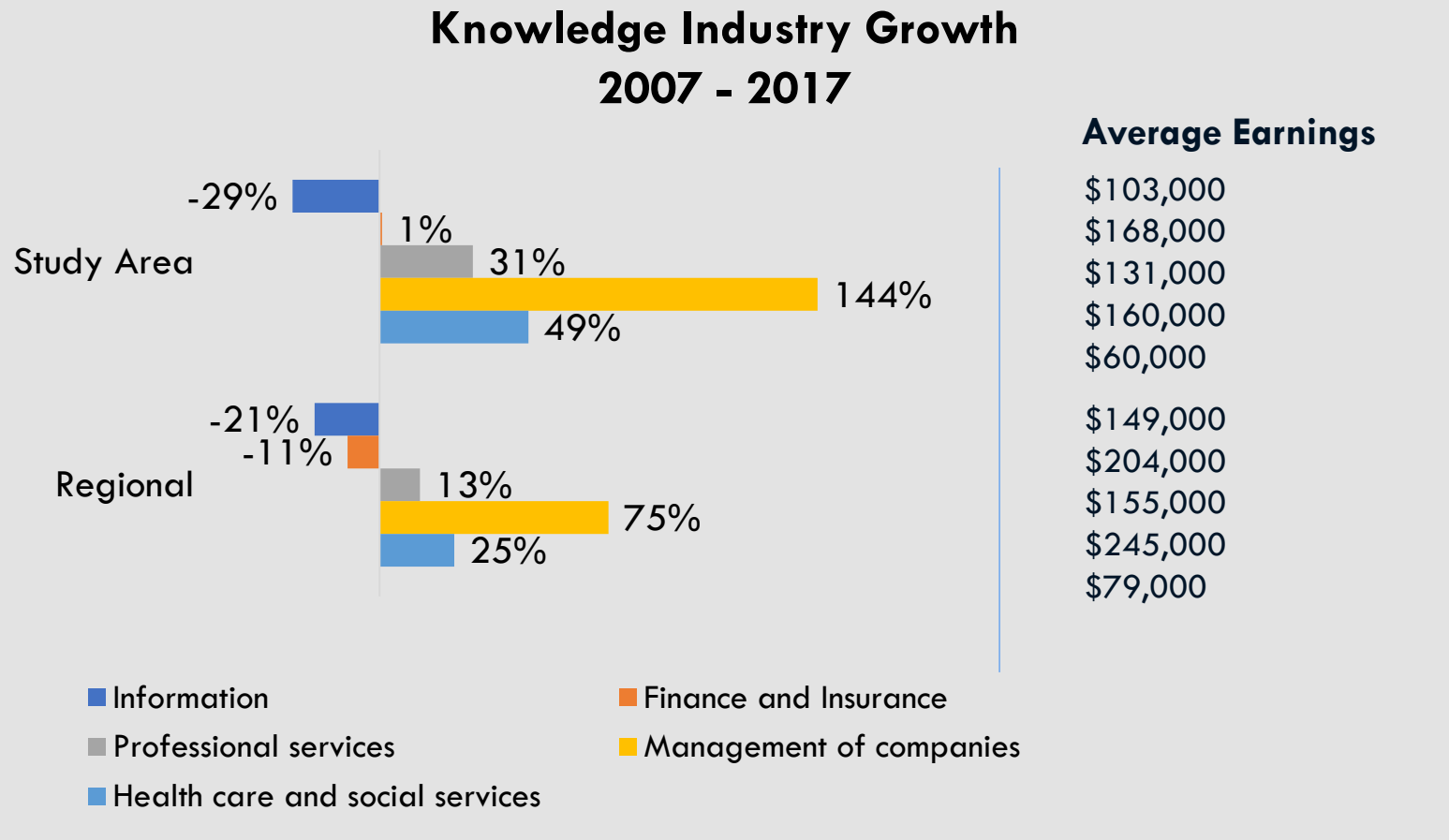
WORKER ATTRACTION | YARDS PARK

Yards Park has helped to anchor a new mixed-use district, achieving overall employment growth and average wages modestly exceeding DC-wide levels in a short period. While wages in high job quality industries lag countywide wages, employment in these industries has expanded more rapidly.

Total New Employment Growth:
6,000 jobs, at a rate of 12%
versus 10% citywide in an entirely
new planned district.

Average Regional Wage:
\$114,000

**Average Wage of New Park
District Jobs: \$116,000**



Source: EMSI

WORKER ATTRACTION | BROOKLYN BRIDGE PARK

Built over former industrial waterfront piers, the 85 acre **Brooklyn Bridge Park** has reconnected the borough to its waterfront, attracting users from every corner of Brooklyn and new commercial investment.



Brooklyn Bridge Park, Brooklyn

Source: EMSI

Park Construction: Commenced 2008; park opened 2012.

Signature Elements: Waterfront access, pedestrian and bicycle connectivity, and signature programming that appeals to local workers and boroughwide residents.

Resulting Investment:

- Etsy, an online marketplace, developed its 225,000 square feet global headquarters in the district.
- JP Morgan Chase moved 1,000 jobs to Metrotech Center the year the park opened.
- Global design companies and cutting edge design firms are moving their headquarters to the area, both into the first newly-built Class A office tower in the borough in many years and into renovated, historic structures.

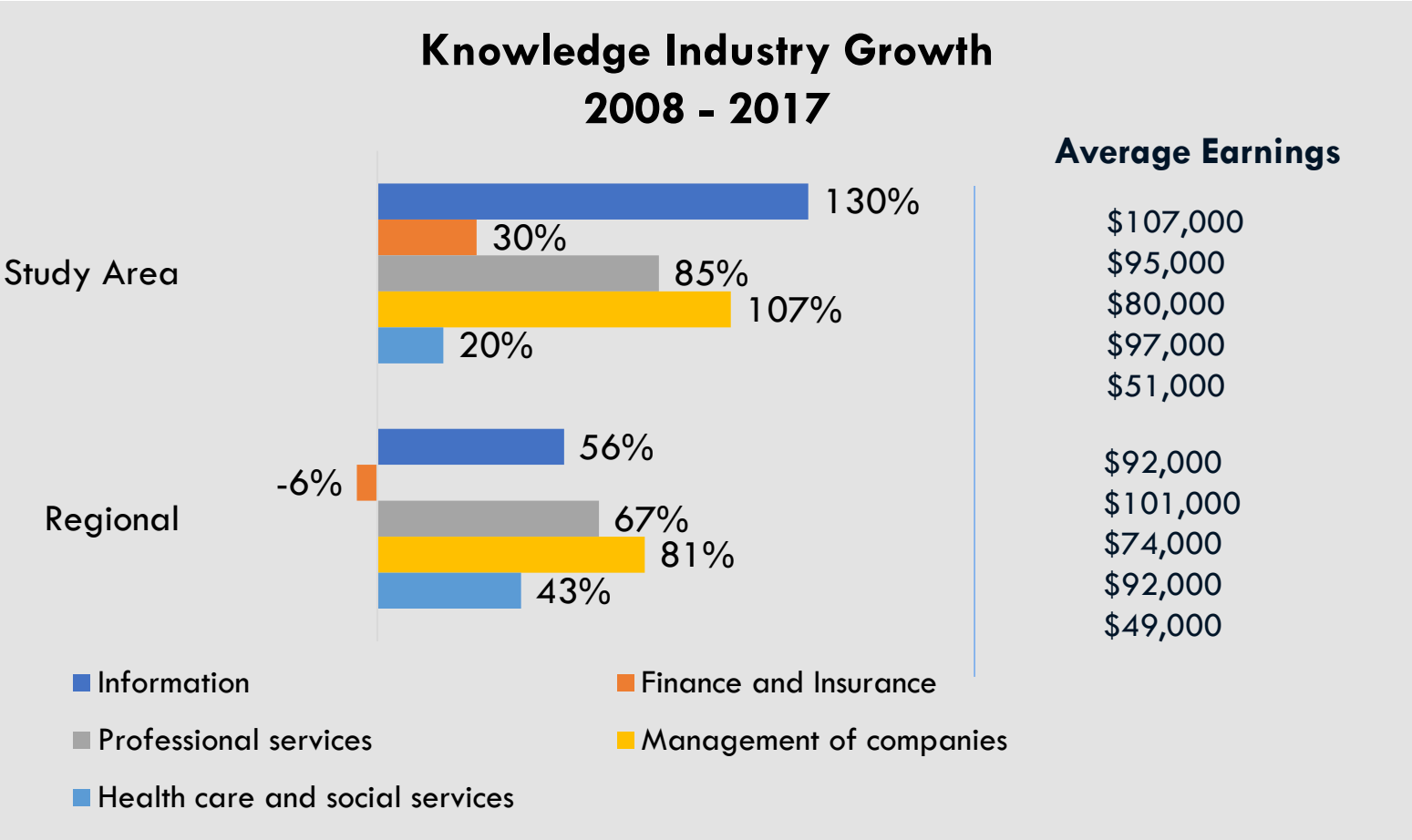
WORKER ATTRACTION | BROOKLYN BRIDGE PARK

In a neighborhood that was predominantly residential, Brooklyn Bridge Park helped to spur new commercial development on the periphery of Brooklyn’s downtown, achieving significant total employment growth, innovation economy growth, and wages higher than those Brooklyn-wide.

Total New Employment Growth:
20,000 new jobs following park development, a 45% increase in a previously predominantly residential neighborhood.

Average Regional Wage:
\$57,000 (Brooklyn-wide)

Average Wage of New Park District Jobs: \$62,000



Source: EMSI

WORKER ATTRACTION | ROSE KENNEDY GREENWAY

Built over a buried freeway that previously divided downtown Boston from its waterfront, the 1.1 mile **Rose Kennedy Greenway** provides an important connective link and recreational amenity that appeals to workers, residents, and visitors.



Rose Kennedy Greenway, Boston

Source: EMSI

Park Construction: Commenced 2008; park opened 2008.

Signature Elements: Neighborhood jewel and pocket parks, pedestrian and bicycle connectivity, and signature programming that appeals to local workers, citywide residents, and visitors.

Resulting Investment:

- Wayfair, an online retailer, currently employs 3,500 workers downtown and is seeking space to hire as many as 10,000 new workers.
- LogMeIn, a remote access tool developer, is expanding its headquarters to double employment to 450 workers.
- General Electric relocated its corporate headquarters from suburban Connecticut to a new \$200M development in Seaport District, accessible by pedestrian bridge to the Rose Kennedy Greenway, adding 800 jobs at completion.

WORKER ATTRACTION | ROSE KENNEDY GREENWAY

The Rose Kennedy Greenway has strengthened an established downtown business district, attracting significant information sector growth that was once concentrated in Cambridge. While other innovation employment is growing at parity with the region, downtown has exceeded regional standard wages.

Total New Employment Growth:

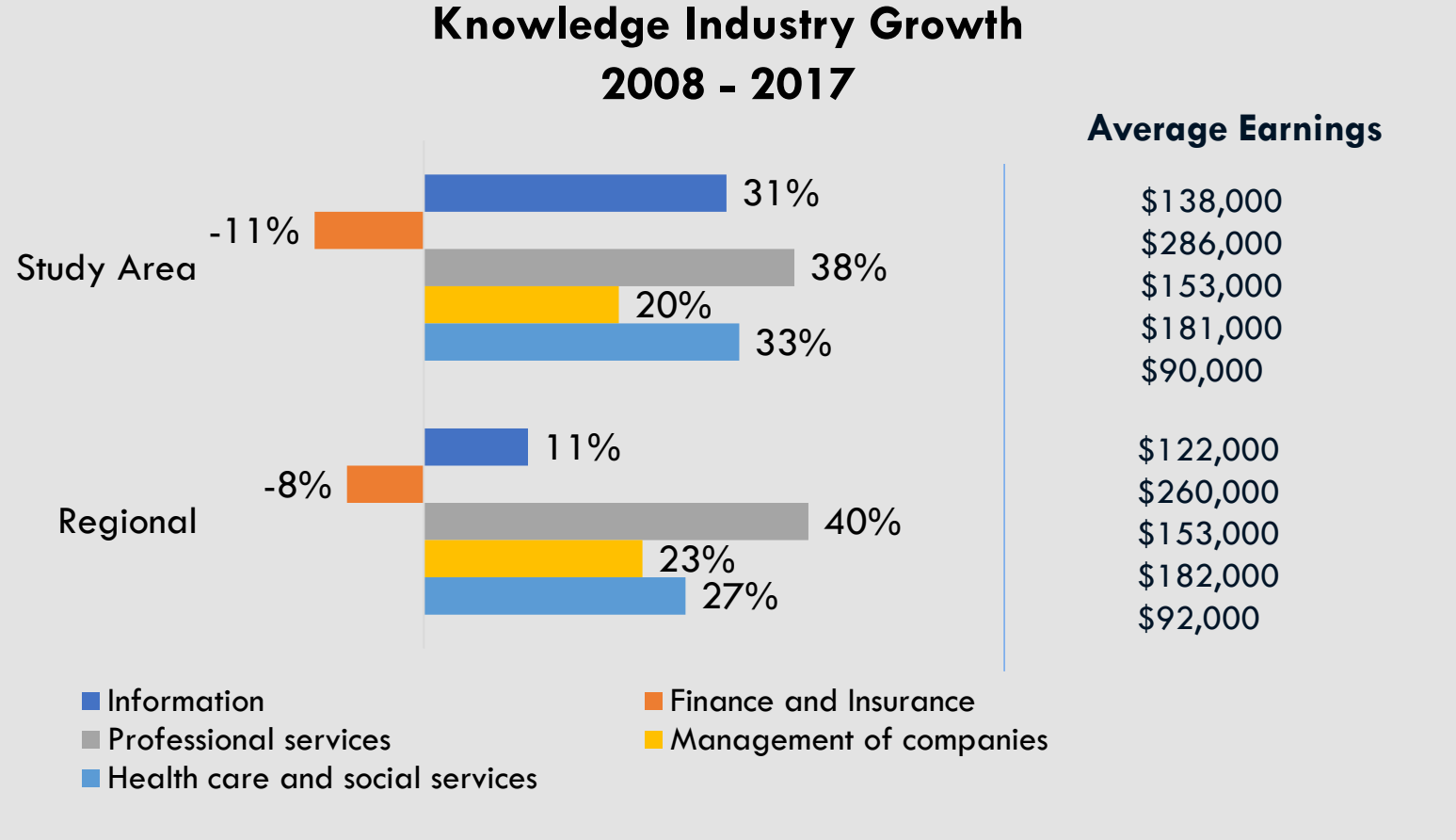
13,000 new jobs following park development, an 11% increase in a dense downtown commercial district.

Average Regional Wage:

\$108,000

Average Wage of New Park

District Jobs: \$152,000



Source: EMSI

WORKER ATTRACTION | KLYDE WARREN PARK

Built over a freeway with a deck cap, **Klyde Warren Park** stitches together Downtown and Midtown Dallas, attracting new investment and development and strengthening established commercial districts.



Klyde Warren Park, Dallas

Source: EMSI

Park Construction: Commenced 2008; park opened 2012.

Signature Elements: Connects Downtown Dallas over a major physical barrier and provides a program that strengthens Downtown's cultural district and surrounding commercial districts.

Resulting Investment:

- Goldman Sachs relocated its regional headquarters from nearby Irving, bringing over 1,000 jobs to Downtown.
- Global engineering firm Jacobs has also relocated its corporate headquarters from Los Angeles, planning to add 100 new jobs.
- Existing companies such as health-tech company Healthmark have also continued to grow their headquarters.
- Confirming Downtown's new status as a desirable live-work destination, a planned 55-story residential tower at nearby Fountain Place will be the city's tallest building.

WORKER ATTRACTION | KLYDE WARREN PARK

The new commercial district around Klyde Warren Park has achieved overall employment growth and average wages that outpace regional growth and wages. Innovation economy growth has reached parity with regional growth, with higher wages than countywide.

Total New Employment Growth:

13,000 new jobs following park development, a 21% growth rate versus 18% regionally.

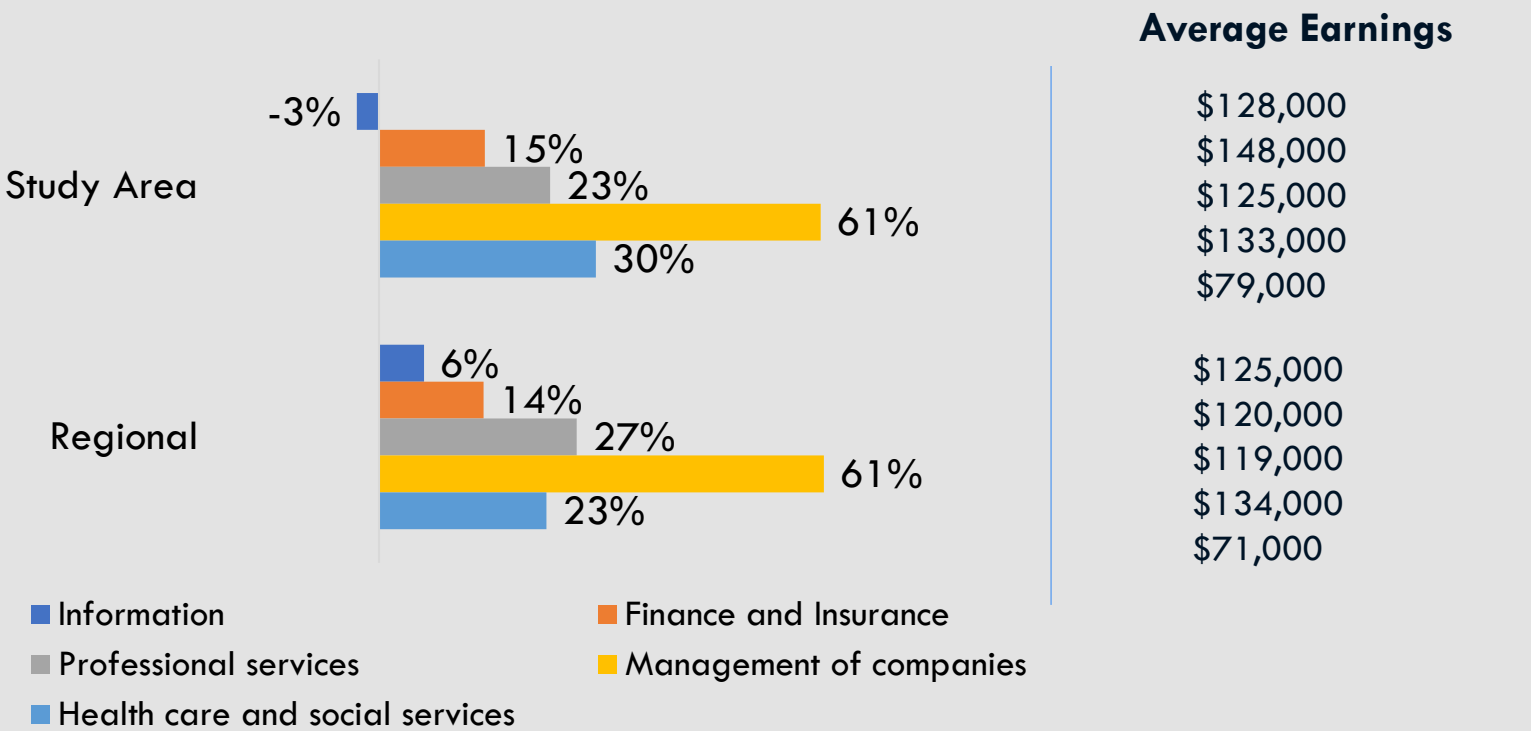
Average Regional Wage:

\$78,000

Average Wage of New Park

District Jobs: \$108,000

Knowledge Industry Growth 2008 - 2017



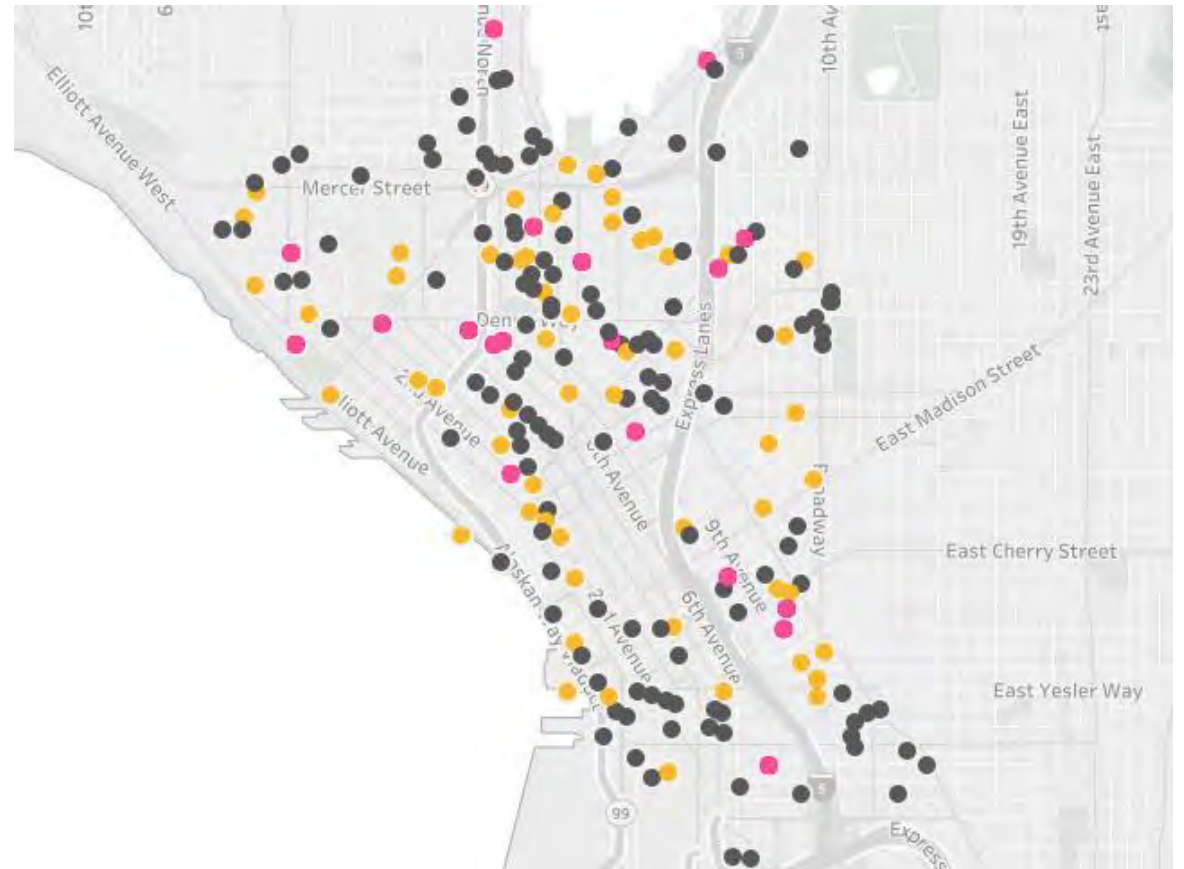
Source: EMSI

WORKER ATTRACTION | SEATTLE

As illustrated by other major open space investments, the Waterfront Seattle project presents an opportunity to build on existing local strengths. Upon completion, the project will likely catalyze further investment, including in both commercial and residential product.

Pipeline Downtown Development

- Currently under construction
- Land use issued
- Predevelopment



EXECUTIVE SUMMARY

ECONOMIC & FISCAL IMPACTS

EQUITY

CITY BUILDING & TALENT RETENTION

WORKER ATTRACTION

WORKER RETENTION

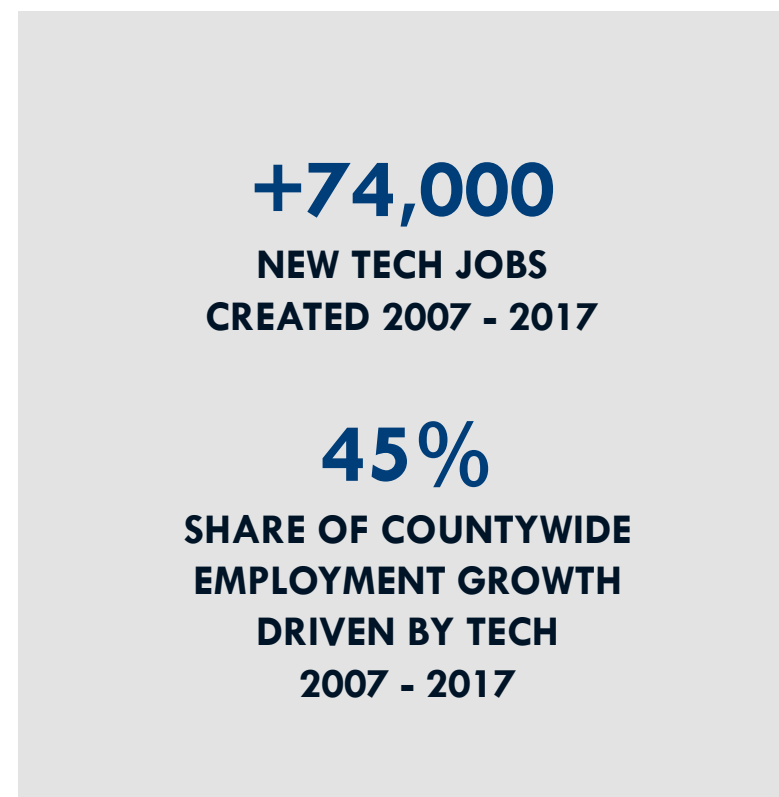
TECHNICAL APPENDICES

CITY BUILDING & TALENT | RETENTION OF TECH TALENT

Seattle is home to a significant number of tech workers, including people employed in tech industries as well as in tech occupations that support other industries. Firms hiring these employees are attracted to Seattle because of its strong pool of tech talent, which has grown significantly over the last decade.



Source: EMSI; A full definition of the tech industry can be found in the technical appendix.



CITY BUILDING & TALENT | RETENTION OF TECH TALENT

Tech jobs pay average wages higher than the regional average. In addition to the direct jobs created by the tech industry, tech employment generates significant indirect and induced employment.

2.1

**NEW JOBS GENERATED
BY ONE TECH JOB**

\$95,000

**AVERAGE WAGE FOR EACH JOB
GENERATED BY THE TECH ECONOMY,
VERSUS \$89,000 REGIONALLY¹**

\$753K

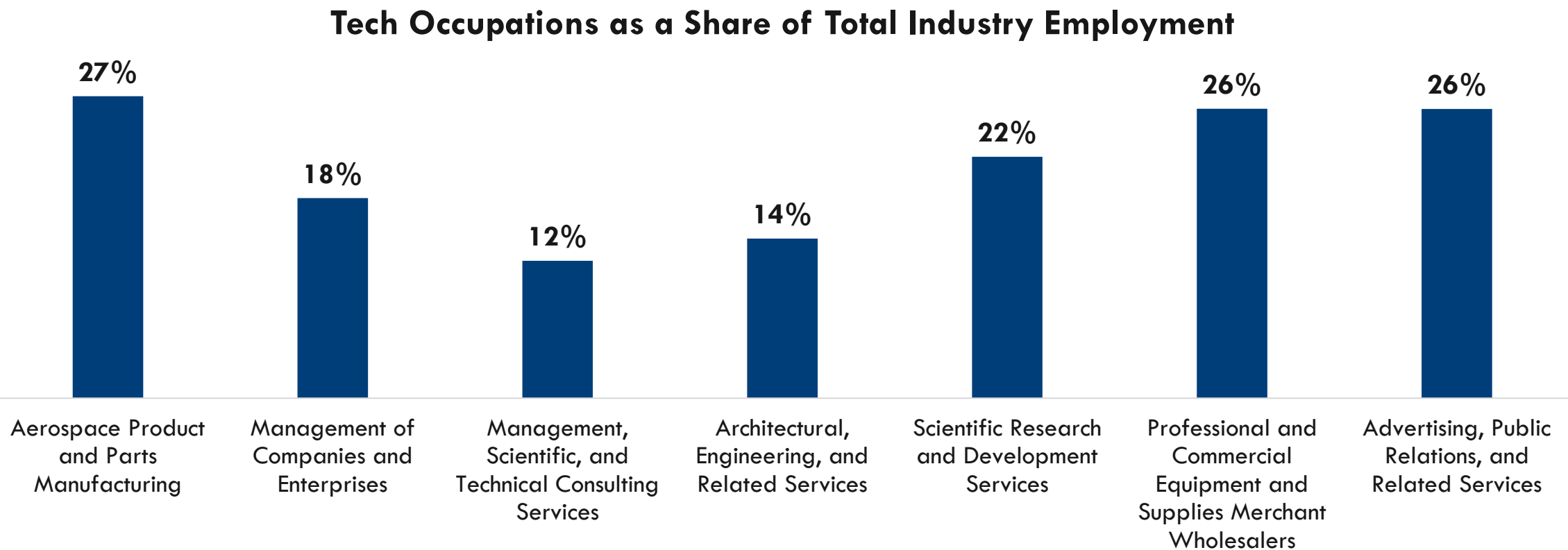
**ECONOMIC ACTIVITY
GENERATED BY EACH
TECH JOB²**

1. Includes indirect and induced wages and jobs. Average wage per direct job is \$144,000.

2. Measured as total output per direct job.

CITY BUILDING & TALENT | RETENTION OF TECH TALENT

Tech occupations are also critical to the long-term health of other industries that comprise large shares of Seattle’s economy. As all industries increasingly become “tech” industries, retaining tech jobs will become critical to continued innovation and strength in adjacent industries.



Source: HR&A Analysis of EMSI data, 2017; a full definition of the tech industry, including tech occupations, can be found in the technical appendix.

CITY BUILDING & TALENT | TECH TALENT LEAKAGE

Tech workers are a highly mobile population that actively seek workplaces surrounded by a vibrant public realm. Although Seattle's tech workers appear more attached to the city than tech workers in other tech regions, as many as a third may be seeking out-of-region employment, following new opportunities and enhanced quality of life as local costs of living rise.



30%
TECH TALENT SEEKING
OUT-OF-REGION JOBS

Literature review suggests that approximately 30% of tech workers may be seeking out of region employment opportunities, while approximately 50% of new Seattle residents—largely tech workers—do not see themselves living in the city within 5 years.^{1,2}

1. HR&A reviewed a study (*Is Silicon Valley At Risk of a Brain Drain?*, Indeed, 2017) that analyzed job seeker data in major cities across the United States. Seattle tech workers' rate was 29%, lower than the San Francisco/Bay Area region.
2. Merge Ahead: Seattle's new and long-term residents adapt to change, Quin Thomas, DHM Research, and Continuum College, 2017

CITY BUILDING & TALENT | RETENTION OF TECH TALENT ANALYSIS

Open space investments have been observed to inform tech worker location decisions, along with other key urban investments that improve quality of life. The Waterfront Seattle project could play an important role in informing tech talent location and retention decisions, along with other major investments.



To understand the potential extent to which the Waterfront Seattle project and other major investments could stem tech talent loss, HR&A conducted a literature review to determine a conservative range of retention rates that could be attributable to park and other urban realm development.¹

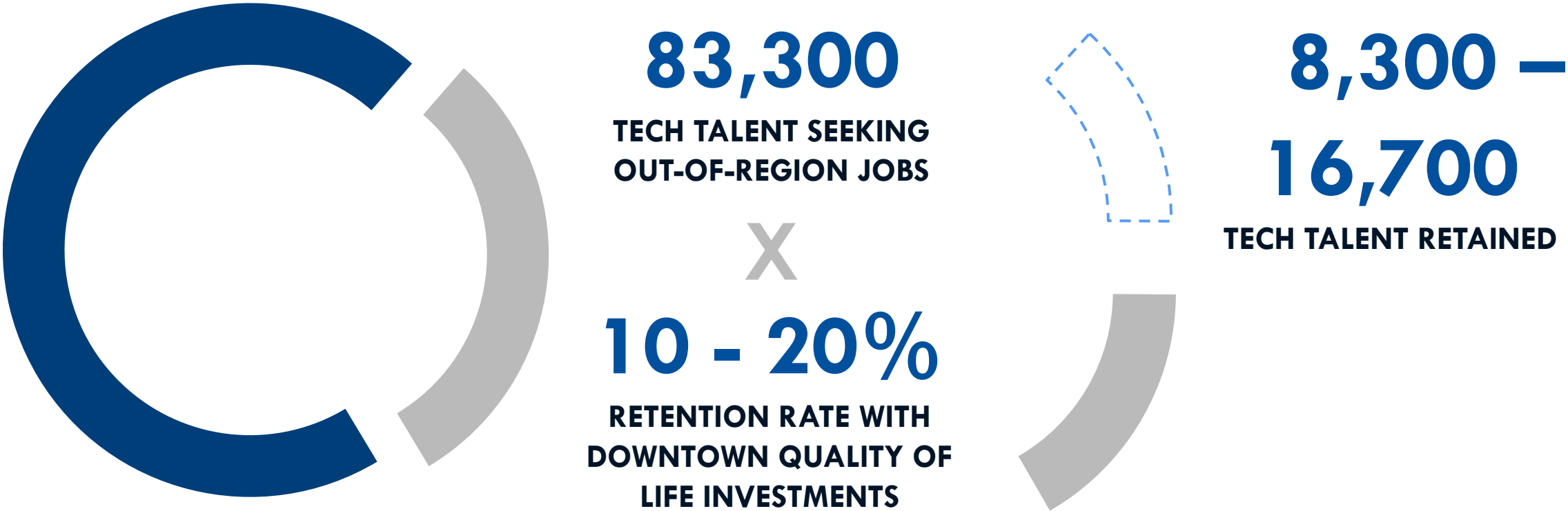


The Waterfront Seattle project will be complementary to a series of major investments being made in the area around the waterfront, creating an environment attractive to valuable tech talent.

1. See technical appendix for discussion of HR&A literature review.

CITY BUILDING & TALENT | RETENTION OF TECH TALENT ANALYSIS

To illustrate the potential impact of an investment like Waterfront Seattle, in addition to the other key investments made in Downtown, HR&A analyzed the potential effects of the park stemming population loss of tech workers.



CITY BUILDING & TALENT | RETENTION OF TECH TALENT ANALYSIS

If these jobs mirror the wages and spending associated with the average “tech economy” job, the retention of these 8,300 – 16,700 employees represents significant economic impacts. These tech workers represent high wage jobs that generate additional benefits throughout the economy, including indirect and induced jobs, wages, and spending.

16,100 – 32,100

JOBS (FTE)

\$1.5B - \$3.1B

WAGES

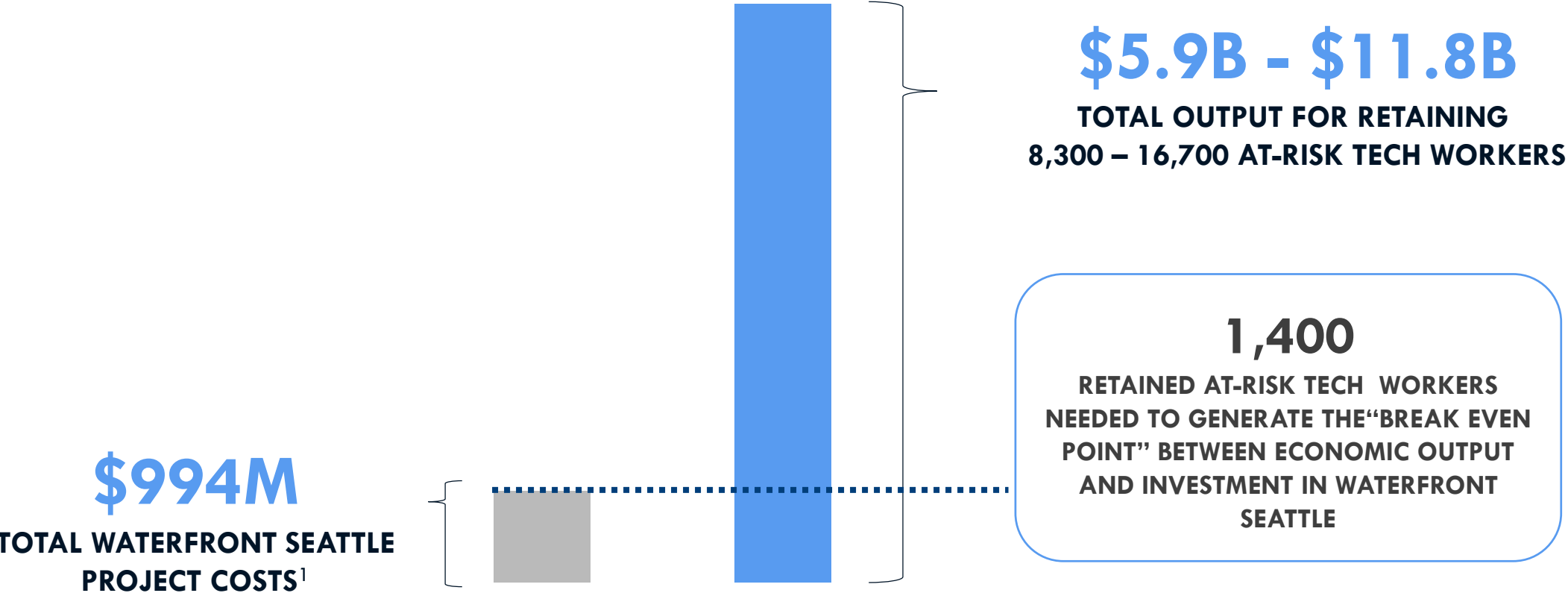
\$5.9B - \$11.8B

OUTPUT



CITY BUILDING & TALENT | RETENTION OF TECH TALENT

The retention of 1,400 tech workers at risk of leaving the region would generate economic output equivalent with total costs associated with capital and O&M costs for waterfront Seattle. The total output associated with potential retention of tech workers far exceeds costs, by a measure of at least **6:1**.



1. Total project costs include \$781M in capital costs and approximately \$213M in O&M costs over 30 years (net present value).

TECHNICAL APPENDIX: ECONOMIC & FISCAL ANALYSIS

TECHNICAL APPENDIX: COMMUNITY BENEFITS

TECHNICAL APPENDIX: CITY BUILDING & TALENT

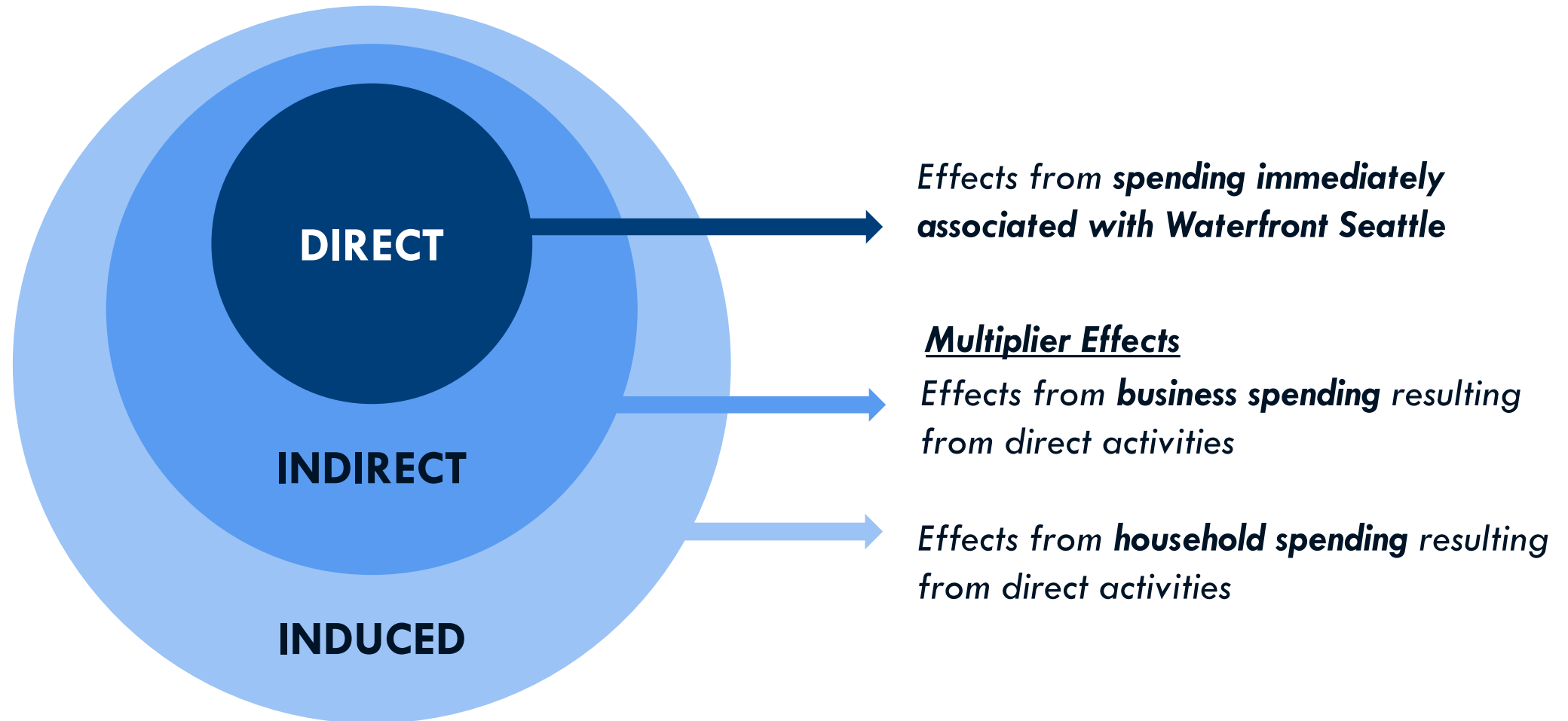
APPENDIX | WATERFRONT PROJECT

HR&A’s analysis considers the full waterfront project, as currently planned with the exception of those program elements under the jurisdiction of DOT and in the pre-design phase (Partner Projects 1-3 and 5).



ECONOMIC & FISCAL IMPACTS

HR&A's economic impact analysis takes into account Waterfront Seattle's direct spending and employment as well as the indirect and induced impacts of business and household spending.



ECONOMIC & FISCAL IMPACTS | TAX RATE ASSUMPTIONS

HR&A considered a range of the most commonly assessed local and State taxes to evaluate one-time and ongoing fiscal impacts associated with construction and operation.

TAX	APPLIED TO	RATE
Seattle Sales & Use Tax	All materials and labor	3.6%
Seattle Business License Tax (Retail Sales & Retail Services)	Gross receipts	.22%
State Sales & Use Tax	All materials and labor	6.5%
State Business & Occupation Tax	Gross receipts	
Retail sale & retail services		.47%
Public Road Construction		.48%
Hotel Tax, including state & local sales and use		
60+ rooms, includes Convention and Trade Center tax		15.6%
Fewer than 60 rooms		8.6%

ECONOMIC & FISCAL IMPACTS | CONSTRUCTION

One-Time Construction Inputs ¹	Spending
Construction – Built Structures	\$269M
Construction - All other elements	\$558M
Total Costs	\$827M

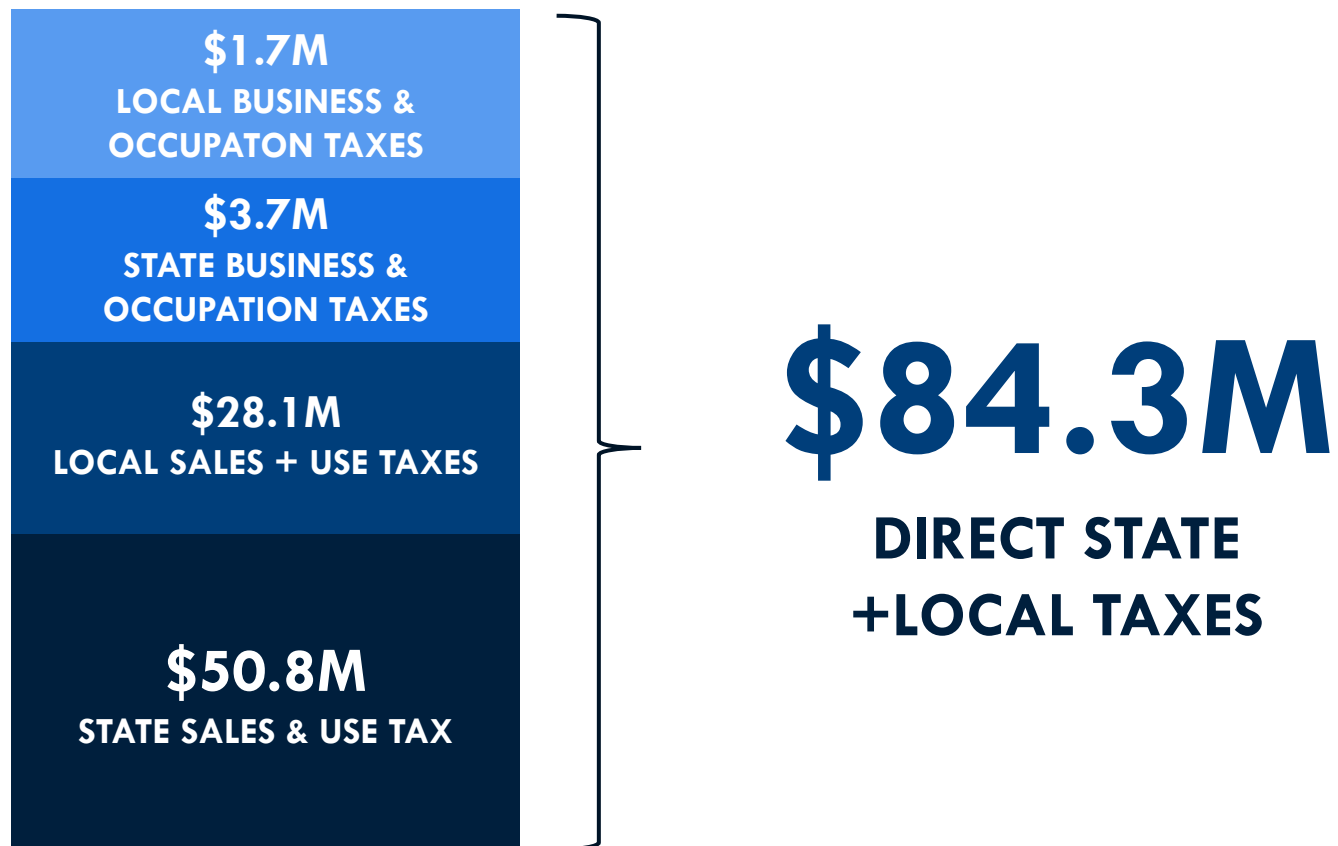
1. Construction costs for the majority of park elements provided by the City of Seattle Office of the Waterfront. Cost estimates for the Ocean Pavilion and Market Front element included provided by SOJ.

ECONOMIC & FISCAL IMPACTS | CONSTRUCTION

One-Time Construction Impacts	Economic Output	Job-Years (FTE ⁴)	Wages
Direct Impacts ¹	\$827M	4,451	\$291M
Indirect Impacts ²	\$138M	619	\$36M
Induced Impacts ³	\$197M	1,170	\$70M
Total Impacts	\$1.1B	6,240	\$398M

1. Waterfront Seattle direct output, employment, and total wages
2. Jobs and output generated by cross-sector purchases associated with the Waterfront Seattle program
3. Jobs and output generated as a result of employee household spending.
4. Full time equivalent: (FTE) Job-years adjust for part-time jobs within the industry.

ECONOMIC & FISCAL IMPACTS | CONSTRUCTION



ECONOMIC & FISCAL IMPACTS | ONGOING OPERATIONS INPUTS

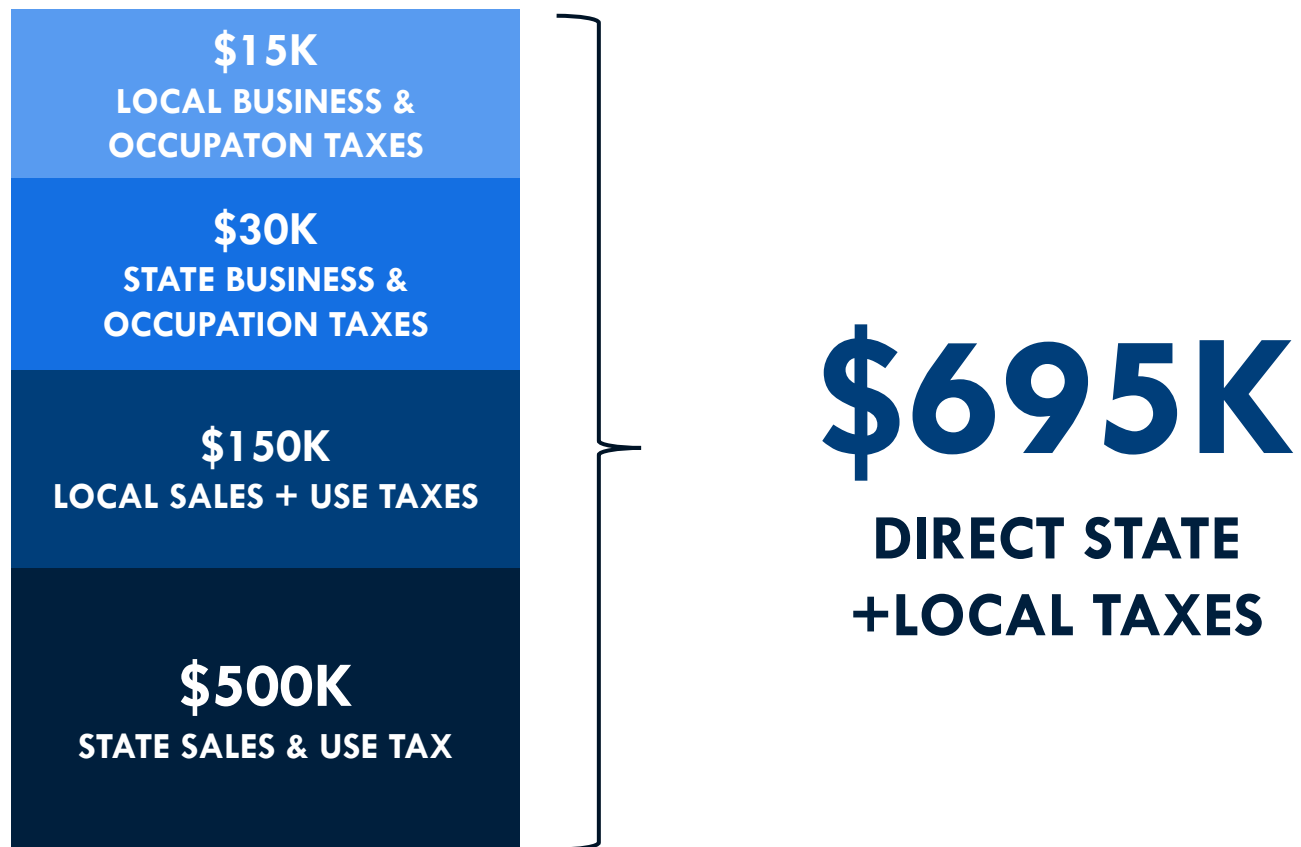
Ongoing O&M Inputs	\$2018
Operations (Cost)	\$12.4M
On-Site Commercial Activity (Annual Sales)	\$2.4M
Visitor Spending	\$191.3M
Total	\$206.1M

ECONOMIC & FISCAL IMPACTS | ONGOING OPERATIONS IMPACTS

Ongoing Impacts - Operations	Economic Output	Job-Years (FTE ⁴)	Wages
Direct Impacts ¹	\$12.4M	113	\$5.8M
Indirect Impacts ²	\$2.5M	12	\$.6M
Induced Impacts ³	\$3.5M	20	\$.8M
Total Impacts	\$18.4M	145	\$7.2M

1. Waterfront Seattle direct output, employment, and total wages
2. Jobs and output generated by cross-sector purchases associated with the Waterfront Seattle program
3. Jobs and output generated as a result of employee household spending
4. Full time equivalent: (FTE) Job-years adjust for part-time jobs within the industry. Rounded to 145 in the summary slides

ECONOMIC & FISCAL IMPACTS | ONGOING OPERATIONS IMPACTS



ECONOMIC & FISCAL IMPACTS | **ONSITE PARK AMENITY INPUTS**

Category	Annual Sales
Food Programming	\$840K
Limited F&B	\$1.2M
Events	\$350K
Total	\$2.4M

ECONOMIC & FISCAL IMPACTS | ONSITE PARK AMENITY IMPACTS

Ongoing Impacts- Commercial Activity	Economic Output	Job-Years (FTE ⁴)	Wages
Direct Impacts ¹	\$2M	25	\$1M
Indirect Impacts ²	\$.5M	2	\$100K
Induced Impacts ³	\$.5M	3	\$200K
Total Impacts	\$3M	29	\$1.3M

1. Waterfront Seattle direct output, employment, and total wages
2. Jobs and output generated by cross-sector purchases associated with the Waterfront Seattle program
3. Jobs and output generated as a result of employee household spending.
4. Full time equivalent: (FTE) Job-years adjust for part-time jobs within the industry. Rounded to 30 in earlier slides.

ECONOMIC & FISCAL IMPACTS | **ONSITE PARK AMENITY IMPACTS**



ECONOMIC & FISCAL IMPACTS | NET NEW VISITATION METHODOLOGY

To identify a potential capture rate for visitation to the Waterfront, HR&A evaluated visitation and capture rates of comparable open spaces.

Park	Location	# of Annual Visitors	Total Market (Metro Pop. + Annual Tourists)	Capture Rate
Belle Isle Park	Detroit, MI	4M	20M	20%
Brooklyn Bridge Park	Brooklyn, NY	7M	81M	9%
Golden Gate Park	San Francisco, CA	13M	29M	44%
High Line	New York, NY	8M	79M	10%
Hudson River Park	New York, NY	17M	81M	21%
Millennium Park	Chicago, IL	20M	64M	31%
Rose Kennedy Greenway	Boston, MA	1M	30M	5%
Avg. Capture Rate				20%

Waterfront Seattle Estimated Visitation:

40M

TOTAL MARKET

x

20%

CAPTURE RATE

=

8M

PROJECTED ANNUAL VISITORS

Note: Comparable parks were chosen based on the following criteria: 1) waterfront location and/or linear configuration; 2) downtown context and/or signature design; 3) multiple season climate. With the exception of the High Line, visitation and total market figures represent 2016 data. The High Line capture rate was estimated using 2015 data.

ECONOMIC & FISCAL IMPACTS | NET NEW VISITATION METHODOLOGY

HR&A then estimated the share of regional vs. out-of-town visitors, and how much time these visitors might spend in the park.

Visitor Type	Share of 8M Projected Visitors	Net New Visitor Days Per Person	Net New Visitor Days
Regional Residents			
Downtown (park adjacent)	<1%	0	0
City Residents (non-adjacent)	8%	.11	69K
Metro Residents (non-city)	37%	.11	327K
Subtotal	45%		396K
Tourists			
Day Visitors	28%	.25	566K
Overnight	27%	.25	539K
Subtotal	55%		1.1M
Total			~1.5M

Note: Distribution of visitors, % regional v. tourists, is based on comps from the High Line and Hudson River Park. Distribution of regional residents is based on population distribution. Distribution of day v. overnight tourists is based on 2016 Longwood Tourism Study for Seattle. Net new visitor days per person is based on precedent research on time spent in open spaces by residents and out-of-town visitors, based on an 8-hour day.

ECONOMIC & FISCAL IMPACTS | VISITOR SPENDING ASSUMPTIONS

HR&A applied average per person visitor spending assumptions to the anticipated breakdown of daytime and overnight tourists, and to a portion of regional visitors, assuming that some regional visitors do not generate new spending on-site.

Net New Regional Resident Visitor Days	396K	
Capture Rate of Regional Resident Visitors	5%	
Net New Out-of-Town Visitor Days	1.1M	
% Daytime Seattle Visitors	51%	
% Overnight Seattle Visitors	49%	
Avg. per person spending ¹	Daytime Trips	Overnight Trips
Lodging	N/A	\$119
Restaurant, Food & Beverage	\$27	\$63
Transportation	\$13	\$29
Recreation	\$18	\$30
Retail	\$20	\$33

1. As reported in the 2016 Longwood Tourism Study for Seattle, provided by the Downtown Seattle Association

ECONOMIC & FISCAL INPUTS | VISITOR SPENDING ANALYSIS

Visitors are anticipated to generate approximately \$191.3M in spending off-site.

Spending by Sector	Total Visitor Spending ¹	Less: On-Site Sales ²	Net Visitor Spending
Lodging	\$64.3M	N/A	\$64.3M
Restaurant, Food & Beverage	\$49.8M	-\$2.0M	\$47.8M
Transportation	\$23.4M	N/A	\$23.4M
Recreation	\$27.2M	-\$0.4M	\$26.8M
Retail	\$29.0M	N/A	\$29.0M
Total Impacts	\$193.7M	-\$2.4M	\$191.3M

1. Visitor spending based on average per person spending reported in the 2016 Longwood Tourism Study for Seattle, provided by the Downtown Seattle Association

2. HR&A removed on-site sales from anticipated visitor spending to ensure that spending impacts are not double-counted.

Waterfront Seattle Benefits Study | 86

ECONOMIC & FISCAL IMPACTS | NET NEW VISITATION IMPACTS

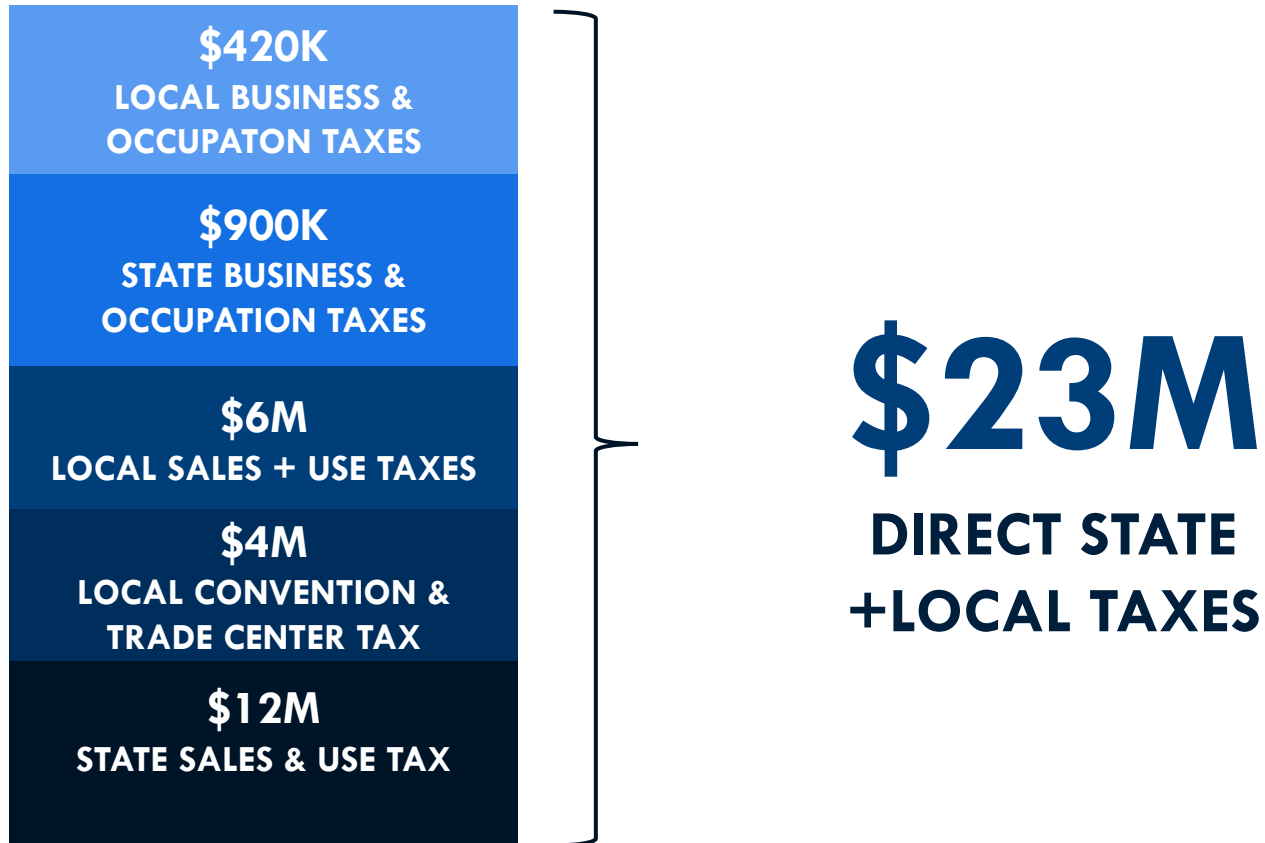
Visitor spending creates significant new economic impacts, and supports job activity in and around the project.

Ongoing Impacts- Visitor Spending	Economic Output	Job-Years (FTE ⁴)	Wages
Direct Impacts ¹	\$176M	1,780	\$67M
Indirect Impacts ²	\$44M	190	\$11M
Induced Impacts ³	\$46M	240	\$16M
Total Impacts	\$266M	2,210	\$94M

1. Waterfront Seattle direct output, employment, and total wages
2. Jobs and output generated by cross-sector purchases associated with the Waterfront Seattle program
3. Jobs and output generated as a result of employee household spending.
4. Full time equivalent: (FTE) Job-years adjust for part-time jobs within the industry.

ECONOMIC & FISCAL IMPACTS | NET NEW VISITATION IMPACTS

Visitor spending activity is also anticipated to generate tax revenue for the City and State through hotel stays, food and beverage purchases, and other activities.



TECHNICAL APPENDIX: ECONOMIC & FISCAL ANALYSIS

TECHNICAL APPENDIX: COMMUNITY BENEFITS

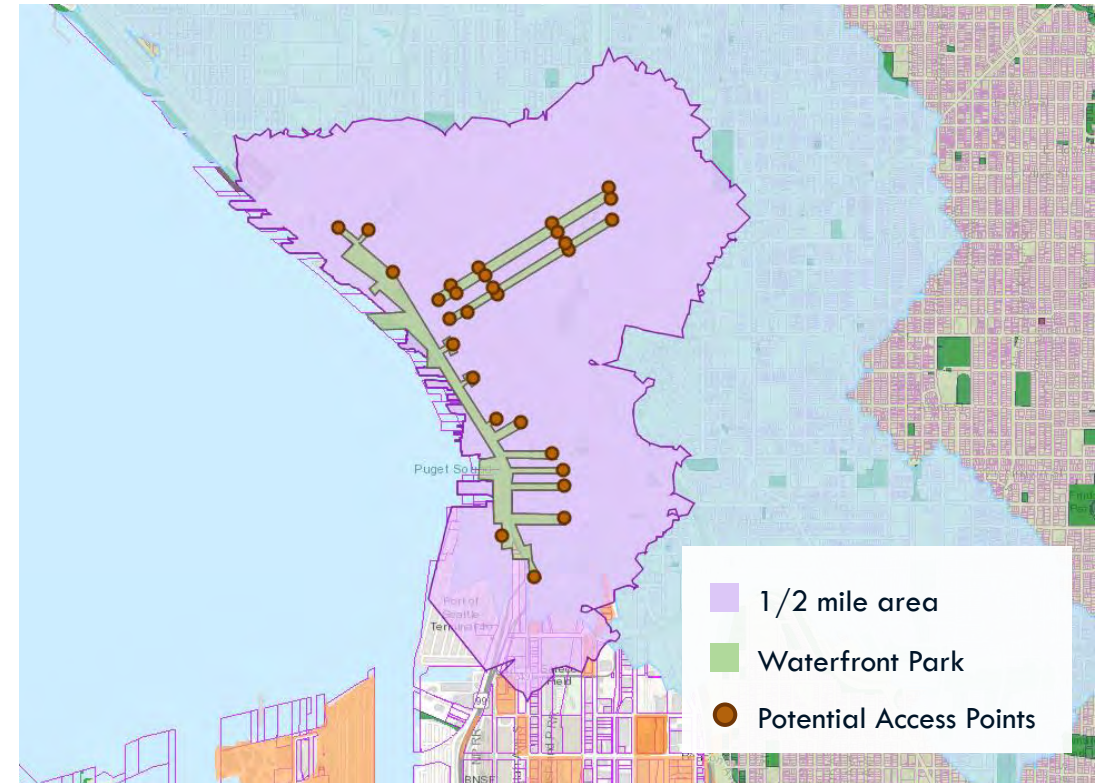
TECHNICAL APPENDIX: CITY BUILDING & TALENT

COMMUNITY BENEFITS | STUDY AREA

The study area for analysis was defined as a ½ mile radii of Park Access Points. In park planning, a ½ mile is a frequently used measure as it represents a ten-minute walk time, making the open space easily accessible by all potential visitors located within the are. This area includes over 2,125,000 square feet of open space program, spanning a range of typologies from natural space to active onsite commercial uses.

Project Areas

- Sidewalk - West Side
- Sidewalk - East Side, South Of Pine St.
- Sidewalk - North Of Pine, South Of Pine St.
- Promenade and LPS
- Railroad Way
- Union Street (btw. Western & Alaskan Way)
- Overlook Walk
- Market Front
- Pier 63 Only
- Pier 62 Only
- Waterfront Park
- Cycle Track
- Washington Street Boat Landing
- Alaskan Way
- Elliott Way
- Columbia Street
- Seneca Street
- Lenora Ped Bridge
- King Street
- Main Street
- Washington Street
- Yesler Way
- Marion Street Ped Bridge
- Pike Pine
- Bell Street



EQUITY MEASUREMENTS | ACCESS & INCLUSIVITY

HR&A considered the range of metrics that the Friends can use to gauge advancement of its equity goals, the most efficient way of tracking this information, the existence of baseline data, and whether data collection could potentially support future development of value capture strategies.

CATEGORY	METRIC	TOOL	BASELINE?	POTENTIAL VALUE CAPTURE OPPORTUNITY?
Community Enrichment				
	User perception of engagement, ownership, and/or park welcomeness	Annual survey		
	Satisfaction with the park, by race and socioeconomic status	Annual survey		
	Hours of volunteer time donated to Friends	Tracking		Lowered operational costs
	Percentage of people participating in stewardship and park advocacy	Tracking		
	Physical health values (i.e. obesity and asthma rates)	Tracking and survey	X	Cost savings on public health
	Pedestrian and bike counts	Tracking		
Recreation				
	Park visitor composition (age, gender, race, income bracket, immigrant status)	Annual survey		
	Demographics of program and event attendees	Event surveys		
	Number of waterfront visitors	Sensors	X	
	Time spent at waterfront	Sensors	X	
	Level of program participation	Event sign-in		
	Event attendance	Event sign-in		
Culture & Education				
	Inventory of cultural and historic assets	Tracking	X	
	Visitation to cultural and historic assets and programs	Event surveys	X	Collaborative funding with relevant organizations
	Awareness of cultural and historic assets	Annual survey	X	

EQUITY MEASUREMENTS | ECONOMIC EMPOWERMENT & OUTREACH

CATEGORY	METRIC	TOOL	BASELINE?	POTENTIAL VALUE CAPTURE OPPORTUNITY?
Economic Empowerment				
	Number of jobs created in micro-business support program and parks operations	Tracking		
	Demographics of employees in micro-business support program and parks staff	Tracking		
	Number/share of jobs created for minority or low-income individuals	Job entrance survey		
	Average salary in micro-business support program and parks operations	Tracking		
	Increase in salary compared to prior employment	Job entrance survey		
	Number of workforce training opportunities in local area	Tracking	X	
	Business success rate of micro-business support program graduates	Alumni program		
	Number of management positions created	Tracking		Economic development funding
	Demographic composition of managers (race, ethnicity, socioeconomic class)	Job entrance survey		
	Local unemployment rates	Public tracking	X	
	Number of small businesses graduating the micro-business support program	Tracking	X	Economic development funding
Outreach and Engagement				
	Number of outreach programs for homeless and addicted populations	Tracking	X	Collaborative funding agreements with relevant organizations
	Number of people reached by programs	Tracking	X	Cost savings on City health and rehabilitation expenditures
	Participation in offered programs by target demographic	Program surveys	X	
	Percentage who feel that outreach has been impactful	Annual surveys		

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TECHNICAL APPENDIX: CITY BUILDING & TALENT RETENTION

QUALITY OF LIFE | WORKER ATTRACTION: KNOWLEDGE ECONOMY INDUSTRIES

HR&A defines knowledge economy industries as those comprising knowledge-intensive activities that contribute to an accelerated pace of technical and scientific advance, with a greater reliance on skills than on physical inputs or natural resources. Jobs within these industries tend to pay higher average wages than traditional manufacturing and services industries. The strength of specific knowledge economy industries varies regionally dependent on regional strengths including access to talent and educational infrastructure.

NAICS Code (2 – digit)	Industry
54	Professional services
55	Management of companies
51	Information
52	Finance and insurance
62	Health care and social services

QUALITY OF LIFE | WORKER ATTRACTION: METHODOLOGY

HR&A identified recent, comparable open space investments in peer cities within the last 15 years. Innovation economy growth was evaluated within open space “benefit areas,” defined as the immediate districts surrounding the open spaces. Overall employment growth and innovation economy growth within these areas was evaluated against citywide growth.

Peer Open Spaces & Benefits Areas Analyzed

Peer City Open Space	Open Space Benefit Areas (zip code statistical area)	Impact Period
Klyde Warren Park, Dallas	75201, 75202	2008 (construction commencement) - 2017
The High Line, Manhattan	10014, 10011 ¹	2006 (construction commencement) - 2016
Brooklyn Bridge Park, Brooklyn	11201	2007 (construction commencement) – 2017
Millennium Park, Chicago	60601, 60602, 60603	2001 (construction commencement) – 2011
Yards Park, DC	20024, 20319, 20374, 20003	2007 (construction commencement) - 2017
Rose Kennedy Greenway, Boston	02109, 02110, 02111, 02113	2008 (construction commencement) - 2017
Downtown Seattle	98109, 98102, 98121, 98101, 98104, 98122, 98134, 98144	2007 - 2017

1. 10001 was not considered because Midtown Manhattan was a long-established office market, whereas the High Line helped to establish Chelsea’s office market.

Waterfront Seattle Benefits Study | 95

WORKER RETENTION | WORKER RETENTION: LITERATURE REVIEW

HR&A reviewed past assessments of the importance of open space in worker attraction to understand the importance of public realm investments in attracting and retaining workers. Tech and knowledge economy industries are considered to be more “footloose” than traditional companies as their financial performance is relatively independent of location decisions, making local amenities, including public space, particularly important to these employees and employers.

Worker Retention Literature Review Summary

Assessment	Evaluation	Increment/Range
Insight Endeavors. <i>What Do the Best Entrepreneurs Want in a City?</i> , 2014.	Surveyed founders of 150 companies from Inc.’s list of 500 fastest growing companies about location decisions.	1 in 5 founders cited quality of life/cultural attractions as the most important factor.
Hogana, Michael J.; Leyden, Kevin M; Conway, Ronan; Goldberg, Abraha; Walsh, Deirdre; McKenna-Plumley, Phoebe: <i>Happiness and health across the lifespan in five major cities: The impact of place and government performance</i> , 2015.	Surveyed 5,000 adults aged 25 – 85 years old living in 5 global cities about their happiness levels along <i>place</i> and <i>performance</i> dimensions.	Place-based investments are more important to young workers than to older workers, by as much as 50%.
Kelly, Janet; Ruther, Matt; Ehresman, Sarah; Nickerson, Bridget. <i>Placemaking as an Economic Development Strategy for Small and Midsized Cities</i> , 2016.	Examines the effect of quality of place in 81 small metros (250,000 to 500,000 people) and 83 mid-sized metros (500,000 to 2.5 million people) on the overall change in total population aged 25 and over, the share of adults with a college degree, and the size of the college-educated population between the ages of 25 and 34.	For medium-sized metros, the quality-of-place variables explained between 38 percent and 58 percent of the variance in outcomes
Florida, Richard; Arora, Ashish; Gates, Gary; Kamlet, Mark. <i>Human Capital, Quality of Place, and Location</i> , 2000.	Reviewed 70 metro-areas for correlations between amenities, culture, housing, and high-skill workers.	Finds that the presence of amenities is correlated with high-skill workers and informs the distribution of talent independently of the initial stock of high-skill workers present in high-amenity locations.

WORKER RETENTION | METHODOLOGY

HR&A evaluated the scale of employment of highly-mobile tech workers whose location decisions could be influenced by the Waterfront Seattle project and other downtown improvements.

Unlike most industries that are neatly defined by the North American Industrial Classification System (NAICS), tech jobs are embedded in industries throughout the economy. A guiding principle of HR&A’s definition process is that the tech ecosystem should be defined based on both industry and occupational data. There are tech jobs present in industries that should not be wholly classified as “tech,” such as finance or healthcare. Counting these tech jobs requires a definition that captures

tech jobs using occupational data. Similarly, there are non-tech jobs at tech industry firms, such as a janitor who works at a software company. Although such jobs are not “tech” jobs themselves, they provide necessary support to tech employers, and thus are directly enabled by tech. Counting these jobs requires a definition that captures tech-enabled jobs using industry data.

Tech Industries	Tech Occupations
<p>Industries are based on the 2017 NAICS codes as defined by the U.S. Census Bureau. Two rules guided classification of industries as tech industries:</p> <p>Rule 1: Is this industry enabled by tech?</p> <p>Rule 2: Does this industry primarily produce tech?</p>	<p>Occupations are based on the Standard Occupational Classification (SOC) codes as defined by the Bureau of Labor Statistics. Three rules guided classification of occupations as tech occupations:</p> <p>Rule 1: Does this occupation directly produce tech?</p> <p>Rule 2: Does this occupation facilitate the use of tech by others?</p> <p>Rule 3: Would this occupation cease to exist without the presence of tech?</p>

WORKER RETENTION | METHODOLOGY

HR&A identified employment within primary tech related industries to size the employment of the greater Seattle tech ecosystem.

NAICS Code	Industry
5112	Software Publishers
3364	Aerospace Product and Parts Manufacturing
5415	Computer Systems Design and Related Services
4541	Electronic Shopping and Mail-Order Houses
5191	Other Information Services
5173	Wired and Wireless Telecommunications Carriers
5417	Scientific Research and Development Services
5182	Data Processing, Hosting, and Related Services
3345	Navigational, Measuring, Electromedical, and Control Instruments Manufacturing
3344	Semiconductor and Other Electronic Component Manufacturing
3341	Computer and Peripheral Equipment Manufacturing
33422	Radio and Television Broadcasting and Wireless Communications Equipment Manufacturing
5179	Other Telecommunications
5174	Satellite Telecommunications

WORKER RETENTION | METHODOLOGY

HR&A identified secondary tech occupational employment to size the employment of the greater Seattle tech ecosystem.

SOC Code	Occupation
11-3021	Computer and Information Systems Managers
15-1111	Computer and Information Research Scientists
15-1121	Computer Systems Analysts
15-1122	Information Security Analysts
15-1131	Computer Programmers
15-1132	Software Developers, Applications
15-1133	Software Developers, Systems Software
15-1134	Web Developers
15-1141	Database Administrators
15-1142	Network and Computer Systems Administrators
15-1143	Computer Network Architects
15-1151	Computer User Support Specialists
15-1152	Computer Network Support Specialists
15-1199	Computer Occupations, All Other
15-2031	Operations Research Analysts
17-2011	Aerospace Engineers
17-2031	Biomedical Engineers
17-2041	Chemical Engineers
17-2061	Computer Hardware Engineers
17-2071	Electrical Engineers
17-2072	Electronics Engineers, Except Computer
17-2112	Industrial Engineers
17-3012	Electrical and Electronics Drafters
17-3021	Aerospace Engineering and Operations Technicians
17-3023	Electrical and Electronics Engineering Technicians

SOC Code	Occupation
17-3024	Electro-Mechanical Technicians
17-3026	Industrial Engineering Technicians
27-1014	Multimedia Artists and Animators
27-4011	Audio and Video Equipment Technicians
27-4012	Broadcast Technicians
27-4014	Sound Engineering Technicians
27-4032	Film and Video Editors
29-2011	Medical and Clinical Laboratory Technologists
29-2031	Cardiovascular Technologists and Technicians
29-2032	Diagnostic Medical Sonographers
29-2033	Nuclear Medicine Technologists
29-2034	Radiologic Technologists
29-2035	Magnetic Resonance Imaging Technologists
29-2055	Surgical Technologists
41-3011	Advertising Sales Agents
49-2011	Computer, Automated Teller, and Office Machine Repairers
49-2022	Telecommunications Equipment Installers and Repairers, Except Line Installers
49-2091	Avionics Technicians
49-2093	Electrical and Electronics Installers and Repairers, Transportation Equipment
49-2094	Electrical and Electronics Repairers, Commercial and Industrial Equipment
49-2095	Electrical and Electronics Repairers, Powerhouse, Substation, and Relay
49-2096	Electronic Equipment Installers and Repairers, Motor Vehicles
49-2097	Electronic Home Entertainment Equipment Installers and Repairers

WORKER RETENTION | METHODOLOGY

Based on an estimate of tech workers who may be retained based on investments in Waterfront Seattle and other investments downtown, HR&A evaluated the full potential economic impact of retaining these jobs.

Ongoing Impacts	Economic Output	Jobs (FTEs)	Wages
Direct Impacts ¹	\$4.2B - \$8.4B	7,800 – 15,600	\$1.1B - \$2.3B
Indirect Impacts ²	\$900M - \$1.7B	3,600 – 7,200	\$200M – 400M
Induced Impacts ³	\$800M - \$1.7B	4,600 – 9,200	\$200M - \$400B
Total Impacts	\$5.9B - \$11.8B	16,000 – 32,000	\$1.5B - \$3.1B

1. The direct output, employment, and total wages associated with each retained tech worker.
2. Jobs and output generated by cross-sector purchases generated by each retained tech worker.
3. Jobs and output generated as a result of employee household spending.

An aerial photograph of the Seattle skyline and waterfront. The image shows a dense urban area with numerous skyscrapers and buildings. In the foreground, a proposed development is overlaid on the existing cityscape, featuring a curved promenade, green spaces, and a large Ferris wheel. The waterfront area is visible on the right, with several boats and a large ship docked. The overall scene is a mix of urban development and natural elements like trees and water.

BEYOND REAL ESTATE INCREMENT: THE VALUE OF THE CENTRAL SEATTLE WATERFRONT

A STUDY OF THE ECONOMIC, FISCAL, AND COMMUNITY BENEFITS OF SEATTLE'S NEW REGIONAL WATERFRONT

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Analyze. Advise. Act.

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