Appendix S **Displacement Study**

Inglewood Sports and Entertainment Venue Displacement Study

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I. STUDY PURPOSE, APPROACH, AND SUMMARY OF FINDINGS

STUDY PURPOSE

This study has been prepared as part of the environmental impact report (EIR) for the Inglewood Basketball Entertainment Center (IBEC or Proposed Project). The purpose of this study is to determine whether there is evidence to suggest that the Proposed Project may cause or contribute to gentrification of the area and, if so, whether such an effect may have the indirect impact of displacing a substantial number of residents, resulting in in the need for the construction of replacement housing. The IBEC is the proposed future home of the Los Angeles Clippers, and includes a multi-level arena with up to 915,000 square feet of space providing 18,000 fixed seats and 500 temporary floor seats for events including LA Clippers home games, smaller sporting events, concerts, and community events. The Proposed Project would also include a team practice and training facility, sports medicine clinic, and up to 71,000 square feet of office building space for LA Clippers' team offices. Additional uses include 48,000 square feet of commercial uses such as restaurants and team store, a large outdoor plaza, a parking garage, a 15,000 square-foot space for an as yet undetermined use or uses, a hotel with up to 150 rooms, and water well relocation. The IBEC EIR assumes the Proposed Project will be completed and operational in 2024.

Several comments on the Notice of Preparation for the EIR requested that the City consider the potential for the Proposed Project to indirectly cause displacement of housing and residents as a result of it causing the process of gentrification. The City requested this study to determine if there is evidence to suggest that gentrification and indirect housing displacement are foreseeable socioeconomic effects that would be caused by the Proposed Project.

Generally speaking, CEQA does not require analysis of socioeconomic issues such as gentrification, displacement, environmental justice, or effects on "community character." Most specifically, the CEQA Guidelines state that:

"[e]conomic or social effects of a project shall not be treated as significant effects on the environment. An EIR may trace a chain of cause and effect from a proposed decision on a project through anticipated economic or social changes resulting from the project to physical changes caused in turn by the economic or social changes. The intermediate economic or social changes need not be analyzed in any detail greater than necessary to trace the chain of cause and effect. The focus of the analysis shall be on the physical changes."²

CEQA defines the "[e]nvironment" as "physical conditions," and impacts analyzed under CEQA must be "related to a physical change."

¹ These Proposed Project components are discussed in the Inglewood Basketball and Entertainment Center Environmental Impact Report, prepared by Environmental Science Associates, in Section 2. Project Description.

² CEQA Guidelines, § 15131, subd. (a).

³ Pub Res Code § 21060.5 (emphasis added); Guidelines, §15360.

⁴ Guidelines, §15358(b).

Under the CEQA guidelines, however, a project's economic or social effects may be used to determine whether a *physical change* is *significant*.⁵

There are very few rulings on how social and economic effects are to be addressed under CEQA. The most oft-cited case focuses on urban decay in the context of two proposed shopping centers and, specifically, on whether these proposed projects' effects would lead to a downward spiral of store closures and long-term vacancies, thus causing or contributing to urban decay.⁶

Beyond the requirement to assess the potential to cause urban decay where evidence suggests this result could occur, courts have issued limited rulings on the issue of socioeconomic effects in the context of CEQA. One such case involves the effects of school overcrowding and property value effects.⁷

These cases suggest few instances where physical changes in the environment have been linked to social or economic effects. The court's finding that questions of community character are not a CEQA issue further supports this conclusion.⁸ Even the State Legislature has ruled that social or economic effects are not CEQA issues as evidenced by the frequent introduction of bills to amend CEQA to permit analysis of socioeconomic issues, and the continued failure of these bills being enacted into law.⁹

Thus, the consideration of socioeconomic effects in the context of CEQA is limited to where those effects result in significant physical environmental impacts. The purpose of this report, therefore, is to more specifically probe the local context of whether displacement effects leading to the construction of new

⁵ CEQA Guidelines §15064(e).

⁶ The primary case is *Bakersfield Citizens* for Local Control v City of Bakersfield (2004) 124 CA4th 1184, 1215, which requires EIRs to examine the potential for projects, primarily shopping center projects, to cause or contribute to urban decay if certain conditions are met, but does not establish that such decay will necessarily result from new development. Other related cases include *Anderson First Coalition v City* of *Anderson* (2005) 130 CA4th 1173, in which the court upheld an EIR for a Walmart supercenter against a challenge that the EIR did not adequately evaluate the project's potential to cause urban decay in the city's central business district; and *Gilroy Citizens* for Responsible Planning v City of Gilroy (2006) 140 CA4th 911, in which the court upheld the city's determination that it was unnecessary for an EIR for a shopping center project to examine urban decay effects because evidence in the record supported the city's conclusion that ongoing loss of business in the downtown commercial district would occur with or without development of the shopping center.

⁷ This case is *Gray v County of Madera* (2008) 167 CA4th 1099, 1121. The court upheld an EIR against a claim of economic impact because no evidence supported the assertion that potential reduction in property values of neighboring lands would have physical environmental consequences.

⁸ Representative cases include *Preserve Poway v. City of Poway* (2016) 245 Cal. App. 4th 560, 581, regarding a new housing development replacing an equestrian center, in which case the Court of Appeal re-affirmed that CEQA does not "include such psychological, social, or economic impacts on community character;" and Cathay Mortuary, Inc. v. San Francisco Planning Com. (1989) 207 Cal.App.3d 275, 280, in which case the Court of Appeal rejected the argument that relocating a traditional Chinese mortuary to make way for a new park would physically divide an existing community, stating that the argument was not "related to any environmental issue."

⁹ See, e.g., SB 731 of 2013 (would have added to CEQA a requirement to study "economic displacement"; died in the Assembly in 2014); SB 115 of 1999 (Ch. 690, Stats. 1999) (an earlier version of this bill would have directed OPR to recommend revisions to CEQA that would require analysis of environmental justice; the bill was specifically amended before passage to eliminate this requirement); SB 1113 of 1997 (bill to require environmental justice impacts under CEQA vetoed by Governor), AB 3024 of 1992 (similar bill vetoed), AB 937 of 1991 (similar bill vetoed).

housing arising from gentrification are likely outcomes pursuant to development of a new sports and entertainment venue in Inglewood.

The study findings are presented in this report. This report is subject to the appended Assumptions and General Limiting Conditions.

STUDY ORGANIZATION AND APPROACH

This report is organized into five chapters, as follows:

- I. Study Purpose, Approach, and Findings
- II. IBEC Site and City of Inglewood Profile
- III. Overview of Gentrification and Displacement
- IV. Case Study Analysis
- V. Conclusion

As noted above, consideration of gentrification is not a required component of an environmental impact report consistent with CEQA. Accordingly, there is no commonly accepted definition of gentrification in the context of CEQA. Therefore, a portion of this study identifies definitional components of gentrification as well as reviews of some of the literature that discuss gentrification with respect to its causes and linkages, how it is identified and measured, efforts to predict its occurrence, and if existing research identifies the gentrification effects of sports venue development.

SUMMARY OF FINDINGS AND CONCLUSION

The detailed study findings are presented in the following report sections. Summary findings for key topics are below, including a general conclusion for the overall research and analysis effort.

Inglewood Land Use Changes

There are many land-use changes underway in Inglewood, all initiated at different times. One of the most significant changes includes the Hollywood Park Specific Plan (HPSP), which encompasses an approximate 238-acre area that includes redevelopment of the former Hollywood Park racetrack/grandstand, with the plan and select entitlements approved by the Inglewood City Council in July 2009. Envisioned as a new city center within Inglewood, at full buildout this plan area includes relocation of the Hollywood Park Casino, an approximate 25-acre park system with passive and active recreational opportunities, and mixed-use development including 2,500 new residential units, almost 900,000 square feet of retail space, 300 hotel rooms, about 4.0 million square feet of office space, a 6,000-seat performance venue, and 4 acres of civic space for community-serving uses. In February 2015, the Inglewood City Council approved a voter-sponsored initiative 10 (known and cited as the "City of Champions Revitalization Initiative"); this initiative amended the HPSP to include the new, Los Angeles Stadium at Hollywood Park with 70,000 seats, along with a 6,000-seat performance venue.

Rumors about stadium construction first began in 2014. Official City of Inglewood approval of the stadium development occurred in February 2015 and NFL approval of the Ram's relocation back to the Los Angeles area occurred in January 2016. As of June 2019, the NFL Stadium was 70% complete. NFL Stadium completion is anticipated in 2020. The NFL Stadium will host the Super Bowl in 2022 and

¹⁰ See https://www.cityofinglewood.org/DocumentCenter/View/1162/Hollywood-Park-Champions-Initiative

is expected to host soccer matches during the 2028 summer Olympics. The NFL Stadium campus will additionally be the location of NFL Media, relocating from Culver City. Current plans also include development of a 200,000-square-foot space for hundreds of NFL employees, expected to open by the summer of 2021. Although development of the HPSP was stalled with the advent of the Great Recession, the casino relocation occurred in 2016 and development of 314 residential units, 518,077 square feet of retail space, 466,000 square feet of office space, the performance venue, and a portion of the planned open space, are all anticipated to become operational between Summer 2020 and September 2021, well before the time the IBEC opens in 2024. This leaves substantial new HPSP development potential, including 2,186 residential units, 371,923 square feet of retail, 3,567,314 square feet of office, 300 hotel rooms, and 13.06 acres of open space.

Another significant land use change in Inglewood consists of an 8.5-mile extension of the Los Angeles County Metro Rail System through Inglewood on the Crenshaw/LAX Line. An EIR for the project was certified in 2011, the Federal Transit Administration approved the line in January 2012, pre-construction began in July 2012, and heavy construction began in June 2014. Originally planned for completion in fall 2019, revenue operations along the extension are currently anticipated to begin by mid-2020. Three stations are located in Inglewood: one in Downtown Inglewood located near the intersection of Florence Avenue and La Brea Avenue, one located near the intersection of Florence and Hindry Avenues, and one located near the Intersection of Florence Avenue and West Boulevard. There is one additional light rail station planned along the Crenshaw/LAX line that is near but not in Inglewood. Additionally there is one existing Green Line light rail station at Crenshaw Boulevard and the I-105, just outside the City boundary.

The City of Inglewood approved a "Transit Oriented Development" ("TOD") plan and design guidelines in November 2016, creating two Transit-Oriented Districts – Downtown TOD and Fairview Heights TOD. The purpose of the plan is to guide new construction and rehabilitation in the plan area, which includes 585 acres in the center of Inglewood. As of May 2018, the City's cumulative project list for the IBEC project includes 32 development projects plus the Inglewood Transit Connector (ITC) project, pursuant to a list provided by the Economic and Community Development Department. The projects comprise a wide range of land uses, including residential, congregate living facilities, commercial, retail, hotel, self-storage, office, car rental, and the stadium at Hollywood Park and other HPSP development. Most of the new planned development is occurring in the Downtown area associated with the TODs and the City's new light rail stations. This especially includes residential development, typically the most predominant transit-oriented use, with 722 of the planned 849 units located in the TODs, i.e., 83%. In contrast, hotels, which are not traditionally deemed a transit-oriented use, are planned in closer proximity to the new stadium site and the prospective IBEC site. These development patterns indicate that these sports venues are not attracting nearby residential development. Moreover, aside from development of the HPSP, which has been percolating since 2009 (well before the anticipation of any new sports venues in Inglewood), these sports venues do not appear to have sparked significant new development nearby.

This review indicates several major time milestones associated with future land use changes in Inglewood. These include the 2009 approval of the HPSP, FTA approval of the Crenshaw/LAX line in 2012 with construction beginning in 2014, and rumors of the new Rams stadium in 2014 with City

¹¹ See Table 3.0-1 in the Proposed Project Draft EIR, in Section 3. Environmental Setting, Impacts, and Mitigation Measures.

¹² See table 3.0-2 in the Proposed Project Draft EIR, in Section 3. Environmental Setting, Impacts, and Mitigation Measures.

approval in 2015 and NFL approval in 2016. All of these land use changes preceded the IBEC proposal, which was announced in June 2017, after the beginning of NFL Stadium construction.

Gentrification and Displacement

There is a wide and varied base of literature on the process of gentrification. This literature is primarily of a scholarly nature, authored by academics or think tanks with academically credentialed staff, although gentrification is often discussed in the media as well. Gentrification is a process, commonly perceived to be what happens when a traditionally low-income neighborhood experiences an influx of new, higher-income residents. Many definitions and explanations of gentrification focus on neighborhood change, including consideration of spatial, physical, demographic, and economic characteristics. One representative definition of gentrification is:

"a process of neighborhood change that includes economic change in a historically disinvested neighborhood—by means of real estate investment and new higher-income residents moving in - as well as demographic change - not only in terms of income level, but also in terms of changes in the education level or racial make-up of residents." ¹³

Numerous methodologies have been developed to attempt to define gentrification and ascertain its presence or lack therof in a community.

There are many contributing drivers of gentrification, including demand-side factors, supply-side factors, unequal investment, and policy factors. The development of models that can predict what neighborhoods are most vulnerable to gentrification is an ongoing research topic of interest, which has thus far had limited success. These models often focus on whether a community is characterized by gentrification, and how one can identify whether gentrification has occurred, but not on the cause or causes. This hints at the difficulty of tracing the seeds or root causes of gentrification.

Very few, if any instances of analysis are associated with assessing the gentrification and displacement effects of specific developments, such as the Proposed Project. As gentrification is a process, this further complicates the ability to attribute gentrification to a particular stimulus or catayst. Research into the base of literature suggests that transit system and related development is sometimes studied as a catalyst for gentrification. More specific to the case of Inglewood, there is a small body of literature that explores the relationship between sports facility development and increasing real estate valuation or pricing, which is a commonly perceived and measurable indicator of potential gentrification. This literature is characterized by mixed findings regarding sports facility effects on property values, where some studies find there is a positive effect on values while others find no significant effect. Where positive effects were found, they generally appear to be relatively limited.

Most studies use this information to quantify potential municipal effects via growth in property taxes, thereby reflecting on the value of public subsidies provided to support new sports facility development. Some of the studies conclude that there is an amenity effect¹⁴ associated with sports facilities, either in the area most proximite to the facility or citywide, but this is not borne out by all of the studies. One

¹³ See http://www.urbandisplacement.org/gentrification-explained.

¹⁴ In this context, an "amenity effect" is when a feature or attribute is perceived to comprise an amenity, a feature making something more attractive, with that attraction measured in a variety of ways depending upon the study.

study examined the anticipatory effect of new sports facilities following the public announcement of a planned location, finding mixed results, with a positive effect noted on home sales prices in one instance but a decline noted in another.

Case Study Analysis

This study explored two types of case study analysis. These included: 1) analysis of recent residential pricing trends in Inglewood, for the purpose of assessing whether recent pricing trends support public concerns and comments that development and operation of the IBEC will contribute to gentrification; and 2) examples of new sports arena development, for the purpose of assessing if there is any utility in examining development trends around other sports venues to assess whether they cause or contribute to displacement resulting from gentrification.

In order to identify potential displacement effects resulting from gentrification in Inglewood associated with the proposed IBEC, the study reviewed residential market pricing information for rental units and home sales, dating back to 2010 where available. The study found that since the announcement of the IBEC in June 2017, both apartment rents and home sales prices have increased in Inglewood, but they also increased in the surrounding communities as well. The noted increases in Inglewood and other cities with high price increases coincide with the strengthening economy and increasing housing demand resulting from the general perception of a lack of housing supply throughout the region, especially affordable housing. Accordingly, Inglewood did not experience a spike in median rents or median home prices immediately after the June 2017 announcement. Based on this case study analysis, therefore, ALH Economics has determined that recent increases in median rents and home prices in Inglewood cannot be attributed to the proposed IBEC.

Research was conducted to identify case study examples of communities with new sports arenas to determine the extent to which surrounding area land use changes do or do not exemplify gentrification or displacement associated with these venues. This entailed research into new NBA and NHL arenas constructed over the past 10+ years in order to identify arena developments and situations as similar as possible to the proposed Inglewood arena complex site, which is being entirely privately funded and developed.

The research indicated that comparability to the Inglewood arena complex is limited, largely because only two of the nine United States sports arenas constructed, or commencing construction, since 2005 are privately-owned, with all others owned by a city (or city/county/state agency) or a government development corporation or authority. Moreover, land use pattern changes varied or are still evolving, such that examination of these sports venues did not result in any meaningful gentrification- or displacement-related findings. Thus, examination of development trends around other sports venues appears to have limited utility with regard to assessing whether or not they cause or contribute to gentrification and displacement, and is not a useful medium to assessing the extent to which area land use changes surrounding sports venues do or do not exemplify gentrification and displacement.

Project-Related Gentrification and Displacement Effects

In considering the potential for gentrification and related displacement effects associated with the proposed IBEC, it is notable that a series of land use changes have been occurring in Inglewood, set in motion as much as 10 years ago in 2009. Some of these changes, especially the HPSP and Transit Oriented Development plans, are indicative of City expectations and desires for growth and new development. The gentrification and displacement literature does not adequately address whether

development of a professional sports arena or a development program like the proposed IBEC causes or contributes to gentrification and displacement. These remain unanswered questions. Instead, the literature more thoroughly probes and suggests that public investment in transit infrastructure, including rail transit, can contribute to changing socioeconomic neighborhood characteristics, including the type of characteristics often associated with gentrification. One such indicator can be new housing construction, of which much is planned in Inglewood's Transit Oriented Development plan areas in or near Downtown Inglewood. In contrast, little new development is planned near the proposed IBEC site or the NFL Stadium, with the exception of the HPSP, of which the NFL Stadium is an integral part.

The residential pricing analysis included herein for Inglewood suggests that independent of other trends affecting pricing, the anticipatory pricing effect explored in some of the literature does not appear to have occurred in Inglewood. Consequently, it cannot be determined if recent increases in median rents and home prices in Inglewood resulted from any factors unique to Inglewood, including stimuli such as the development of the Crenshaw/LAX line, the NFL Stadium, or the proposed IBEC, or if pricing changes that may lead to displacement are instead driven by other housing market and general economic factors.

In conclusion, based on the study's research and analysis, literature review, empirical data, and case study analysis, this study finds that there is not a sufficient basis to link a sports and entertainment arena in Inglewood like the IBEC to the process of gentrification, or to the indirect effect of displacing a substantial number of residents resulting in the need for the construction of replacement housing.

II. IBEC SITE CONTEXT AND CITY OF INGLEWOOD PROFILE

IBEC DEVELOPMENT SITE CONTEXT

The proposed IBEC project site comprises approximately 28 acres located in the southwestern portion of the City of Inglewood, approximately 10 miles south/southwest of downtown Los Angeles. The site is also approximately 1.5 miles east of the Los Angeles International Airport (LAX). The proposed IBEC site area is generally bounded by West Century Boulevard on the north, South Prairie Avenue on the west, South Doty Avenue on the east, and a straight line extending east from West 103rd Street to South Doty Avenue, and on 102nd Street east from South Doty Avenue to Yukon Avenue on the south.

Most of the proposed IBEC site consists of parcels owned by the City of Inglewood or the City of Inglewood as Successor Agency to the Inglewood Redevelopment Agency. Some of the parcels are vacant while others have existing structures that are either occupied or vacant. Most of the existing structures on the proposed IBEC site are industrial in nature. In particular, the existing on-site uses include a restaurant, a hotel, industrial and warehouse properties, , a commercial catering business, and a groundwater well and related facilities (on a City-owned parcel). The surrounding land uses include a mix of commercial, industrial, and residential land uses, as well as some vacant parcels.

The proposed IBEC site is located in an area already established as an entertainment node, with The Forum, an approximately 18,000-seat performance venue, located approximately three-quarters of a mile north of the site. With construction of the new NFL Stadium located between the Forum and the proposed IBEC site, this performance and entertainment focus will be strengthened by the time the proposed IBEC is scheduled for completion (see below).

The proposed IBEC site is partially within the Planning Boundary/Airport Influence Area for LAX and the Airport Compatibility Zone for the southern LAX runway. This accounts for how and why some of the property came to be owned by the City of Inglewood and the Successor Agency. Beginning in the mid-1980s, the Federal Aviation Administration (FAA) has issued noise grants to the City of Inglewood as part of the LAX Noise Control/Land Use Compatibility Program, with the objective of disposing and recycling incompatible land uses to uses compatible with the noise levels of airport operations. Under that program, the FAA and the City of Inglewood approved the acquisition of a number of parcels on the Project Site. These parcels were previously occupied by single-family or multifamily homes, among other nonresidential uses. There are strict use limitations relating to the City's acceptance of these grant funds from the FAA which, if not met, may require City repayment of the funds to the FAA and/or forfeiture of future funding. Chief among the provisions is that the City is obligated to dispose of the land at fair market value and ensure that the land is used for purposes that are compatible with specified airport noise levels. This consequently restricts the uses to which these properties can be put and limits the type of development that can take place on them.

INGLEWOOD DEMOGRAPHIC PROFILE

A series of demographic exhibits characterizing the population of Inglewood, the housing stock, and employment characteristics of Inglewood residents are included in Appendix A. These include Exhibits 1 – 7. All the data points pertain to the year 2017, which reflects the most recent one-year period available for U.S. Census Bureau estimates in the American Community Survey, and comprises the data set available at the time this study was initiated.

As shown in Exhibit 1, Inglewood's estimated 2017 population totaled 110,611. Overall, approximately 51.5% of the population is Hispanic or Latino, of which the majority is Mexican. Among the non-Hispanic or Latino population, 39.9% are Black or African American. All other ethnicities comprise very small percentages of Inglewood's population base. The median age of residents is 37 years. Among the population aged 18 to 24, 54.1% had some college, an associate's degree, a bachelor's degree, or higher (see Exhibit 2). For persons aged 25 years and over, 20.5% have a bachelor's degree or higher, 7.2% have an associate's degree, and 27% have some college, no degree. Overall, 78.2% are high school graduates (includes high school graduates and all others with some college with or without a degree). As one would expect, the median per capita earnings of Inglewood's population base increases with each successive level of higher education, although overall incomes are relatively comparable between those with less than a high school degree and those with only a high school degree.

Of the total housing stock of 38,029 units, in 2017, 35,788 consisted of occupied housing units in Inglewood (see Exhibits 3 and 4). Of these, 36% were owner-occupied and 64% were renter-occupied (see Exhibit 4). Per the household income data presented in Exhibit 5, the overall median household income was \$51,456, with median household incomes of \$74,711 for households living in owner-occupied units, which is much higher than the \$40,978 median for households in renter-occupied units. Reported monthly housing costs are a median of \$1,350 for all combined households, comprised of \$1,702 for households in owner-occupied units and \$1,260 for households in renter-occupied units. These figures indicate a higher share of household income spent on housing costs for renters than for owners, i.e., 37% compared to 27%, respectively. As one would expect, households with lower household incomes spent a higher percentage of income on housing costs.

The average household size in Inglewood is 3.04 persons, varying between 2.95 for renter-occupied housing units and 3.2 for owner-occupied housing units (see Exhibit 4). Among owner-occupied units, 10,142 units (78.8%) are one unit detached structures. Another 850 units (6.6%) are single attached units. Among renter-occupied units, the largest share of housing units (22.2%) are 5 to 9 units. Combining all renter-occupied structures with 5 or more units indicates that 58.0% of all renter-occupied units in Inglewood are in structures with 5 or more units. A substantial 17.9% of occupied rental units, however, are single unit detached, indicating a high percentage of rental single-family detached homes. Households in owner-occupied units have longer residency in Inglewood than households in renteroccupied units. The median year owner-occupied households moved in was 1999, compared to 2012 for renter-occupied households. This is indicative of high mobility among renter-occupied household units, with 65.5% moving in during 2000 or later. The comparable figure for owner-occupied units is 47.8%. Across all housing units, Inglewood's housing stock is relatively older, with only 8.8% built from 1990 onward (see Exhibit 3). The median year of housing unit construction is be around 1950 or 1951. Age of housing structure is often a variable identified and measured in studies of gentrification, but its relationship to gentrification and gentrification-induced displacement varies depending upon the study and other economic factors at play (see Chapter III. Overview of Gentrification and Displacement).

The employment data in Exhibit 6 indicates that the largest percentage of Inglewood's employed civilian population aged 16 and over work in sales and office occupations. This percentage is 29.6%, followed closely by service workers comprising 25.5% of employed residents and 24.5% engaged in management, business, science, and arts occupations. The largest single occupational category of all is office and administrative support workers, comprising 18.8% of all workers. By industry, resident employment is greatest in health care and social assistance, with 13.6% of all resident workers (see Table 7). This is followed by 10.8% employed in accommodation and food services. The next highest categories include the following: administrative and support and waste management services, 9.3%; educational services, 7.7%; and transportation and warehousing, 7.5%. Collectively, these categories reflect nearly one-half (48.9%) of employed residents.

INGLEWOOD RECENT LAND USE CHANGES

There are land use changes underway in Inglewood. The most significant of these include the Hollywood Park Specific Plan, a new NFL Stadium under construction for the Los Angeles Rams and Los Angeles Chargers, and public transit improvements. If approved, the proposed IBEC would comprise an additional major land use change.

Hollywood Park Specific Plan

The Hollywood Park Specific Plan (HPSP) encompasses an approximate 238-acre area that includes redevelopment of the former Hollywood Park racetrack/grandstand. A Final Environmental Impact Report for the HPSP was certified in June 2009, and the plan and select entitlements were approved by the Inglewood City Council in July 2009. ¹⁵ The area is envisioned as a new city center within Inglewood. There are many components to the plan, including closure and demolition of the Hollywood Park racetrack and grandstand (which occurred in 2013 and 2014, respectively), relocation of the Hollywood Park Casino, an approximate 25-acre park system with passive and active recreational opportunities, and mixed-use development including 2,500 new residential units, almost 900,000 square feet of retail space, 300 hotel rooms, about 4.0 million square feet of office space, and 4 acres of civic space for community-serving uses. In February 2015, the Inglewood City Council approved a voter-sponsored initiative (known and cited as the "City of Champions Revitalization Initiative"); this initiative amended the HPSP to include the new, Los Angeles Stadium at Hollywood Park with 70,000 seats, as well as a 6,000-seat performance venue.

Rumors about the NFL Stadium proposal first began in 2014. Official City of Inglewood approval of the stadium development occurred in February 2015 and NFL approval of the Ram's relocation back to the Los Angeles area occurred in January 2016. As of June 2019, the NFL Stadium was 70% complete. NFL Stadium completion is anticipated in 2020. The NFL Stadium is a privately funded new stadium with 70,000 seats. The 6,000-seat performance venue is planned to be attached to and completed concurrently with the NFL Stadium. The NFL Stadium will host the Super Bowl in 2022 and is expected to host soccer matches during the 2028 summer Olympics. The NFL Stadium campus will additionally be the location of NFL Media, relocating from Culver City. Current plans also include development of a 200.000-square-foot space for hundreds of NFL employees, expected to open by the summer of 2021.¹⁷ Although development of the HPSP was stalled with the advent of the Great Recession, the casino relocation occurred in 2016 and development of 314 residential units, 518,077 square feet of retail space, 466,000 square feet of office space, the performance venue, and a portion of the planned open space, are all anticipated to become operational between Summer 2020 and September 2021, well before the time the IBEC opens in 2024. 18 This leaves substantial new HPSP development potential, including 2,186 residential units, 371,923 square feet of retail, 3,567,314 square feet of office, 300 hotel rooms, and 13.06 acres of open space. 19

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¹⁵ https://www.cityofinglewood.org/DocumentCenter/View/1347/Hollywood-Park-Specific-Plan.

¹⁶ See https://www.cityofinglewood.org/DocumentCenter/View/1162/Hollywood-Park-Champions-Initiative

¹⁷ https://en.wikipedia.org/wiki/Los Angeles Stadium at Hollywood Park.

¹⁸ See Table 3.0-1 in the Proposed Project Draft EIR, in Section 3. Environmental Setting, Impacts, and Mitigation Measures.

¹⁹ See table 3.0-2 in the Proposed Project Draft EIR, in Section 3. Environmental Setting, Impacts, and Mitigation Measures.

Crenshaw/LAX Metro Line Extension and Proposed Inglewood Transit Connector

Crenshaw/LAX Metro Line Extension. The most significant public transit improvement planned for Inglewood comprises an 8.5-mile extension of the Los Angeles County Metro Rail System through Inglewood on the Crenshaw/LAX Line.²⁰ This line will run through southwest Los Angeles, connecting the Crenshaw neighborhood and Leimert Park to the City of Inglewood and Los Angeles International Airport (LAX). An EIR for the project was certified in 2011, the Federal Transit Administration approved the line in January 2012, pre-construction began in July 2012, and heavy construction began in June 2014. Originally planned for completion in fall 2019, revenue operations along the extension are currently anticipated to begin by mid-2020.

Eight stations are planned along the Crenshaw/LAX Line. Three will be located in Inglewood and are under construction. These stations, all at-grade, include one in Downtown Inglewood located near the intersection of Florence Avenue and La Brea Avenue, which is anticipated to open in 2020, one located near the intersection of Florence and Hindry avenues, which is anticipated to be completed in 2020, and one located near the intersection of Florence Avenue and West Boulevard, which is anticipated to be completed in 2020. Projections included in the Final Environmental Impact Report for the project indicated that the Downtown Inglewood station is anticipated to be fourth busiest station along this line, with 1,446 daily boardings in 2030, out of 12,628 projected for the line. ²¹ There is one additional light rail station planned along the Crenshaw/LAX line that is near but not in Inglewood.

To support transit-oriented development, the City of Inglewood approved the "New Downtown and Fairview Heights Transit Oriented Development Plan and Design Guidelines" in November 2016. ²² This plan created two Transit-Oriented Districts: Downtown TOD and Fairview Heights TOD. The plan does not grant specific development entitlements. Instead, the plan is designed to guide and encourage new construction in, and revitalization of, the plan area, consisting of 585 acres in downtown Inglewood along Metro's Crenshaw/LAX line.

The City has proposed two additional Transit Oriented Development Plans:

- Crenshaw/Imperial TOD Plan, a 221-acre area on the southwest corner of the intersection of Crenshaw Boulevard and Imperial Highway, nearing the Metro Green Line's Crenshaw/I-105 Station; and
- Westchester/Veterans TOD Plan, a 432-acre area on the western side of the city, near the Westchester/Veterans Metro station on the Crenshaw/LAX Line at the intersection of Florence and Hindry Avenues.

Like the Downtown TOD Plan, the two additional proposed TOD plans are intended to encourage and guide investment in these areas but would not grant project-specific entitlements.

Fairview-Heights-TOD-Plan-Design-Guidelines-lo-res.pdf.

²⁰ See https://en.wikipedia.org/wiki/Crenshaw/LAX Line.

²¹ Crenshaw/LAX Transit Corridor Project, Final Environmental Impact Statement/Final Environmental Impact Report, 3.0 Transportation Impacts of the Alignment and Stations, August 2011, page 3-33. See http://media.metro.net/projects_studies/crenshaw/images/FEIS_FEIR/3.0_Transportation_Impacts.pdf.

²² See http://inglewood.arroyogroup.com/wp-content/uploads/2017/01/The-New-Downtown-

In September 2017, it was announced that Los Angeles County will be host to the 2028 Summer Olympic Games, with some events held at the new NFL Stadium under construction for the NFL's Los Angeles Rams and the Los Angeles Chargers. While the light rail stations are more than one mile from this new sports facility, it is anticipated that these stations will serve spectators traveling to and from Olympic venues in Inglewood.

Proposed Inglewood Transit Connector. In order to address traffic congestion and close the last-mile gap between the Crenshaw/LAX Line and the City of Inglewood's new sports and entertainment destinations, the City has proposed a new transit system between the regional Metro Rail system and the City's major activity centers, known as the Inglewood Transit Connector. Implementation of the proposed Inglewood Transit Connector would serve many City goals, including: encouraging the use of public transportation; reducing traffic congestion and parking demand; increasing transit choices and reducing vehicular trips and vehicle miles traveled to the City's major activity centers; activating and complementing development and redevelopment in the City; and connecting residents to jobs, education, services, and local and regional destinations while supporting efforts to increase economic stability.²³ This project consists of an elevated, automated people mover (APM) system. Several alignment alternatives have been proposed, ranging from 1.8 to 3.1 miles in length, at a capital cost in 2018 dollars in the \$600 to \$700 million range. In July 2018, the City designated a "locally preferred alternative" with up to five stations and support facilities that would provide a transit connection between the Metro Crenshaw/LAX Downtown Inglewood Station and the intersection of Prairie Avenue and Century Boulevard. Some of the destinations served by the Inglewood Transit Connector would include the Madison Square Garden Forum, the new NFL Stadium, other development in the HPSP, and the proposed IBEC. Environmental review of the Inglewood Transit Connector commenced in July 2018. The schedule for completing this review and considering the proposed ITC has not been determined. If approved, construction and operation of the ITC would not occur until after the Crenshaw /LAX Downtown Inglewood Station and NFL Stadium are completed and operational.

Current Planning Applications²⁴

The City of Inglewood Department of Economic and Community Development provided a list of citywide projects engaged in the planning process in the City of Inglewood as of May 2018. These projects are mapped on the following page and listed in Table 1 following the map. As of May 2018, the City's cumulative project list for the IBEC project includes 32 development projects of varying sizes plus the Inglewood Transit Connector (ITC) project, pursuant to a list provided by the Economic and Community Development Department. The project numbering in Table 1 starts with 42 and is consistent with the numbering system used in the Project's EIR to designate proposed projects. That list further includes Map No. 74 in Inglewood, which comprises the Inglewood Transit Connector Project.

The planned projects consist of a wide range of land uses, the majority of which are residential, either condominiums, apartments, or townhomes. Other land uses include congregate living facilities, commercial, retail, hotel, self-storage, office, car rental, and the stadium at Hollywood Park and other HPSP development. The project numbers on Table 1 match the project numbers on the map. There are two geographic overlays shown on the map. These overlays correspond with the City of Inglewood's two TODs – Downtown TOD and Fairview Heights TOD. For reference, Map No. 67 corresponds with the NFL Stadium and Map No. 73 (a hotel) most closely corresponds with the location of the IBEC.

²³ See "Inglewood Transit Connector, Overview Fact Sheet," Summer 2018. See http://envisioninglewood.org/wp-content/uploads/2018/08/ITC-fact-sheet 1.pdf.

²⁴ For the purpose of this study, the reference Planning applications were current as of May 2018.

Examination of the map on the following page illustrates the geographic distribution of the planned citywide development projects in the City of Inglewood. As this map shows, the majority of individual proposed projects are clustered in the Downtown TOD. Of note is the location of two largest planned residential projects, which include project number 59 with 116 apartments and project number 63 with 310 townhomes. These projects are located relatively close to each other, within the Downtown TOD but also near the intersection with the Fairview Heights TOD. In total, excluding the residential units in the HPSP, there are 869 planned apartments, condominiums, and townhomes. Top of these, 722 units are located in the TODs (almost all in the Downtown TOD), and only 147 are located outside the TODs. Even most of these units are located within just a few blocks of the perimeter of the TODs. In contrast, the planned projects located closer to the NFL Stadium site and the IBEC site comprise mostly hotels and relatively small planned residential projects, i.e., ranging from 3 to 12 units.

As the planned projects map on the next page shows, Inglewood's proposed development projects appear to be centered primarily in the area encompassed by the Downtown TOD Plan, proximate to the Crenshaw/LAX Metro Station. Many of the proposed projects in this area consist of residential development. Such residential development is often characteristic of transit-oriented development patterns. The HPSP includes residential development within the plan area; aside from the residential development that is part of the plan itself, the area surrounding the HPSP has not been a focus of residential development proposals. Relatively few residential projects are proposed in the vicinity of the IBEC site; those that have been proposed (nos. 44, 54, 65, 70) are small in scale (3 units, 3 units, 3 units, and 5 units, respectively). These development patterns suggest that, in the City of Inglewood, major sports venues (the NFL Stadium approved in February 2015, and IBEC announced in June 2017) do not appear to be catalysts in encouraging significant residential development proposals nearby; rather, policies that promote transit-oriented development appear to be more important factors in encouraging such development.

²⁵ The HPSP development is excluded from this discussion as its development has long been planned for the purpose of creating a new city center, and is by definition not oriented to other land uses in the City of Inglewood.

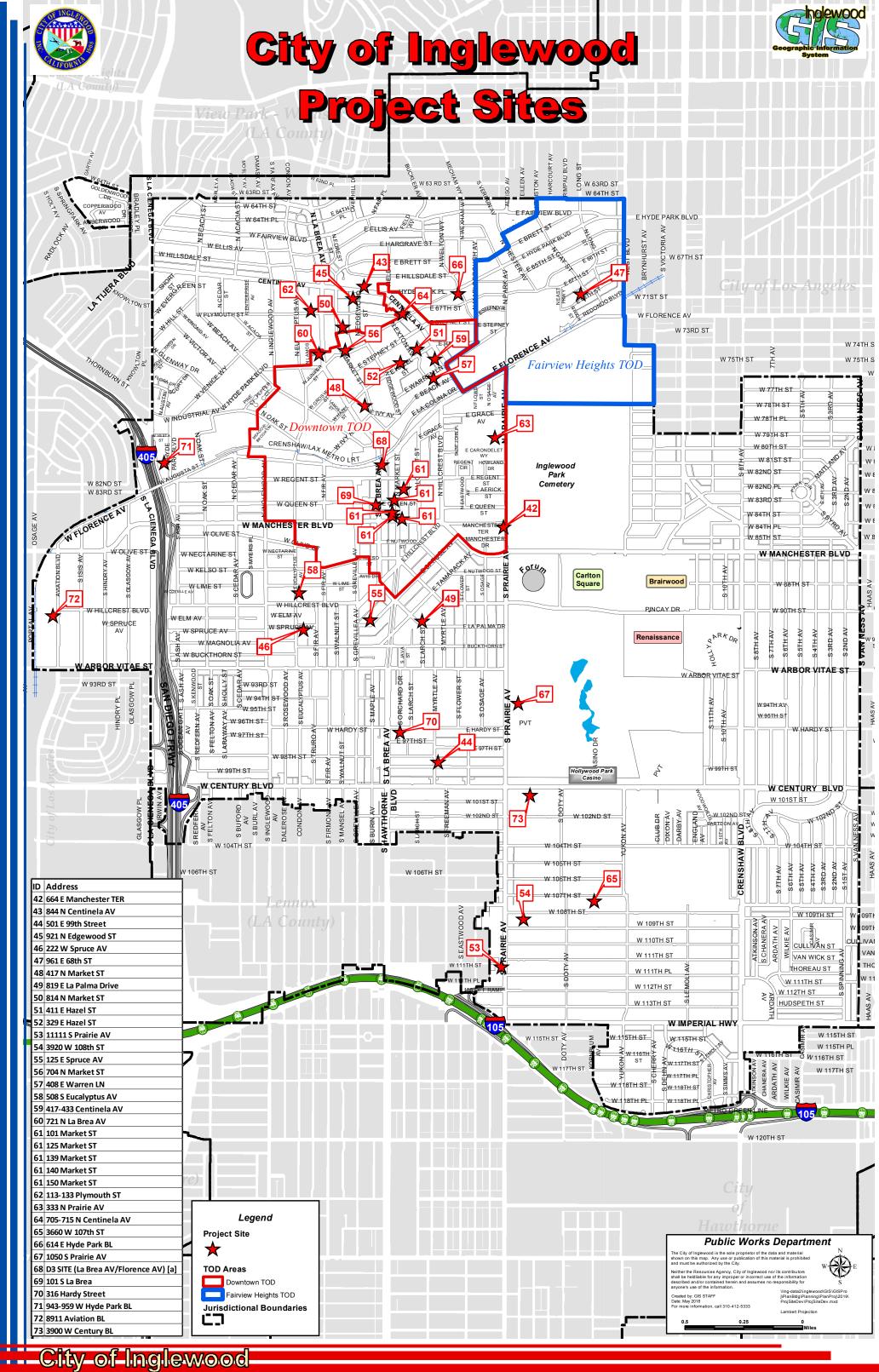


Table 1. Planned Citywide Development Projects City of Inglewood Current as of May 2018 (1)

Map No.	Transit Overlay	Project Location	Land Use	Size
42			Condominiums	4 units
43			Apartments	4 units
44		501 E. 99th Street	Condominiums	12 units
45		921 N. Edgewood Street	Apartments	38 units
46		222 W Spruce Avenue	Apartments	10 units
47	Fairview Hts.	961 E 68th Street	Condominiums	3 units
48	Downtown	417 N Market Street	Condominiums	12 units
49		819 E La Palma Drive	Apartments	5 units
50		814 N Market Street	Congregate Living Facility	18 beds
51	Downtown	411 E Hazel Street	Apartments	18 units
52	Downtown	329 E. Hazel Street	Condominiums	4 units
53		11111 S. Prairie Avenue	Hotel	120 rooms
54		3920 W 108th Street	Apartments	3 units
55		125 E. Spruce Avenue	Apartments	7 units
56	Downtown	704 N. Market Street	Apartments	12 units
57	Downtown	408 E. Warren Lane	Commercial	2,542 sq. ft.
58		508 S. Eucalyptus Avenue	Senior Housing	40 units
59	Downtown	417-433 Centinela Avenue	Apartments	116 units
60	Downtown	721 N. La Brea Avenue	Commercial Commercial	1,312 sq. ft. -1,210 sq. ft.
61	Downtown	101,125,139,140,150 Market Street	Retail	40,000 sq. ft.
62		113-133 Plymouth Street	Townhomes	20 units
63	Downtown	333 N. Prairie Avenue	Townhomes	310 units
64	Downtown	705-715 N. Centinela Avenue	Self-Storage	81,613 sq. ft.
65		3660 W. 107th Street	Dwelling Units	3 units
66		614 E. Hyde Park Boulevard	Congregate Living Facility	18 beds
		,	Dwelling Units	2,186 units
			Retail	371,923 sq. ft.
67		1050 S. Prairie Avenue (2)	Office	3,567,314 sq. ft.
			Hotel	300 rooms
			Open Space	13.06 acres
68	Downtown	wn D3 SITE (La Brea Avenue/Florence Avenue)	Apartments	243 units
		,	Retail	40,000 sq. ft.
69	Downtown	101 S La Brea	Philharmonic Association	25,500 sq. ft
70		316 Hardy Street	Condominiums	5 units
71		943-959 W Hyde Park Boulevard	Self-Storage	159,498 sq. ft.
72		8911 Aviation Boulevard	Car Rental	173,804 sq. ft
73		3900 W. Century Blvd	Hotel Renovation	Net increase 4 rooms

Sources: City of Inglewood, Economic and Community Development Department; Draft EIR, IBEC, 3. Environmental Setting, Impacts, and Mitigation Measures, Table 3.0-2; and ALH Urban & Regional Economics.

⁽¹⁾ Note the project count changes over time, and this count was current as of May, 2018.

⁽²⁾ This project comprises the HPSP, and the identified sizes are less the Adjusted Baseline projects reflected in the EIR, Table 3.0-1.

III. OVERVIEW OF GENTRIFICATION AND DISPLACEMENT

CHAPTER PURPOSE

There is a wide and varied base of literature on the process of gentrification, and more recently, the relationship of gentrification to displacement. This literature is primarily of a scholarly nature, authored by academics or think tanks with academically credentialed staff, although gentrification is occasionally discussed in the media as well. Gentrification has been a topic of interest for decades, with some of the initial literature first published in the mid-1960's. Displacement is a somewhat more recent topic of study, first discussed in the academic literature in the late 1970s.

The discussion in this study chapter is meant to provide a general introduction to the concepts of gentrification and displacement. The existing literature is voluminous, and not easily summarized. Thus, the discussion below touches upon a small segment of the literature, meant to be illustrative of what is meant by gentrification and displacement, various approaches to measuring and predicting gentrification, consideration of the causes of gentrification, the relationship between gentrification and displacement, and examples of research efforts to identify and analyze key stimuli and their effects on gentrification, with a special emphasis on sports facilities as a stimulus for gentrification.

DEFINITION OF GENTRIFICATION AND DISPLACEMENT

Defining and Measuring Gentrification

Gentrification is a widely studied and discussed process, commonly perceived to be what happens when a traditionally low-income neighborhood experiences an influx of new, higher-income residents. This definition is housing-based, but there can be different types of gentrification, including both residential and commercial uses. Gentrification has historically been perceived in many ways, some positive and some negative, with the process comprising a tool, goal, outcome, or unintended consequence of change. Many definitions and explanations of gentrification focus on neighborhood change, including consideration of spatial, physical, demographic, and economic characteristics.

Residential gentrification is the most studied form of gentrification, and typically what comes to mind when the term gentrification is used. The first recognized use of the term gentrification was in reference to the influx during the 1950s and 1960s of the "gentry" into lower income neighborhoods in London. This phenomenon was defined as "gentrification." Hence, the initial definition of gentrification was class-based. Historically, gentrification has been linked to declining urban neighborhoods experiencing disinvestment, defined variously by characteristics of physical deterioration, concentrations of poverty, and racial segregation. While the initial context of gentrification was reflective of class-based movement into lower-income, or inner-city neighborhoods, academic studies conducted during the decade of the 2000's also identified gentrification in a variety of other neighborhoods, including suburban, rural, and middle- or higher-income neighborhoods, thus broadening the definition of residential gentrification beyond only low-income neighborhoods. For some, the definition of gentrification included economic considerations, such as new high-income households, housing investment, or transition from renter- to

²⁶ Merriam-Webster's Dictionary defines "gentry" as people of high social status: the aristocracy.

owner-occupancy, while for others gentrification was defined based on demographic changes, such as an influx of white households, college-educated residents, or increases in professionalization.²⁷

One well-stated definition of gentrification, prepared by the Urban Displacement Project, which is a research and action initiative of UC Berkeley that conducts research aimed to understand and describe the nature of gentrification and displacement, is as follows: ²⁸

Gentrification: a process of neighborhood change that includes economic change in a historically disinvested neighborhood —by means of real estate investment and new higher-income residents moving in - as well as demographic change - not only in terms of income level, but also in terms of changes in the education level or racial make-up of residents.

While there may be a commonly perceived definition of residential gentrification, it has to be operationalized (i.e., the process of strictly defining variables into measurable factors) in order to be measured, analyzed, and possibly predicted. In this regard, numerous methodologies have been developed to define gentrification and ascertain its presence or lack thereof in a community. Every study reflects consideration of different variables, conducted at different levels of geography, such as census tract or block level. To assess gentrification, which is a process, data are measured at two or more points in time. Examples of variables across different studies include household or family income, age of population, age of housing stock, educational level of population, ethnic composition, housing appreciation, property values, resident job occupations, homeownership rate, and poverty rate. More recently, efforts to assess gentrification also include measurements of public investment.

Defining Displacement

There are numerous definitions or usages of the term displacement in the academic literature. A key research paper published in 2018 that discusses gentrification, authored by Zuk, Bierbaum, Chapple, Gorska, and Loukaitou-Sideris of the University of California, ²⁹ indicates that a widely accepted definition was proposed in 1978 by Grier and Grier. This definition is as follows:

- "Displacement occurs when any household is forced to move from its residence by conditions which affect the dwelling or immediate surroundings, and which:
- 1) are beyond the household's reasonable ability to control or prevent;
- 2) occur despite the household's having met all previously-imposed conditions of occupancy; and
- 3) make continued occupancy by that household impossible, hazardous or unaffordable."³⁰

²⁷ Primarily summarized from "Mapping Susceptibility to Gentrification: The Early Warning Toolkit," the Center for Community Innovation, by Karen Chapple, August 2009, page 1 (see http://communityinnovation.berkeley.edu/publications).

²⁸ http://www.urbandisplacement.org/gentrification-explained.

²⁹ Miriam Zuk, Ariel H. Bierbaum, Karen Chapple, Karolina Gorska, and Anastasia Loukaitou-Sideris, "Gentrification, Displacement, and the Role of Public Investment," Published in Journal of Planning Literature, 2018, Vol 33 (I), (see

https://journals.sagepub.com/doi/abs/10.1177/0885412217716439).

³⁰Zuk et al., page 6.

In their 2018 paper, Zuk et al. emphasize that while displacement may result from gentrification, there are other, additional catalysts for displacement. After reviewing the literature on displacement, published between 1978 and 2015, they posit two major types of displacement (forced and responsive), with three types of causes (direct or physical, indirect or economic, and exclusionary). This results in six categories of displacement, examples of which include the following:³¹

Forced

- o Direct or Physical eviction, eminent domain, natural disaster
- o Indirect or Economic foreclosure, condo conversion
- o Exclusionary zoning policies, NIMBY resistance to development

Responsive

- o Direct or Physical deterioration in housing quality, neighborhood violence
- o Indirect or Economic rent increase, loss of cultural significance of a place
- o Exclusionary unaffordable housing, lack of social networks

As these causes suggest, there are many types of displacement, of which some but certainly not all may be associated with gentrification. Thus, while displacement can have ties to gentrification, it is a separate process or occurrence in its own right.

CAUSES OF GENTRIFICATION 32

As noted above, gentrification is a process. The literature identifies a range of contributing drivers of gentrification. Expressed simplistically, some of these drivers are as follows:

- **Demand-side Factors.** This reflects changing demographics and preferences, especially among higher-income, college-educated households. As higher income groups develop an interest in a particular area, for reasons such as job generation or cultural amenities, housing demand increases, affecting demand for housing units and pricing.
- **Supply-side Factors.** Insufficient supply of housing exists to meet demand, resulting in a seller's market for existing housing units or pressures for construction of new housing for higher income households.
- **Unequal Investment.** If neighborhoods do not benefit equally from investment, the addition of new amenities can increase competition to live in the area.
- Policy Factors. Select government actions could cause housing values to fall or create incentives
 for higher-income households to purchase homes in lower income neighborhoods. Examples
 of policy actions include tax incentives, mortgage programs, local economic development tools,
 and housing rehabilitation programs.

³¹ Ibid, page 7.

³² Two resources that best summarize these causes include "Gentrification: Causes and Consequences," by Steve Holland, January 1, 2016, Journal of Lutheran Ethics (https://www.elca.org/JLE/Articles/1135) and "Dealing with Gentrification: A Toolkit for Equitable Development," at http://dealingwithgentrification.org/causes/.

Notably, while these factors have been identified as contributing causes to gentrification, sometimes in combination, their presence in a community is not necessarily a predictor of gentrification. Therefore, even if a community exhibits some of these characteristics, gentrification may not necessarily result.

MEASURING AND PREDICTING GENTRIFICATION

The 2018 Zuk et al. paper has a succinct summary of representative research efforts to measure gentrification and predict where it may occur in the future.³³ They cite that the same complexity in defining and documenting gentrification leads to complications in its measurement and prediction. The metrics used in these studies are similar to those identified earlier, such as income, race, educational attainment, housing values, rent, proxies for investment or disinvestment, and income growth.

The studies reviewed by Zuk et al. include those conducted from 1982 through 2015. Each conducts quantitative analysis on a particular location, using a mix of variables. The locations include New Orleans, Philadelphia, Boston, and the United States as well as the country's largest metropolitan areas. Each paper examined data for its respective study area(s), and sought to develop a predictive model to identify gentrifying areas. Notably, the authors had to identify and define gentrifying areas in order to determine if their respective model could then predict this gentrification. Hence, as viewed by ALH Economics, the models are by necessity backward looking, and not designed to predict where gentrification will occur in the future. Instead, in seeking to develop models with the capability of predicting gentrification, the authors seek to formulate statistical equations that use existing datapoints to predict, in a statistically significant manner, known outcomes based on author-specified definitions of gentrification.

The lens through which many of Zuk et al.'s comments are made in this paper pertain to research that takes into account public sector actions. This lens influenced the selection of studies they reviewed. Nevertheless, based upon general review of the gentrification literature, ALH Economics found the selected studies to be relatively representative of the literature as a whole with respect to overall conclusions regarding predicting gentrification.

The findings of the studies summarized by Zuk et al., a few of which are reviewed below, varied significantly with respect to their success in predicting gentrification.³⁴ The study on New Orleans, conducted in 1982 by Bradway Laska et al.³⁵ at the University of New Orleans, found through statistical multiple regression analysis that educational attainment, owner occupancy, and high percentage of multi-unit buildings significantly predicted renovation (i.e., statistically significant), with housing stock renovation comprising a key indicator of gentrification, while the presence of public housing negatively predicted gentrification (i.e., the predicted effect is in the opposite direction of the cause).

The 1986 study by Galster of Wayne State University and Peacock³⁶ examining gentrification in Philadelphia used ethnicity, college-education, household income, and property values as criteria for

³⁴ Note the relevant papers are cited in the following text. However, the overall summaries presented are excerpted from the Zuk et al. 2018 paper.

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³³ Zuk et al., pages 4 and 5.

³⁵ Bradway Laska, Shirley, Jerrol M. Seaman, and Dennis R. McSeveney. 1982. "Inner-City Reinvestment: Neighborhood Characteristics and Spatial Patterns Over Time." *Urban Studies* 19 (2): 155–65 (see https://journals.sagepub.com/doi/10.1080/00420988220080281 for abstract).

³⁶ Galster, George, and Stephen Peacock. 1986. "Urban Gentrification: Evaluating Alternative Indicators." Social Indicators Research 18 (3): 321–37 (see https://link.springer.com/article/10.1007/BF00286623 for abstract).

assessing the potential for gentrification. Their findings on the gentrification or lack thereof for census tracts with the potential to gentrify did not result in strong statistical predictability despite the testing of 12 predictive characteristics. Note that census tracts were defined as "eligible" for renovation based on the age/period of the housing and whether the housing needed renovation.³⁷

Depending upon the definitions used, Galster and Peacock found some variables to be statistically significant while others were not, with only one variable noted as statistically significant across the four different criteria, or equations, evaluated. Instead, their study's statistical analysis showed that "how one defines gentrification crucially affects which and how many tracts are identified as having undergone gentrification, and which initial characteristics of those tracts appear to hold the greatest explanatory power for such changes." In other words, the authors indicate that how one defines gentrification will result in the identification of different explanatory factors, and that this specification may influence the outcome of the analysis.

A 2005 study by Freeman³⁹ of Columbia University defined gentrifying neighborhoods based on five locational, economic, and demographic characteristics. Pursuant to his criteria, Freeman found that 31% of eligible tracts in the U.S. gentrified in the 1990s. In other words, his model achieved a 31% success rate in predictive capability, suggesting reasonable success based upon how he defined gentrification. An updated study prepared in 2015 by Maciag⁴⁰ found that nearly 20% of eligible neighborhoods gentrified since 2000, hence a lower rate of success than Freeman, although higher percentages of over 50% were found in select locations. The Maciag study did not present any statistical measures reporting on statistical significance of the findings. A final example cited by Zuk et al. is a 2015 study by Landis⁴¹ at the University of Pennsylvania. Using an income-only definition for gentrification (i.e., based on percent change in median income over a 20-year timeframe), Landis' study found that 21% of eligible tracts gentrified in the 1990s and 2000s, but his model predicted only 4% of gentrifying tracts across 70 large metropolitan areas.

Developing models that can predict what neighborhoods are most vulnerable to gentrification is an ongoing research topic of interest. A very recent study published January 2019⁴² in the Journal of Urban Affairs by Rigolon of the University of Illinois at Urbana-Champaign and Nemeth of the University of Colorado at Denver seeks to assess why some gentrification-susceptible neighborhoods gentrify while others do not. A study goal is to develop a model that predicts gentrification and can be used as a tool by city governments and others to be proactive in targeting interventions in the most vulnerable

³⁷ Bradway Laska, et al., page 158.

³⁸ Galster and Peacock, page 333.

³⁹ Freeman, Lance. 2005. "Displacement or Succession? Residential Mobility in Gentrifying Neighborhoods." *Urban Affairs Review* 40 (4): 463–91 (see https://journals.sagepub.com/doi/10.1177/1078087404273341 for abstract).

⁴⁰ Maciag, Mike. 2015. "Gentrification in America Report" (see http://www.governing.com/gov-data/census/gentrification-in-cities-governing-report.html).

⁴¹ Landis, John D. 2015. "Tracking and Explaining Neighborhood Socioeconomic Change in U.S. Metropolitan Areas Between 1990 and 2010." *Housing Policy Debate* 0 (0): 1–51 (see https://www.tandfonline.com/doi/abs/10.1080/10511482.2014.993677 for abstract).

⁴² Alessandro Rigolon, "Toward a sociological model of gentrification: How people, place, and policy shape neighborhood change," Journal of Urban Affairs, January 16, 2019 (see https://www.tandfonline.com/doi/full/10.1080/07352166.2018.1562846?scroll=top&needAccess=true for study abstract).

neighborhoods. 43 The models' predictive power was tested in five heavily populated regions, including San Francisco and Los Angeles, and three place-related factors emerged as strong predictors of a neighborhood's likelihood to gentrify. These factors comprise the following: access to jobs; proximity to transit stations; and the quality of housing stock. The researchers also indicated that racial/ethnic diversity is a strong predictor of gentrification, and that research findings by others on implicit bias indicates that if a neighborhood has a very high share of Black or Latina residents it is much less likely to gentrify than one with a mix of several racial or ethnic groups. Another goal of this study was to outline community strategies to limit gentrification, such as rent control, community land trust, and antieviction ordinances.

Notably, the preceding study examples focus on whether a community is characterized by gentrification, and how one can identify if gentrification has occurred; the studies do not focus on the potential cause or causes of gentrification. The focus of these studies illustrates the difficulty of identifying the seeds or root causes of gentrification.

RELATIONSHIP BETWEEN GENTRIFICATION AND DISPLACEMENT

ALH Economics identified and reviewed the academic and associated literature on gentrification and displacement. These papers study and address many aspects of gentrification, some of which include defining gentrification, as how one defines gentrification affects how it is analyzed, as well as the effects and consequences of gentrification, housing development, affordability, and relationship to urban poverty and other aspects of urban development. The primary purpose of this review was to identify papers that most succinctly or directly address the relationship between gentrification and displacement to assist ALH Economics in assessing the extent to which gentrification is proven to cause displacement.

ALH Economics identified 12 papers or articles that provide a succinct and germane overview of the topic. A detailed and thorough discussion and review of each of these papers is included in the Appendix. While there are other studies and articles that analyze gentrification and displacement, and seek to find a relationship between the two phenomena, the cited articles not only provide a representative sampling and discussion of other papers and associated commentaries, but provide a solid overview and analysis of the subject by leading experts in the field.

Based on review of these studies, as summarized in the Appendix literature review, extensive analysis has been conducted for more than the past decade exploring whether there is a causal relationship between gentrification and physical displacement of existing residences. In general, leading experts in the field appear to coalesce around the understanding that there is weak causation between gentrification and physical displacement of residences. Some experts conclude that the ability for residents to relocate or move (i.e., residential mobility rates) are not distinguishable between neighborhoods experiencing gentrification and neighborhoods not experiencing gentrification. The literature further demonstrates that physical displacement may occur even in the absence of gentrification. Moreover, some studies suggest that in some instances, existing low-income households in a gentrifying neighborhood may benefit from gentrification because of neighborhood improvements perceived to be of value and increased housing satisfaction; thus, gentrification is a complex process involving effects that may be perceived as both positive and negative. For these reasons, there is insufficient evidentiary basis to conclude that gentrification, should it occur, will lead to physical displacement of substantial numbers of existing residences. There is a concern that low-income households may be disproportionately affected by increased housing costs. This concern appears to be

See "Predictina gentrification in order prevent it." Science Daily, https://www.sciencedaily.com/releases/2019/01/190129093729.htm.

separate from, and broader than, physical displacement impacts potentially associated with gentrification. Local, state, and federal government have developed, and likely will continue to develop, potential policy responses to this concern.

The overall conclusion reached from the findings of this literature review is that if resident concerns about gentrification are borne out following proposed IBEC development, the evidence in the academic literature suggests that displacement may not necessarily follow. The findings overwhelmingly suggest that while some displacement may occur, it is not the inevitable result of gentrification, and that many factors influence whether or not displacement occurs. The findings also suggest that, even if gentrification is perceived to be occurring, and contributing to displacement, policy tools are available to respond.

STIMULUS GENTRIFICATION EFFECTS

Among the numerous studies of gentrification reviewed above, as well as throughout the literature, there are very few, if any instances of analysis associated with assessing the effects of specific developments, such as the Project. As gentrification is a process, this further complicates the ability to attribute gentrification to a particular stimulus, or catalyst. Review of the literature suggests that transit system and related development is sometimes explored as a catalyst for gentrification. More specific to this analysis, there is a scant and somewhat tangential literature that explores the relationship between sports facility development and one commonly perceived indicator of gentrification, i.e., increasing real estate valuation or pricing.

When sports facilities are the subject of economic studies, the primary purpose is often to assess the facility's effect on the local economy. These studies frequently focus on the trade-offs between public subsidies for sports facilities and local benefits, as new sports facilities are often at least partially funded through some sort of public subsidy. That is not the case with the proposed IBEC development, as the expectation is that it will be entirely privately financed. However, the narrow segment of the sports facility economic impact literature that assesses the effect of sports facilities on property values or pricing bears on the question of gentrification effects of such sports facilities, given that home price and rental appreciation rates are often construed as potential signs of gentrification.

There are several academic research papers that are illustrative of the literature assessing property value or pricing effects of professional sports facilities. Most appear to focus on the sport of football. Given the specialized nature of sports facilities, ALH Economics anticipates that the findings associated with one type of facility or sports franchise, such as a football, would likely be at least somewhat comparable to other franchises, such as baseball or basketball.

Carlino and Coulson, 2003. An early paper in the chain of literature assessing sports facilities in this manner, prepared by Carlino of the Federal Reserve Bank of Philadelphia and Coulson of Pennsylvania State University in 2003,⁴⁴ examined the pattern of residential rents and employment wages in central cities and metropolitan areas with and without National Football League franchises. Their study was based on the 60 largest metropolitan statistical areas, with data from the American Housing Survey. They conclude that their study findings, based on 1993 and 1999 data, suggested no significant effect on wages, but an 8% positive effect on monthly housing rent in central cities with an NFL Stadium. They

⁴⁴ "Compensating Differentials and the Social Benefits of the NFL," Working Paper No. 02-12/R, Federal Reserve Bank of Philadelphia, Gerald Carlino and N. Edward Coulson, September 2003, Revised March 2004. See https://www.philadelphiafed.org/-/media/research-and-data/publications/working-papers/2002/wp02-12r.pdf?la=en.

make this finding despite the fact that only 22.4%⁴⁵ of the rental units in their study were included in both the 1993 and 1999 study samples, comprising just a small portion of the existing units in each study location. Further, data were eventually only available for 53 of the areas they sought to study. Notably, Carlino et al. chose to study the effect on rents because they believed reported rents would be more likely to reflect actual rents whereas home values reported in the American Housing Survey are estimated by the homeowner, and are not market-based.

ALH Economics does not believe the Carlino et al. findings are very robust. Their list of study variables is very limited, with numerous aggregate housing unit variables culled from the Annual Housing Survey but only 11 city or metropolitan area datapoints, including air quality index, unemployment rate, percent black, per capita income, NFL status (an index they created), and population growth. There are many other variables that could differentially affect rental rates across cities that were not accounted for, such as quality of local education, cultural amenities, and public transportation system. Further, their study was conducted for large areas, and thus lacked spatial sensitivity to stadium proximity. Consideration of these and other quality of life measures could well affect the type and amount of rental premium associated with the local presence of an NFL team, thus suggesting their finding might not hold true if subjected to a more rigorous analysis.

Coates, Humphreys, and Zimbalist, 2006. Others also question the robustness of the Carlino et al. findings. For example, a 2006 paper by Coates (University of Maryland – Baltimore County), Humphreys (West Virginia University), and Zimbalist (Smith College)⁴⁶ sought to re-estimate the Carlino et al. model using other specifications, in an effort to clean the rental data and remove outliers with very low rents, and found their results did not hold up to these changes. Thus, they concluded that "The presence of an NFL franchise does not appear to increase rents for center city apartments." ⁴⁷

Kiehl, Matheson, and Sullivan, 2010. In an effort to test the Carlino et al. hypothesis using house values rather than rents, Kiehl, Matheson, and Sullivan of College of the Holy Cross conducted a study published in 2010⁴⁸ examining the effect of sports franchises on residential ownership property values. Kiehl et al. used the same 1993 and 1999 timeframe as Carlino et al., as well as the same 53 cities Carlino et al. included in their analysis. Noting that not all of Carlino et al.'s variables were well defined in their paper, Kiel et al. indicated they approximated them as best they could. Kiel at al. indicate that they added several additional variables, and that some may not be exactly the same as Carlino et al., but are likely controlling for similar effects. Pursuant to their study findings, Kiel et al. conclude that "the presence of an NFL franchise does not lead to higher house values, all else held constant," ⁴⁹ thus further refuting the residential value differential found by Carlino and Coulson.

⁴⁵ Ibid, page 11.

⁴⁶ Coates, D., B.R. Humphreys and A. Zimbalist. 2006. "Compensating differentials and the social benefits of the NFL: A Comment." *Journal of Urban Economics*, 60:1, 124 – 131. Se abstract at: https://www.sciencedirect.com/science/article/pii/S0094119006000039.

⁴⁷lbid, paper abstract from Journal of Urban Economics, July 2006.

⁴⁸ Kiel, Katherine A.; and Matheson, Victor; and Sullivan, Christopher, "The Effect of Sports Franchises on Property Values: The Role of Owners versus Renters" (2010). Economics Department Working Papers. Paper 28. College of the Holy Cross. See https://crossworks.holycross.edu/econ_working_papers/28/
⁴⁹ Ibid, page 9.

Feng and Humphreys, 2012. Continuing along this vein of inquiry, Feng (College of William and Mary) and Humphreys (University of Alberta, Canada) published a study in 2012⁵⁰ on the effect of professional sports facilities on housing values. Feng and Humphreys estimated the effect of proximity within five miles to an NFL, NBA, MLB, and NHL facility on residential property values in US cities based on 1990 and 2000 census block group data in the United States. By using the smaller geographical units of measurement Feng et al. believe their findings are better able to examine the effects of sports facility proximity on housing values. In addition, they believe the incorporation of any of the four major professional sports leagues captures variations among the scheduling patterns for the facilities. The primary data sources for this study are block group level data from the 1990 and 2000 U.S. Census. The study sought to analyze the median value of owner occupied units based upon analysis of three types of variables, including housing structure attributes, neighborhood characteristics, and sports facility-related characteristics. Data were collected on 126 sports facilities in 45 metropolitan statistical areas.⁵¹

In developing their model, Feng et al.'s key parameter of interest is the estimated effect of distance from a sports facility on the median value of owner-occupied housing units in a block group. ⁵² They conclude that proximity to a sports facility has a positive effect on the value of owner-occupied housing and that median values decline as distance from the facility increases. They cite that this decline is 0.8% for each one percent increase in distance from the sports facility. ⁵³ In providing dollar value effects, they cite that their results suggest that moving a residential housing unit one mile closer to a sports facility would increase its value by \$793. ⁵⁴ Presumably, these are year 2000 dollars, as that is the final year corresponding to the study data, so in current year dollars the effect would be greater. From their findings, however, it is difficult to understand the median home values associated with this increase, and how this change would be expressed in the housing market. Instead, they focus more on the aggregate values based on impact radius, and how the associated increases comprise a property tax benefit, which can provide justification to local governments that provide subsidies for sports facility construction and operation.

Feng et al. note that their study findings reflect statistical association, and not a causal relationship. They note that other factors could account for differences, such as the initial location decision process for the sports facility, i.e., they could be locating in areas with higher residential property values. If this is the case, then the study findings are over estimating the relationship between the presence of a sports facility and residential property values. ⁵⁵ Their study, however, did not control for this possibility. Notably, nor did the study have the capability of assessing housing price changes following the introduction of the sports facility, so as they state, it is not possible to ascertain cause and effect, or housing market effects associated with new sports facility development.

Tu, 2005. Yet other studies have been prepared to assess the housing value effects of stadiums. The earliest of these was a 2005 study prepared by Tu (University of Wisconsin) published in the journal Land Economics that examined the effect of FedEx Field on property values in its surrounding area, in an effort to directly assess the effect of a new stadium on housing values. The study area covered all of

⁵⁰ Feng, Xia; and Humphreys, Brad R. "The impact of professional sports facilities on housing values: Evidence from census block group data," City, Culture and Society 3 (2012) 189-200. See http://www.thecyberhood.net/documents/papers/sports.pdf.

⁵¹Ibid, page 194.

⁵² Ibid, page 197.

⁵³ Ibid, page 198.

⁵⁴ Ibid, page 199.

⁵⁵ Ibid, page 198.

Prince George's County, Maryland, which is east of the District of Columbia. The primary data source comprised a GIS data product that included all residential properties in Prince George's County, reflecting over 35,000 transactions of single-family properties between October 1992 and December 2001. The dependent variable tracked in the analysis was the home sale price. A series of models were specified to "measure the price differentials between properties in close proximity to the stadium and those away from it." 56 After developing and evaluating the series of models, the study results show that properties close to the site of FedEx Field sold at a discount but that the there was a pre-existing differential before the stadium was built, and that it was narrowed after the announcement of site selection and further reduced after the stadium was completed. As cited by Tu, "the results also indicate that the closer the property is to FedEx Field, the greater the price improvement, and that the impact is minimal when the property is more than 2.5 miles away from the stadium."⁵⁷ Tu proceeds to explain that "several factors may have contributed to the price improvement by creating benefits for local residents that offest the inconvenience caused by the stadium."58 Some of these factors cited by Tu include: improved infrastructure pursuant to road improvements; employment opportunities created by the stadium; and a learning center as part of the stadium providing a recreational outlet for local residents. Thus, while Tu's overall study conclusion is that development of FedEx Field improves the value of single-family homes in its surrounding area, there are related factors that Tu suggests could also be influential factors, which may not be present in other locations where stadium construction occurs, thus potentially limiting the applicability of his findings to other communities experiencing new stadium construction.

Dehring, Depken, and Ward, 2007. Instead of examining value changes after development of a sports facility, a 2007 study by Dehring, Depken, and Ward⁵⁹ of The University of Georgia and University of Texas at Arlington examined anticipatory housing value changes after the announcement of publiclysubsidized new stadium development in two Texas locations. These included the announcement of plans for a new NFL stadium for the Dallas Cowboys in Dallas, which were subsequently abandoned, and announcements for a new stadium in nearby Arlington, Texas. A key focus of this paper was to analyze pricing changes relative to tax payer expectations regarding the tax implications of the proposed public subsidies. The findings for the Dallas location included an increase in property values (i.e., sales prices) in the City of Dallas after announcement of the possible stadium, counterbalanced by a decrease in Dallas County, whose property owners were anticipating a tax burden to fund the stadium. When the stadium plans were abandoned, these pricing effects reverted back to the prior status quo. In contrast, in Arlington Texas, residential property sales prices in Arlington declined 1.3% to 1.5% in the surrounding area prior to stadium construction. This decline was assessed to be almost equal to the household sales tax burden anticipated to fund the stadium, interpreted by the authors as reflecting a combined amenity effect and tax effect. Thus, the average amenity effect of hosting the Cowboys in Arlington was deemed not significantly different than zero, i.e., no significant amenity effect. Dehring et al. conclude their paper by postulating that the effect of stadium announcements when stadiums are funded by municipal tax dollars is the combination of three elements: tax burden, which causes a reduction in property values; overall city amenity effect, which causes an increase in property values; and a proximity amenity effect, which has an ambiguous effect on residential property values.⁶⁰

⁵⁶ Ibid, page 385.

⁵⁷ Ibid, page 393.

⁵⁸ Ibid.

⁵⁹ Dehring, Carolyn A; Depkin, Craig A; and Ward, Michael R; "The Impact of Stadium Announcements on Residential Property Values: Evidence from a Natural Experiment in Dallas-Fort Worth," Contemporary Economic Policy, 25(4), 627-638. See http://www.uta.edu/faculty/mikeward/stadeffect11.pdf. ⁶⁰ Ibid, page 13.

Georgia Tech Center for Economic Development Research, 2018. In September 2018, researchers at Georgia Tech Center for Economic Development Research (Center) prepared a study for the Cobb County Chamber of Commerce on the fiscal impact of SunTrust Park and The Battery Atlanta on Cobb County. 61 SunTrust Park is the new ballpark built for the Atlanta Braves in 2017, 55% funded by the Braves and 45% funded by the local government, and The Battery Atlanta is a lifestyle mixed-use destination development privately funded by the Braves anchored by SunTrust Park. Existing or planned uses at The Battery Atlanta include 1.5 million square feet of mixed-use space, featuring 20 restaurants, 600 multifamily residential units, a 260-room hotel, a nine-story office tower, and a 53,000-squarefoot entertainment venue. Phase I of The Battery Atlanta featuring numerous retail shops was completed in 2017 in time for the new ballpark opening.

The purpose of the study was to assess if the private investment changed the calculus for public financing of the stadium, where historically many believe that sports facilities funded solely through public investment do not generate public benefits sufficient to justify the public investment. Much of the study is devoted to a traditional fiscal impact analysis, that examines the public revenues accruing to the County versus the anticipated fiscal service costs. As a component of this analysis, however, the Center study sought to isolate what it termed the "Halo Effect," which was defined as the effect of SunTrust Park and The Battery Atlanta on property values within approximately 6 square miles surrounding the development. This area corresponds with the boundaries of the Cumberland Community Improvement District (CID), which is a public-private assessment district that funds public infrastructure projects designed to enhance property values and the greater community.

In its study, the Center sought to isolate property value effects associated with the presence of SunTrust Park and The Battery Atlanta. Its methodology included parcel-based analysis and a process of excluding other possible influences on property value between 2013, when the Braves announced the move, and 2017, which corresponded with the most recent data available at the time of the study. This is also the year SunTrust Park and Phase I of The Battery Atlanta opened. The type of factors the Center isolated and controlled for in its area-specific analysis included overall property value growth in the balance of Cobb County, property area growth in a neighboring CID, and The Battery Atlanta's property value growth. After excluding these factors, the Center determined that of 45.9% of property value growth in the area of interest, 16.2% remained unexplained. Recognizing that yet other factors may be influencing property value growth, the Center elected to reduce this by 25%, or to 12.1%. Thus, it concludes that in 2017, 12.1% of the 6.0-square-mile area of interest property valuation, or \$627 million, is attributable to the Halo Effect of SunTrust Park and The Battery Atlanta. 62 Notably, this estimated effect pertains to all property in the CID, regardless of land use.

The Center's report includes an important qualifier about its Halo Effect finding. As cited in the study, "[i]t is impossible to know how much of this Halo Effect growth is new construction versus revaluation of existing properties."63 This is a significant constraint on the analysis and its findings relative to its transferability to other locations. To its credit, the Center does not make this claim of transferability. Nevertheless, ALH Economics believes that this study limitation invalidates the findings as a predictor of sports facility effects on real estate values in other locations, including residential pricing and values. The Cumberland CID is a very dynamic area, as demonstrated by its website at www.cumberlandcid.org, which documents a number of projects under way, others completed recently,

⁶¹ Georgia Tech Center for Economic Development Research, "Fiscal Impact of SunTrust Park and The Battery County," Prepared behalf Cobb Chamber, http://www.cobbchamber.org/economic-development/suntrust park fiscal impact.aspx.

⁶² Ibid, pages 20 and 21.

⁶³ Ibid, page 21.

and highlights the amount of area investment in public infrastructure and other development since inception of the CID in 1988. Clearly it would be unlikely to find a comparable location to which the findings could be extrapolated. In addition, the study was measuring two stimuli rather than just one, these being the new ballpark and the significant new use development at The Battery Atlanta, thus further compromising the applicability of the study findings to other locations.

Summary of Findings. The foregoing summaries indicate the literature is characterized by mixed findings regarding sports facility effects on property values, with property value changes comprising only one of many indicators typically linked with gentrification. Some studies find there is a positive effect on values while others find no significant effect. Where value increase effects were found, they generally appear to be relatively limited, although the magnitude is difficult to assess from the study findings. After discussing this aspect of their findings, most studies proceed to use the information to quantify potential municipal effects via growth in property taxes, with this growth often used to reflect on the value of public subsidies provided to support new sports facility development. Some of the studies conclude that there is an amenity effect associated with sports facilities, either in the area most proximate to the facility or citywide, but this effect is not borne out by all of the studies. Further, the one study reviewed that examined the anticipatory effect of new sports facilities following the public announcement of a planned location also had mixed results, with an upward effect noted on home sales prices in one instance but a decline noted in another. These findings, as with other study findings, may also be confounded by tax considerations, as the facilities under examination were both anticipated to be at least partially funded by through public taxation mechanisms, which could influence behavior and real estate markets. Of most relevance to questions or concerns about the Inglewood sports and entertainment venue, however, the studies do not explore the extent to which displacement does or does not occur as a result of property value changes, which again, is only one of many indicators linked to gentrification. Thus the studies do not lend any insight to the displacement-inducing effects of sports facilities such as the Inglewood sports and entertainment venue.

IV. CASE STUDY ANALYSIS

CHAPTER PURPOSE

This chapter examines two types of case study analyses. The first focuses on recent residential pricing in Inglewood, for the purpose of assessing if public concerns and comments that development and operation of the proposed IBEC will contribute to gentrification are supported by recent pricing trends. This is essentially examining whether recent pricing data indicate an anticipatory pricing effect, such as was probed in some of the academic literature reviewed in the prior study chapter. The second type of case study analysis includes examples of new sports arena development and the type of surrounding area land use changes that subsequently occurred, and assessing if there is any utility in examining development trends around other sports venues with regard to assessing whether or not they cause or contribute to displacement-inducing gentrification.

INGLEWOOD RESIDENTIAL PRICING TRENDS

In order to identify potential gentrification effects in Inglewood associated with the proposed IBEC, as well as other Inglewood land use changes, ALH Economics reviewed residential market pricing information generated by Zillow, an online real estate data provider. Zillow provides a time series of median asking rents and sales prices at the city and place level for counties across the U.S. The pricing analysis examines pricing trends in Inglewood compared to all other cities and places in Los Angeles County, and assesses the extent to which Inglewood pricing trends are or are not distinguished, especially relative to the June 2017 announcement of the pending Exclusive Negotiating Agreement (ENA) between the City of Inglewood and Murphy's Bowl LLC (the developer of the proposed IBEC project), as well as the rumblings in 2014 regarding possible NFL Stadium construction in Inglewood, which was approved by the City of Inglewood in February 2015 and approved by the NFL in January 2016. The purpose of this analysis is to assess if there would be a discernable anticipatory effect associated with these sports facility announcements. As 64% of Inglewood's housing units are renter-occupied, as noted earlier in the Demographics discussion, this is Inglewood's dominant residential real estate characteristic, and thus is discussed first.

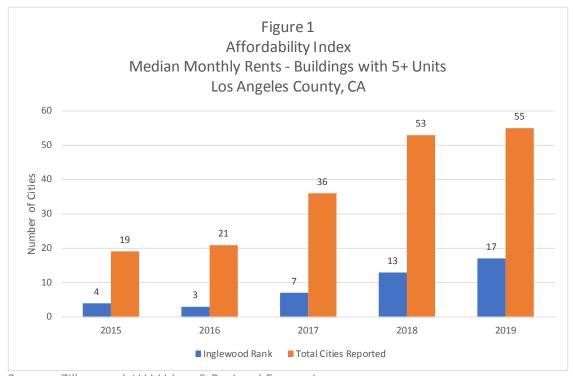
Apartment Rental Market

Zillow provides median asking apartment rents for a variety of building types, which are collected on a monthly basis. Because the data represent asking rents, they can vary month to month based on the age and quality of the units being marketed at a given time and may not necessarily reflect the actual rent for a particular unit. However, these time series data currently comprise the most comprehensive resource for apartment trend data. For this analysis, ALH Economics reviewed data reported for buildings containing five or more units. Among the categories reported by Zillow, this category is most analogous to the apartment rental market.

As Zillow's coverage of the Los Angeles County rental market has expanded, the number of cities and places for which it reports asking rent data has increased. Thus, for some cities, such as Inglewood, data are available back to 2013 or even earlier. By contrast, other cities like Calabasas and La Verne were not added to the database until early 2018. As of January 2015, Zillow reported rents for 19 cities and places in Los Angeles County. By January 2017, this count had increased to 36, and by January 2019, a total of 55 cities and places were reported. As a result, longer-term time series data are not available for some cities and places in Los Angeles County.

In its analysis, ALH Economics benchmarked the data from January to January of each year. As of January 2019, the reported median monthly asking rent ranged from \$1,400 in Lancaster to \$6,300 in Malibu, which is a high-side outlier. The next highest city reported is Manhattan Beach at \$3,995. Inglewood, with a reported median monthly asking rent of \$1,803 as of January 2019, is one of the more affordable locations in Los Angeles County.

For 2019, Inglewood ranks as 17th out of the 55 cities and places reported in terms of affordability (i.e., lower rental cost). While still in the lower third of the overall group, Inglewood's rank in terms of rental cost has increased over the past few years. Looking back at the four prior years, from 2015 to 2018, Inglewood was in the lower quartile in terms of apartment affordability. In other words, apartment rents in 75% or more of the Los Angeles County locations were higher. In 2019, that metric decreased to 69%. The relative positioning of Inglewood to the other cities and places reported in Los Angeles County is presented graphically in Figure 1.

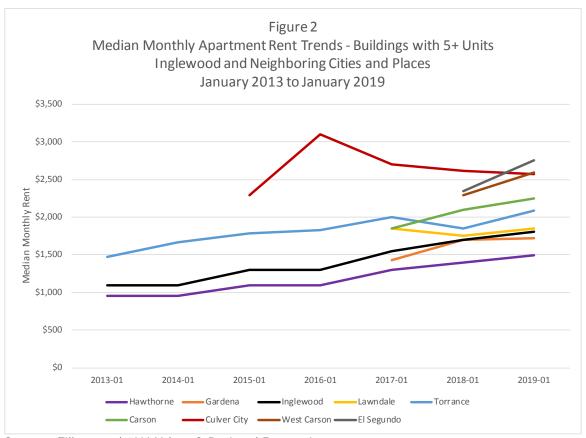


Sources: Zillow; and ALH Urban & Regional Economics.

As shown in Figure 2, in 2015, Inglewood was the fourth most affordable city in Los Angeles County, out of a total of 19 reported by Zillow. By 2019, Inglewood was the 17th most affordable city, out of a total of 55 cities and places reported. While the absolute rank increased, relative to the larger set of cities and places, the proportional increase is more muted. In 2015, 79% of the cities and places were more expensive than Inglewood. In 2019, this figure had decreased to 69%.

As with many markets in California, median rental rates have been increasing in Inglewood and other cities and places in Los Angeles County. Figure 2 illustrates the median rental rates reported for Inglewood and eight other nearby cities and places. As shown, rents have been generally increasing, with the exception being Culver City, which experienced a blip in January 2016. Closer examination of the data for Culver City indicates that there were three months where median asking rents exceeded

\$3,000 (January to March 2016). After March 2016, the median asking rent in Culver City declined to \$2,525, indicating that one or more particularly expensive rentals influenced the reported rent.



Sources: Zillow; and ALH Urban & Regional Economics.

Inglewood's reported asking median rents are higher than those in Hawthorne and Gardena, but lower than the six other nearby cities in places included in the Zillow dataset. El Segundo is the most expensive city with a reported median monthly rent of \$2,750. Hawthorne has the lowest reported median monthly rent at \$1,495.

Urgency Ordinance Imposing a Moratorium on Certain Residential Rent Increases in the City of Inglewood. On March 5, 2019, Mayor James T. Butts, Jr. introduced an emergency ordinance to impose a 45-day moratorium limiting rent increases to 5% per year on certain rental residential properties in Inglewood. This ordinance was adopted in March 2019 and subsequently extended in April 2019. The ordinance cited increasing rents in Inglewood, as well as across Los Angeles County, as one reason to enact the proposed rent increase moratorium. In introducing the ordinance, Mayor Butts stated: "Inflation-adjusted median rent in the County has also grown by nearly 25% between 2000-2012, while inflation-adjusted incomes have declined by 9%." Additionally, the ordinance text indicates that the "City Council's direction to study just cause eviction policy has created market uncertainty and concern

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⁶⁴ City of Inglewood, Office of Mayor James T. Butts, Jr., Memo to Inglewood City Council, Initiative to Adopt an Urgency Ordinance Imposing a Moratorium on Certain Residential Rent Increases in the City of Inglewood, March 5, 2019, Page 1.

among some landlords that if they do not increase rents now, they could face income and property value losses." Thus, the intent of this moratorium is focused on broader market changes over the past decade, as well as to head off possible actions of landlords in response to a potential City policy regarding evictions.

In June 2019, a permanent rent control ordinance was presented to the City Council, and the temporary urgency ordinance was further extended. As of July 2019, the City Council has not taken action on the permanent rent control ordinance, but the City continues to operate under the provisions of the urgency.

Rental Market Change Since IBEC Plans Announcement. The IBEC proposal was publicly announced in June 2017. Examining rental rate trends since the announcement, Inglewood is not the only city with significant rental increases. Of the 36 cities and places for which data are reported for both January 2017 and January 2019, 14, or 39%, experienced a two-year rental increase of 10% or greater. Table 2 summarizes these data.

Table 2. Cities and Places in Los Angeles County Median Asking Rental Rate Increase January 2017 to January 2019					
Two-Year Increase Greater than 10%		Two-Year Increase Greater than 15%			
Rancho Palos Verdes	10%	Hawthorne	15%		
Azusa	11%	Inglewood	16%		
Manhattan Beach	11%	Long Beach	16%		
South Pasadena	11%	3 Cities (8% of Total)			
Covina	12%	, ,			
Whittier	12%	Two-Year Increase Greater than 20%			
Burbank	13%	Gardena	21%		
Los Angeles	13%	Carson	22%		
8 Cities (39% of Total)		Lancaster	25%		
,		3 Cities (8% of Total)			
Total Reported: 36 Cities		· ,			

Sources: Zillow; and ALH Urban & Regional Economics.

Out of the 14 cities and places with two-year rental increases of 10% or more, eight had increases between 10% and 14%, while three had increases of 15% and 16%, and the remaining three had increases of 21% to 25%. Included in these groups are Inglewood at 16% and some of its neighboring cities, with Hawthorne at 15%, Gardena at 21%, and Carson at 22%.

The percentages indicated in Table 2 represent absolute monthly rent increases from \$168 (Azusa) to\$400 (Carson). Within this range, Inglewood was near the middle, with an absolute monthly rent increase of \$253. Of the 14 cities and places, seven had monthly rents lower than Inglewood as of January 2019 and six had higher rents, indicating that these increases were not just occurring in less expensive locations. In fact, some of the more expensive cities had greater absolute monthly rent increases than Inglewood, including Burbank (\$275), Rancho Palos Verdes (\$282), Los Angeles (\$297), Manhattan Beach (\$398), and Carson (\$400), again demonstrating that increasing rental rates is a region-wide issue and not a phenomenon particular to Inglewood.

⁶⁵ Interim Ordinance No.:__ ; An Interim Ordinance of the City Council of the City of Inglewood Adopting as an Urgency Measure a Temporary (45 Day) Moratorium on Certain Residential Rent Increases in the City of Inglewood to no More than 5% Effective Immediately. Page 1

Rental Market Change Since NFL Stadium Announcement. Considering the period starting when plans were approved for the NFL Stadium in early 2015, a second analysis reviewing the four-year rental increase indicates that two-thirds of the cities and places tracked from 2015 to 2019 (13 out of 19) experienced an overall median rent increase in excess of 15%. Table 3 summarizes these data.

Tabl	e 3. Cities and Places Median Asking Rent January 2015 to		
Four-Year Increase Greater than 1	15%	Four-Year Increase Greater than 25%	
Santa Clarita	15%	Pomona	26%
Glendale	16%	Whittier	27%
Torrance	17%	2 Cities (11% of Total)	
Rancho Palos Verdes	18%	·	
Los Angeles	22%	Four-Year Increase Greater than 30%	
Diamond Bar	24%	Bellflower	35%
6 Cities (32% of Total)		Burbank	35%
,		Hawthorne	37%
		Inglewood	39%
		Long Beach	39%
Total Reported: 19 Cities		5 Cities (26% of Total)	

Sources: Zillow; and ALH Urban & Regional Economics.

As shown in Table 3, six cities experienced a four-year rental increase between 15% and 24%, while two cities experienced a four-year increase between 25% and 30%. Over one-quarter of the group, comprising five cities, experienced a four-year increase in excess of 30%. These cities include Inglewood at 39%, as well as three other cities with similar increases, i.e., Long Beach at 39%, Hawthorne at 37%, and Bellflower and Burbank, both at 35%.

Similarly, the percentages indicated in Table 3 represent absolute monthly rent increases from \$265 (Santa Clarita)) to\$610 (Burbank). Within this range, Inglewood was in the upper half of the range with an absolute monthly rent increase of \$508. Of the 13 cities and places, five had monthly rents lower than Inglewood as of January 2019 and seven had higher rents, again indicating that these increases were not just occurring in less expensive locations.

Additionally, examination of the rental trends previously presented in Figure 2 from 2015 onward indicates that median rents in Inglewood did not spike in 2015. As Figure 2 shows, median rental rates in Inglewood exhibited little change from January 2015 to January 2016, increasing by only \$5 per month, similar to Torrance and Hawthorne. (The increase in the Torrance median rent was \$47.) As previously mentioned, Culver City experienced a blip in January 2016 that extended for a few months. Thus, there does not appear to be any specific or immediate market change associated with the NFL Stadium announcement.

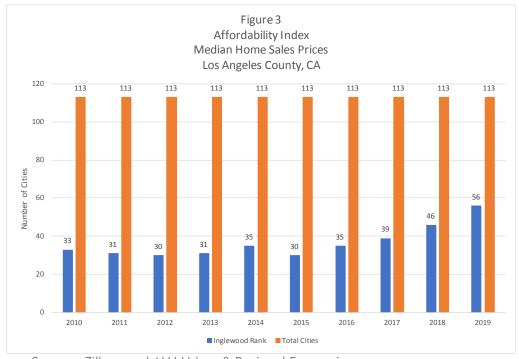
Thus again, the type of rental rate increases noted in Inglewood following announcement of the NFL Stadium did not occur in just Inglewood, with other cities both near and somewhat distant from Inglewood also experiencing comparable percentage increases.

For-Sale Market

Zillow's coverage of the Los Angeles County residential for-sale market has been deeper further back in time, in accordance with its roots as an online for-sale data company. In Los Angeles County, median home price data for 113 cities and places are available extending back to January 2010. As with the rental data, ALH Economics benchmarked the data from January to January of each year.

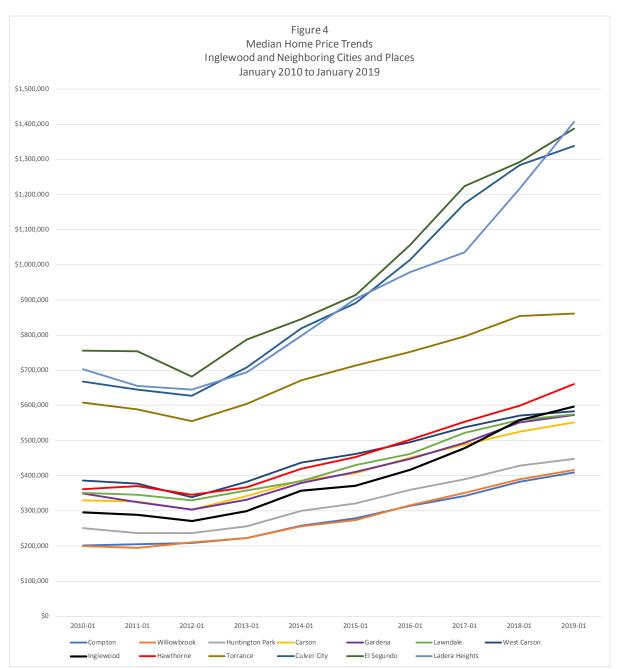
As of January 2019, the reported median sales price ranged from \$252,500 in Pearblossom to \$5,856,700 in Beverly Hills, which is a high-side outlier. The next highest city reported is Malibu at \$3,504,900. Inglewood, with a reported median home price of \$595,900 as of January 2019, is in the middle of the group for Los Angeles County.

For 2019, Inglewood ranks as 56th out of the 113 cities and places reported in terms of affordability (i.e., lower median home price). Inglewood's rank in terms of home price has increased over the past few years. Looking back at the 10-year period from 2010 to 2019, Inglewood's relative position shifted. From 2010 to 2016, Inglewood was in the lower third in terms of home prices. In other words, home prices in 67% or more of the sample were higher. That metric decreased in 2017 and 2018, ultimately declining to 50% in 2019. The relative positioning of Inglewood to the other cities and places reported in Los Angeles County for 2010 through 2019 is presented graphically in Figure 3.



Sources: Zillow; and ALH Urban & Regional Economics.

Home sales prices in Los Angeles County have been increasing since 2012, with some locations experiencing steeper increases in select years. These price increases coincide with the strengthening economy and increasing housing demand in the face of the general perception of a lack of housing supply region-wide. Figure 4 presents median home price trends for Inglewood and 12 neighboring cities and places, from less costly locations (Compton, Willowbrook, and Huntington Park) to more costly areas (Culver City, El Segundo, and Ladera Heights).

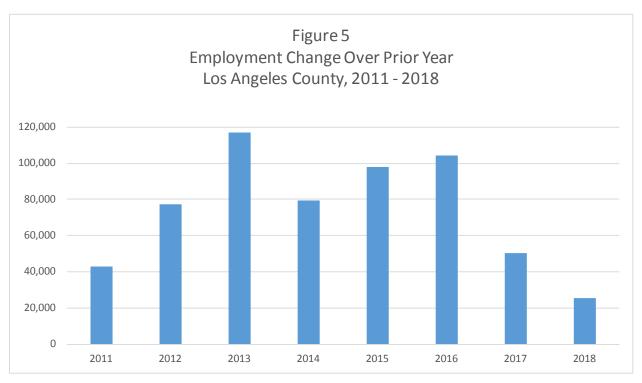


Sources: Zillow; and ALH Urban & Regional Economics.

The median home prices in the costlier cities (Culver City, El Segundo, and Ladera Heights) have increased by over \$700,000 since 2012. In fact, the median home prices in these cities have more than doubled (e.g., an increase of more than 100%). By contrast, the remaining cities and places have had median home prices increase by \$200,000 to \$325,000 since 2012. These changes also reflect substantial increases of 75% or more since 2012, with many approaching or exceeding a 100% increase.

Residential Pricing Effect Conclusions

The residential pricing data indicate that both median rents and sales prices have been increasing in Los Angeles County's cities and places. These increases coincide with the strengthening economy countywide and increasing housing demand resulting from the lack of housing supply region-wide. The strengthening economy is illustrated in Figure 5, which depicts the change in annual change in employment in Los Angeles County between 2011 and 2018, fueling housing demand.



Sources: California Employment Development Department Labor Market Information; and ALH Urban & Regional Economics.

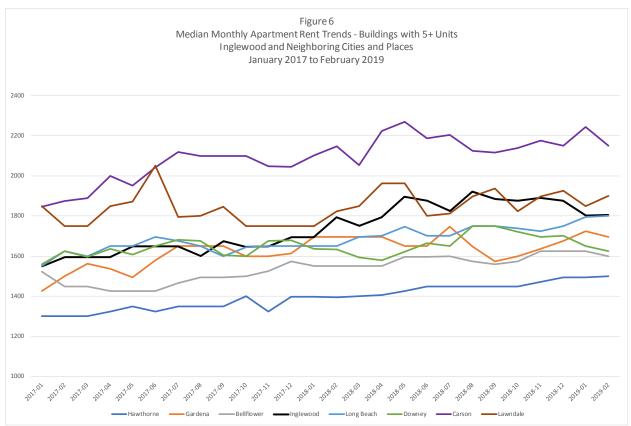
As shown, Los Angeles County added 77,000 jobs in 2012, more than the prior year addition of 42,700 jobs. The year with the most growth in terms of total number of jobs added was 2013, with 117,000 jobs. The second-highest year in terms of job growth was 2016, with over 104,000 jobs added. Over the four-year period 2013 through 2016, nearly 400,000 jobs were added in Los Angeles County, for a 9% increase over the 2012 job base of 4.38 million jobs. Over this time period, the unemployment rate in Los Angeles County declined from a high of 12.5% in 2010 down to 4.7% in 2018.⁶⁶

Since the announcement of the IBEC in June 2017, both apartment rents and home sales prices increased in Inglewood, but they also increased in the surrounding communities as well. Figure 6 shows

Inglewood Sports Venue Displacement Study

⁶⁶ See https://www.labormarketinfo.edd.ca.gov/data/industry-employment-and-unemployment-rates-for-counties.html, accessed April 8, 2019.

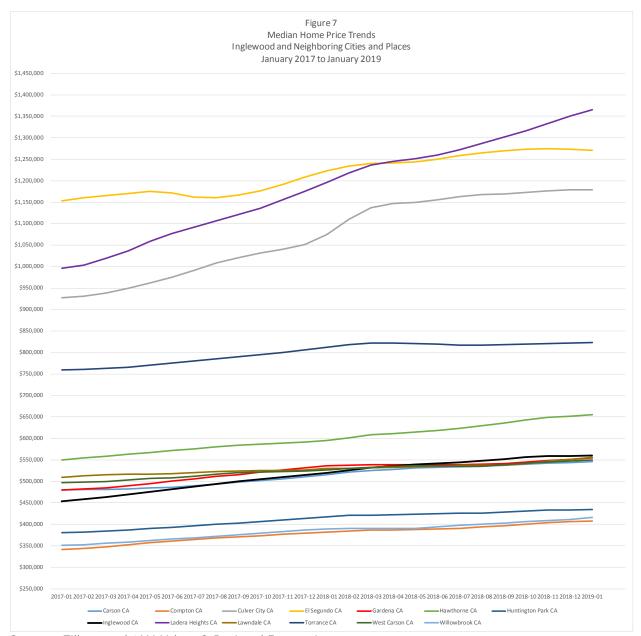
the monthly rent trends in Inglewood and in seven nearby cities and places from January 2017 to February 2019.



Sources: Zillow; and ALH Urban & Regional Economics.

As shown, Inglewood did not experience a spike in median rents immediately after the June 2017 IBEC proposal announcement. While rents did trend upwards in 2018 compared to neighboring areas, this increase started in 2019 and essentially increased at the same level as in early 2018.

Similarly, the change in median home prices in Inglewood did not spike after the IBEC proposal announcement, as shown in Figure 7, which illustrates the monthly trend in median home prices for Inglewood and 12 other nearby cities and places from January 2017 to January 2019. As shown, there is a group of three communities that have lower median prices than Inglewood, and four cities or places that are more expensive – from moderately to significantly more expensive. Inglewood is in a group with five other cities and places that are somewhat similarly priced. Although Inglewood starts 2017 at the lower end of the group, it ends up with similar median prices as with four other cities in January 2019. These four are Carson, West Carson, Gardena, and Lawndale.



Sources: Zillow; and ALH Urban & Regional Economics.

Extending the time frame considered back to early 2015 when the NFL Stadium was approved, two figures previously presented, Figure 2 for the rental market and Figure 4 for the for-sale market, both indicate that Inglewood's median rents and median home prices do not exhibit a significantly larger spike relative to neighboring cities. Especially in the year after the announcement of the NFL Stadium project, the change in median rents and median home prices were in range of those in nearby cities.

Based on the residential pricing trend data reviewed herein, ALH Economics believes it is difficult to attribute the increases in median rents and home prices in Inglewood to the proposed IBEC or the NFL Stadium. Inglewood, as well as many Los Angeles County cities and places, has been experiencing rising median rents and prices. The county has a strong economy and housing costs in higher cost cities

and places have become even more costly, shifting demand to well-located close-in cities and places with relatively lower housing costs, as well as to more far-flung locations.

SPORTS VENUE CASE STUDIES

ALH Economics looked to examples of communities with new sports arenas to determine the extent to which surrounding area land use changes do or do not exemplify gentrification or displacement associated with these venues. This entailed research into new NBA and NHL arenas constructed over the past 10+ years in order to identify arena developments and situations as similar as possible to the proposed Inglewood arena complex site, which is being entirely privately funded and developed. Some of these arenas include the following:

- Fiserv Forum, Milwaukee, WI, completed in 2018
- Golden 1 Center, Sacramento, CA, completed in 2016
- Little Caesars Arena, Detroit, MI, completed in 2017
- Barclays Center, Brooklyn, NY, completed in 2012
- PPG Paints Arena, Pittsburgh, PA, completed in 2010.
- T-Mobile Arena, Paradise, NV, completed in 2016
- Chase Center, San Francisco, under construction

The research indicated that the number of new sports arenas located in areas comparable to the Inglewood arena complex is limited. Only two of the nine United States sports arenas constructed or commencing construction since 2005 are privately-owned (e.g., T-Mobile Arena and Chase Center). All others are owned by a city (or city/county/state agency) or a government development corporation or authority. Moreover, land use pattern changes varied or are still evolving, such that examination of these sports venues did not result in any meaningful gentrification- or displacement-related findings. Thus, examination of development trends around other sports venues appears to have limited utility with regard to assessing whether or not they cause or contribute to gentrification and displacement, and is not a useful medium to assessing the extent to which area land use changes surrounding sports venues do or do not exemplify gentrification and displacement.

V. CONCLUSION

In considering the potential for gentrification and displacement effects associated with the IBEC, it is important to note that a series of land use changes have been occurring in Inglewood, set in motion as much as 10 years ago in 2009 when the Hollywood Park Specific Plan was approved by the City of Inglewood. Other changes during this span of time include approval and construction of two LA Metro stations in Inglewood, the formation of the Downtown and Fairview Heights Transit Oriented Development plan areas to encourage and support transit-oriented development, and the approval and construction of the NFL Stadium. Some of these changes, especially the approval of the HPSP and Transit Oriented Development plan areas, are indicative of city expectations and desires for growth and new development.

The gentrification and displacement literature does not establish whether development of a major league sports arena would cause or contribute to gentrification or displacement. These are unanswered questions, in part because the ability to isolate these effects in many U.S. cities can be especially difficult, as there are many locations where government-owned or financed sports facilities are the centerpiece of a broader effort to revitalize the surrounding area. Research studies more typically probe the impacts of other forms of public investment or stimulus, such as transit infrastructure, with mixed findings.

Residential prices are often considered one indicator of gentrification. Residential prices in Inglewood indicate that since the approval of the NFL Stadium in February 2015 and the announcement of the IBEC proposal in June 2017, both apartment rents and home sales prices increased in Inglewood. However, they increased in the surrounding communities as well. Moreover, it appears that Inglewood did not experience a spike in median rents or median home prices immediately after both the February 2015 NFL Stadium approval and the June 2017 IBEC proposal announcements. Instead, noted increases in Inglewood and other cities with high price increases coincide with the strengthening regional, statewide, and national economy, and increasing housing demand resulting from the general perception of a lack of housing supply region-wide, especially affordable housing. This suggests that independent of other trends affecting pricing, the anticipatory pricing effect explored in some of the literature did not appear to occur in Inglewood. Consequently, it cannot be determined if recent increases in median rents and home prices in Inglewood resulted from any factors unique to Inglewood, including stimuli such as the development of the Crenshaw/LAX line, the NFL Stadium, or the proposed IBEC, or if pricing changes are instead driven by other housing market and general economic factors.

In conclusion, based on the study's research and analysis, literature review, empirical data, and case study analysis, this study finds that there is not a sufficient basis to link a sports and entertainment arena in Inglewood like the IBEC to the process of gentrification, or to the indirect effect of displacing a substantial number of residents resulting in the need for the construction of replacement housing.

ASSUMPTIONS AND GENERAL LIMITING CONDITIONS

ALH Urban & Regional Economics has made extensive efforts to confirm the accuracy and timeliness of the information contained in this study. Such information was compiled from a variety of sources, including interviews with government officials, review of City and County documents, and other third parties deemed to be reliable. Although ALH Urban & Regional Economics believes all information in this study is correct, it does not warrant the accuracy of such information and assumes no responsibility for inaccuracies in the information by third parties. We have no responsibility to update this report for events and circumstances occurring after the date of this report. Further, no guarantee is made as to the possible effect on development of present or future federal, state, or local legislation, including any regarding environmental or ecological matters.

The accompanying projections and analyses are based on estimates and assumptions developed in connection with the study. In turn, these assumptions, and their relation to the projections, were developed using currently available economic data and other relevant information. It is the nature of forecasting, however, that some assumptions may not materialize, and unanticipated events and circumstances may occur. Therefore, actual results achieved during the projection period will likely vary from the projections, and some of the variations may be material to the conclusions of the analysis.

Contractual obligations do not include access to or ownership transfer of any electronic data processing files, programs or models completed directly for or as by-products of this research effort, unless explicitly so agreed as part of the contract.

APPENDIX A: DEMOGRAPHIC EXHIBITS

Exhibit 1. Population Ethnicity and Age Distribution City of Inglewood 2017

Population Characteristic	Number	Percent
Total Population	110,611	100.0%
Ethnicity		
Hispanic or Latino	56,999	51.5%
Mexican	44,081	39.9%
All Other Hispanic or Latino	12,918	11.7%
Not Hispanic or Latino	53,612	48.5%
Black or African American alone	44,152	39.9%
White alone	2,994	2.7%
Asian alone	2,236	2.0%
Native Hawaiian and Other Pacific Islander alon	2,140	1.9%
Two or more races	1,237	1.1%
American Indian and Alaska Native alone	762	0.7%
Some other race alone	91	0.1%
Age Distribution		
Total population	110,611	100.0%
Under 5 years	8,584	7.8%
5 to 9 years	7,434	6.7%
10 to 14 years	7,255	6.6%
15 to 19 years	6,424	5.8%
20 to 24 years	6,415	5.8%
25 to 34 years	17,576	15.9%
35 to 44 years	15,328	13.9%
45 to 54 years	14,463	13.1%
55 to 59 years	5,905	5.3%
60 to 64 years	6,017	5.4%
65 to 74 years	7,848	7.1%
75 to 84 years	5,850	5.3%
85 years and over	1,512	1.4%
Median age (years)	37	NA

Sources: US Census, American Community Survey (ACS), "Table DP05: Demographic and Housing Estimates", 2017 American Community Survey 1-Year Estimates; and ALH Urban & Regional Economics.

Exhibit 2. Population Educational Attainment City of Inglewood 2017

	All Pop	ulation	Male Po	Male Population		Female Population	
Population Age and Educational Attainment	Number	Percent	Number	Percent	Number	Percent	
Educational Attainment by Age							
Population 18 to 24 years	9.469	100.0%	4,646	100.0%	4,823	100.0%	
Less than high school graduate	1,589	16.8%	1,315	28.3%	274	5.7%	
High school graduate (includes equivalency)	2,760	29.1%	1,196	25.7%	1,564	32.4%	
Some college or associate's degree	4,465	47.2%	2,054	44.2%	2,411	50.0%	
Bachelor's degree or higher	655	6.9%	81	1.7%	574	11.9%	
Population 25 years and over	74,499	100.0%	36,269	100.0%	38,230	100.0%	
Less than 9th grade	10,297	13.8%	5,115	14.1%	5,182	13.6%	
9th to 12th grade, no diploma	5,928	8.0%	3,298	9.1%	2,630	6.9%	
High school graduate (includes equivalency)	17,412	23.4%	9,601	26.5%	7,811	20.4%	
Some college, no degree	20,205	27.1%	8,992	24.8%	11,213	29.3%	
Associate's degree	5,395	7.2%	2,566	7.1%	2,829	7.4%	
Bachelor's degree	10,148	13.6%	5,058	13.9%	5,090	13.3%	
Graduate or professional degree	5,114	6.9%	1,639	4.5%	3,475	9.1%	
High school graduate or higher	58,274	78.2%	27,856	76.8%	30,418	79.6%	
Bachelor's degree or higher	15,262	20.5%	6,697	18.5%	8,565	22.4%	
Population 25 to 34 years	17,576		9,052		8,524		
High school graduate or higher	16,125	91.7%	8,127	89.8%	7,998	93.8%	
Bachelor's degree or higher	3,973	22.6%	1,377	15.2%	2,596	30.5%	
Population 35 to 44 years	15,328		7,463		7,865		
High school graduate or higher	12,873	84.0%	6,293	84.3%	6,580	83.7%	
Bachelor's degree or higher	3,198	20.9%	1,243	16.7%	1,955	24.9%	
Population 45 to 64 years	26,385		12,899		13,486		
High school graduate or higher	18,483	70.1%	8,540	66.2%	9,943	73.7%	
Bachelor's degree or higher	5,029	19.1%	2,717	21.1%	2,312	17.1%	
Population 65 years and over	15,210		6,855		8,355		
High school graduate or higher	10,793	71.0%	4,896	71.4%	5,897	70.6%	
Bachelor's degree or higher	3,062	20.1%	1,360	19.8%	1,702	20.4%	
Poverty Rate for the Population 25 Years and Ove							
Less than high school graduate	NA	26.9%	NA	22.7%	NA	31.4%	
High school graduate (includes equivalency)	NA	19.8%	NA	14.5%	NA	26.3%	
Some college or associate's degree	NA	13.0%	NA	12.1%	NA	13.8%	
Bachelor's degree or higher	NA	9.1%	NA	11.7%	NA	7.1%	
Median Earnings in the Past 12 Months (in 2017 In	nflation-Ad	justed Dolla	rs)				
Population 25 years and over with earnings	31,758	NA	31,377	NA	32,092	NA	
Less than high school graduate	\$25,867	NA	\$27,614	NA	\$17,515	NA	
High school graduate (includes equivalency)	\$24,156	NA	\$24,808	NA	\$23,313	NA	
Some college or associate's degree	\$35,044	NA	\$36,316	NA	\$32,046	NA	
Bachelor's degree or higher	\$45,866	NA	\$42,132	NA	\$47,070	NA	
Graduate or professional degree	\$78,606	NA	\$97,419	NA	\$76,686	NA	

Sources: US Census, American Community Survey (ACS), "Table S1501: Educational Attainment", 2017 American Community Survey 1-Year Estimates; and ALH Urban & Regional Economics.

Exhibit 3. Housing Unit Count by Year Built City of Inglewood 2017

		Pecentage				
Year Built	Number	Period	Cumulative			
1939 or earlier	8,357	22.0%	22.0%			
1940 to 1949	7,805	20.5%	42.5%			
1950 to 1959	5,720	15.0%	57.5%			
1960 to 1969	5,523	14.5%	72.1%			
1970 to 1979	3,954	10.4%	82.5%			
1980 to 1989	3,326	8.7%	91.2%			
1990 to 1999	1,617	4.3%	95.5%			
2000 to 2009	1,325	3.5%	98.9%			
2010 to 2013	402	1.1%	100.0%			
2014 or later	0	0.0%	100.0%			
Total	38,029	100.0%	100.0%			

Sources: US Census, American Community Survey (ACS), "Table B25034: Year Structure Built", 2017 American Community Survey 1-Year Estimates; and ALH Urban & Regional Economics.

Exhibit 4. Average Household Size, Units in Structure by Tenure, and Year Householder Moved City of Inglewood 2017

	All Occupied Owner-Occupied		ccupied	Renter-O	ccupied	
Housing Characteristic	Number	Percent	Number	Percent	Number	Percent
Total	35,788	100.0%	12,878	36.0%	22,910	64.0%
Average Household Size	3.04	NA	3.20	NA	2.95	NA
Units in Structure						
1, detached	14,249	39.8%	10,142	78.8%	4,107	17.9%
1, attached	1,957	5.5%	850	6.6%	1,107	4.8%
2	1,136	3.2%	115	0.9%	1,021	4.5%
3 or 4	3,694	10.3%	463	3.6%	3,231	14.1%
5 to 9	5,331	14.9%	248	1.9%	5,083	22.2%
10 to 19	3,734	10.4%	562	4.4%	3,172	13.8%
20 to 49	3,139	8.8%	330	2.6%	2,809	12.3%
50 or more	2,341	6.5%	119	0.9%	2,222	9.7%
Mobile home	207	0.6%	49	0.4%	158	0.7%
Boat, RV, van, etc.	0	0.0%	0	0.0%	0	
Total	35,788	100.0%	12,878	100.0%	22,910	100.0%
By Year Householder Moved In						
2015 or later	7,328	20.5%	326	2.5%	7,002	30.6%
2010 to 2014	9,777	27.3%	1,781	13.8%	7,996	34.9%
2000 to 2009	8,945	25.0%	4,042	31.4%	4,903	21.4%
1990 to 1999	4,140	11.6%	2,244	17.4%	1,896	8.3%
980 to 1989	3,423	9.6%	2,493	19.4%	930	4.1%
Moved in 1979 or earlier	2,175	6.1%	1,992	15.5%	183	0.8%
Total	35,788	100.0%	12,878	100.0%	22,910	100.0%
Median	2009	NA	1999	NA	2012	NA

Sources: US Census, American Community Survey (ACS), "Table B25032: Tenure by Units in Structure", "Table B25038: Tenure by Year Householder Moved Into Unit", and "Table B25039: Median Year Householder Moved Into Unit by Tenure", 2017 American Community Survey 1-Year Estimates; and ALH Urban & Regional Economics.

Exhibit 5. Households by Income and Housing Costs City of Inglewood 2017

Household Income and Housing Costs Number Percent N		All Hous	seholds	Ow	ner-	Rer	iter-
Less than \$5,000	Household Income and Housing Costs						
Less than \$5,000	Occupied Housing Units	35,788	100.0%	12,878	100.0%	22,910	100.0%
Less than \$5,000	Household Income in the Past 12 Months (in 20	17 Inflation-	Δdiustad	l Dollare)			
\$5,000 to \$9,999					2 70/	764	3.3%
\$10,000 to \$14,999		,					
\$15,000 to \$19,999							2.6%
\$20,000 to \$24,999							7.5%
\$25,000 to \$34,999				_			9.2%
\$\$5,000 to \$49,999							6.8%
\$50,000 to \$74,999							11.6%
\$75,000 to \$99,999							18.5%
\$100,000 to \$149,999	· /						18.7%
\$150,000 or more 2,780 7,8% 1,751 13,6% 1,029 Median household income (dollars) \$51,456 NA \$74,711 NA \$40,978 Monthly Housing Costs	\$75,000 to \$99,999	4,505		1,835		2,670	11.7%
Median household income (dollars) \$51,456 NA \$74,711 NA \$40,978 Monthly Housing Costs Less than \$300 793 2.2% 274 2.1% 519 \$300 to \$499 1,932 5.4% 1360 10.6% 572 \$500 to \$799 2,641 7.4% 1224 9.5% 1,417 \$800 to \$999 3,683 10.3% 377 2.9% 3,306 f 1 \$1,000 to \$1,499 12,585 35.2% 2224 17.3% 10,361 d 4 \$1,500 to \$1,999 7,616 d 21.3% 2397 ft.8.6% 5,219 d 2 \$2,500 to \$2,999 1,517 d 4.2% 1517 ft.7 11.78 0 \$2,500 to \$2,999 1,517 d 4.2% 1517 ft.7 11.8% 0 \$2,500 to \$2,999 1,517 d 4.2% 1517 ft.7 11.8% 0 \$2,500 to \$2,499 3,746 loss 3.2% 937 d 7.3% 219 No cash rent 119 os 3.2% 937 d <t< td=""><td>\$100,000 to \$149,999</td><td>4,151</td><td>11.6%</td><td>2,831</td><td>22.0%</td><td>1,320</td><td>5.8%</td></t<>	\$100,000 to \$149,999	4,151	11.6%	2,831	22.0%	1,320	5.8%
Monthly Housing Costs Less than \$300 793 2.2% 274 2.1% 519 \$300 to \$499 1,932 5.4% 1360 10.6% 572 \$500 to \$799 2,641 7.4% 1224 9.5% 1,417 \$800 to \$999 3,683 10.3% 377 2.9% 3,306 1 \$1,500 to \$1,999 12,585 35.2% 2224 17.3% 10,361 4 \$1,500 to \$1,999 7,616 21.3% 2397 18.6% 5,219 2 \$2,000 to \$2,499 3,746 10.5% 2568 19.9% 1,178 \$2,500 to \$2,999 1,517 4.2% 1517 11.8% 0 \$3,000 or more 1,156 3.2% 937 7.3% 219 No cash rent 119 0.3% NA NA 119 Median Share of Household Income, Annually 31.5% NA 27.3% NA 36.9% Less than 20% 0 0.0% 0 0.0% 0	\$150,000 or more	2,780	7.8%	1,751	13.6%	1,029	4.5%
Less than \$300	Median household income (dollars)	\$51,456	NA	\$74,711	NA	\$40,978	NA
Less than \$300	Monthly Housing Costs						
\$300 to \$499		793	2.2%	274	2.1%	519	2.3%
\$500 to \$799	·						2.5%
\$800 to \$999							6.2%
\$1,000 to \$1,499							14.4%
\$1,500 to \$1,999							45.2%
\$2,000 to \$2,499							
\$2,500 to \$2,999							22.8%
\$3,000 or more		,					5.1%
No cash rent 119 0.3% NA NA 119 Median (dollars) \$1,350 NA \$1,702 NA \$1,260 Median Share of Household Income, Annually 31.5% NA 27.3% NA 36.9% Monthly Housing Costs as a Percentage of Household Income in the Past 12 Months Less than \$20,000 5,665 15.8% 1,041 8.1% 4,624 2 Less than 20% 0 0.0% 0 0.0% 0 0.0% 0 20 to 29% 486 1.4% 244 1.9% 242 30% or more 5,179 14.5% 797 6.2% 4,382 4,200 1 1.260 9.8% 4,200 1 1.260 9.8% 4,200 1 1.260 9.8% 4,200 1 1.260 9.8% 4,200 1 1.260 9.8% 4,200 1 1.260 9.8% 4,200 1 1.260 9.8% 4,200 1 1.260 9.8% 4,200 1 1.260 9.8%<						-	
Median (dollars) \$1,350 NA \$1,702 NA \$1,260 Median Share of Household Income, Annually 31.5% NA 27.3% NA 36.9% Monthly Housing Costs as a Percentage of Household Income in the Past 12 Months Less than \$20,000 5,665 15.8% 1,041 8.1% 4,624 2 Less than \$20,000 5,665 15.8% 1,041 8.1% 4,624 2 Less than 20% 0 0.0% 0 0.0% 0 </td <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td>1.0%</td>							1.0%
Median Share of Household Income, Annually 31.5% NA 27.3% NA 36.9% Monthly Housing Costs as a Percentage of Household Income in the Past 12 Months Less than \$20,000 5,665 15.8% 1,041 8.1% 4,624 2 Less than 20% 0 0.0% 0 0.0% 0 0.0% 0 0.0% 0 0 0.0% 0 <t< td=""><td>No cash rent</td><td>119</td><td>0.3%</td><td>NA</td><td>NA</td><td>119</td><td>0.5%</td></t<>	No cash rent	119	0.3%	NA	NA	119	0.5%
Monthly Housing Costs as a Percentage of Household Income in the Past 12 Months Less than \$20,000 5,665 15.8% 1,041 8.1% 4,624 2 Less than 20% 0 0.0% 0 0.0% 0 <t< td=""><td>Median (dollars)</td><td>\$1,350</td><td>NA</td><td>\$1,702</td><td>NA</td><td>\$1,260</td><td>NA</td></t<>	Median (dollars)	\$1,350	NA	\$1,702	NA	\$1,260	NA
Less than \$20,000 5,665 15.8% 1,041 8.1% 4,624 2 Less than 20% 0 0.0% 0 0.0% 0	Median Share of Household Income, Annually	31.5%	NA	27.3%	NA	36.9%	NA
Less than \$20,000 5,665 15.8% 1,041 8.1% 4,624 2 Less than 20% 0 0.0% 0 0.0% 0	Monthly Housing Costs as a Percentage of House	sehold Inco	me in the	Past 12 Months			
20 to 29%					8.1%	4,624	20.2%
30% or more 5,179 14.5% 797 6.2% 4,382 \$20,000 to \$34,999 5,460 15.3% 1,260 9.8% 4,200 1 Less than 20% 460 1.3% 377 2.9% 83 20 to 29% 226 0.6% 41 0.3% 185 30% or more 4,774 13.3% 842 6.5% 3,932 \$35,000 to \$49,999 5,537 15.5% 1,299 10.1% 4,238 1 Less than 20% 508 1.4% 309 2.4% 199 20 to 29% 962 2.7% 171 1.3% 791 30% or more 4,067 11.4% 819 6.4% 3,248 \$50,000 to \$74,999 7,070 19.8% 2,778 21.6% 4,292 1 Less than 20% 1,198 3.3% 894 6.9% 304 20 to 29% 2,894 8.1% 533 4.1% 2,361 30% or more 11,436 32.0% 6,417 49.8% 5,019 2 \$575,000 or more	Less than 20%	0	0.0%	0	0.0%	0	0.0%
\$20,000 to \$34,999	20 to 29%	486	1.4%	244	1.9%	242	1.1%
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Zero or negative income 501 1.4% 83 0.6% 418							1.8%
							0.5%

Sources: US Census, American Community Survey (ACS), "Table S2503: Financial Characteristics", 2017 American Community Survey 1-Year Estimates; and ALH Urban & Regional Economics.

Exhibit 6. Occupation for Civilian Employed Population 16 Years and Over City of Inglewood 2017

Occupation	Number	Percent
Total	52,220	100.0%
Management, Business, Science, and Arts	12,810	24.5%
Management, business, and financial	5,523	10.6%
Management	4,192	8.0%
Business and financial operations	1,331	2.5%
Computer, engineering, and science	1,104	2.1%
Computer and mathematical	628	1.2%
Architecture and engineering	476	0.9%
Life, physical, and social science	0	0.0%
Education, legal, community service, arts, and media	5,037	9.6%
Community and social services	1,329	2.5%
Legal	266	0.5%
Education, training, and library	2,371	4.5%
Arts, design, entertainment, sports, and media	1,071	2.1%
Healthcare practitioner and technical	1,146	2.2%
Health diagnosing and treating practitioners and other technical	578	1.1%
Health technologists and technicians	568	1.1%
Service	13,298	25.5%
Healthcare support	1,012	1.9%
Protective service	1,771	3.4%
Fire fighting and prevention, and other protective service workers including supervisors	1,485	2.8%
Law enforcement workers including supervisors	286	0.5%
Food preparation and serving related	3,402	6.5%
Building and grounds cleaning and maintenance	4,167	8.0%
Personal care and service	2,946	5.6%
Sales and Office	15,441	29.6%
Sales and related	5,609	10.7%
Office and administrative support	9,832	18.8%
Office and administrative support	9,032	10.076
Natural Resources, Construction, and Maintenance	4,128	7.9%
Farming, fishing, and forestry	0	0.0%
Construction and extraction	2,843	5.4%
Installation, maintenance, and repair	1,285	2.5%
Production, Transportation, and Material Moving	6,543	12.5%
Production	2,653	5.1%
Transportation	2,084	4.0%
Material moving	1,806	3.5%
material moving	1,000	0.070

Sources: US Census, American Community Survey (ACS), "Table S2401: Occupation by Sex for the Civilian Employed Population 16 Years and Over", 2017 American Community Survey 1-Year Estimates; and ALH Urban & Regional Economics.

Exhibit 7. Civilian Employed Population 16 Years and Over by Industry City of Inglewood 2017

Industry	Number	Percent
Total	52,220	100.0%
Agriculture, Forestry, Fishing and Hunting, and Mining Agriculture, forestry, fishing and hunting Mining, quarrying, and oil and gas extraction	39 39 0	0.1% 0.1% 0.0%
Construction	2,820	5.4%
Manufacturing	3,432	6.6%
Wholesale Trade	691	1.3%
Retail Trade	6,539	12.5%
Transportation and Warehousing, and Utilities Transportation and warehousing Utilities	4,205 3,891 314	8.1% 7.5% 0.6%
Information	2,224	4.3%
Finance and Insurance, and Real Estate and Rental and Leasing Finance and insurance Real estate and rental and leasing	2,612 1,824 788	5.0% 3.5% 1.5%
Professional, Scientific, and Management, and Administrative and Waste Management Services Professional, scientific, and technical services Management of companies and enterprises Administrative and support and waste management services	es 6,098 1,244 0 4,854	11.7% 2.4% 0.0% 9.3%
Educational Services, and Health Care and Social Assistance Educational services Health care and social assistance	11,145 4,017 7,128	21.3% 7.7% 13.6%
Arts, Entertainment, and Recreation, and Accommodation and Food Services Arts, entertainment, and recreation Accommodation and food services	6,740 1,117 5,623	12.9% 2.1% 10.8%
Other Services, except Public Administration	3,407	6.5%
Public Administration	2,268	4.3%

Sources: US Census, American Community Survey (ACS), "Table S2403: Industry by Sex for the Civilian Employed Population 16 Years and Over", 2017 American Community Survey 1-Year Estimates; and ALH Urban & Regional Economics.

APPENDIX B: GENTRIFICATION AND DISPLACEMENT LITERATURE OVERVIEW

IDENTIFIED REPRESENTATIVE LITERATURE

ALH Economics reviewed numerous papers or articles that address gentrification and residential displacement. While there are many papers or articles that are germane to the question of the relationship between the two phenomena, ALH Economics identified 13 that provide a solid overview and analysis of the subject by leading experts in the field as well as a representative sampling and discussion of other papers and associated commentaries. In some cases, the most relevant portion of the paper is the literature review, as this portion summarizes numerous other studies that also grapple with the question of the relationship between gentrification and displacement. In order of publication date, the specific papers reviewed for this purpose (and document links), include the following:

- Lance Freeman and Frank Braconi, "Gentrification and Displacement: New York City in the 1990s", American Planning Association. Journal of the American Planning Association; Winter 2004; 70, 1; ProQuest Direct Complete, page 39. http://www.astudentoftherealestategame.com/wpcontent/uploads/2010/09/Freeman%2520and%2520Braconi%25202004%2520Gent rification%2520in%2520NY.pdf
- Terra McKinnish, Randall Walsh, Kirk White. "Who Gentrifies Low-Income Neighborhoods?" National Bureau of Economic Research Working Paper 1403 (May 2008). http://www.nber.org/papers/w14036
- Ingrid Gould Ellen, Katherine M. O'Regan, "How Low Income Neighborhoods Change: Entry, Exit, and Enhancement," Regional Science and Urban Economics, Volume 41, Issue 2 (March 2011). http://www.sciencedirect.com/science/article/pii/S0166046211000044 (abstract)
- Silva Mathema, "Gentrification: An Updated Literature Review," Poverty & Race Research Action Council (October 2013). http://prrac.org/pdf/Gentrification_literature_review_-_October_2013.pdf
- Harvard University, Kennedy School of Government, Shorenstein Center on Media Politics and Public Policy, "Gentrification, Urban Displacement and Affordable Housing: Overview and Research Roundup," (August 2014). http://journalistsresource.org/studies/economics/real-estate/gentrification-urbandisplacement-affordable-housing-overview-research-roundup
- 6. Joe Cortright, "How Governing got it wrong: The problem with confusing gentrification and displacement," Cityobservatory.org Commentary (June 2, 2015). http://cityobservatory.org/how-governing-got-it-wrong-the-problem-with-confusing-gentrification-and-displacement/ [comments on Governing Magazine, "The 'G' Word: A Special Series on Gentrification" (February 2015) http://www.governing.com/topics/urban/gov-gentrification-series.html]

- 7. Richard Florida, "The Complicated Link Between Gentrification and Displacement," Citylab (Atlantic Magazine), September 8, 2015. http://www.citylab.com/housing/2015/09/the-complicated-link-between-gentrification-and-displacement/404161/
- 8. University of California, Berkeley, "Urban Displacement Project," (funded by the U.S. Department of Housing and Urban Development for the Bay Area Regional Prosperity Plan and the California Air Resources Board) (December 2015). http://www.urbandisplacement.org/sites/default/files/images/urban_displacement_project_-_executive_summary.pdf
- Miriam Zuk, Karen Chapple, "Housing Production, Filtering and Displacement: Untangling the Relationships," University of California, Berkeley, Institute of Governmental Studies Research Brief (May 2016). http://www.urbandisplacement.org/sites/default/files/images/udp_research_brief_052 316.pdf
- 10. Lei Ding, Jackelyn Hwang, Eileen Divringi, "Gentrification and Residential Mobility in Philadelphia," Discussion Paper: Federal Reserve Bank of Philadelphia, (September 2016). https://www.philadelphiafed.org//media/communitydevelopment/publications/discuss ion-papers/discussion-paper gentrification-and-residential-mobility.pdf?la=en
- 11. Derek Hyra, "Commentary: Causes and Consequences of Gentrification and the Future of Equitable Development Policy," Cityscape, Volume 18, Number 3, Office of Policy Development and Research, U.S. Department of Housing and Urban Development, pp. 169-177 (November 2016). https://www.huduser.gov/portal/periodicals/cityscpe/vol18num3/index.html
- 12. Karen Chapple, Paul Waddell and Daniel Chatman, with Miriam Zuk, "Developing a New Methodology for Analyzing Potential Displacement," April 26, 2107. https://ww3.arb.ca.gov/research/apr/past/13-310.pdf
- 13. Miriam Zuk, Ariel H. Bierbaum, Karen Chapple, Karolina Gorska, and Anastasia Loukaitou-Sideris, "Gentrification, Displacement, and the Role of Public Investment," Published in Journal of Planning Literature, 2018, Vol 33 (I): 31-44. https://journals.sagepub.com/doi/abs/10.1177/0885412217716439

As noted, there are many other studies and articles that analyze gentrification and displacement, and seek to find a relationship between the two phenomena. The cited articles, with summary reviews following, are considered a representative sampling of some of these papers and associated commentaries.

REPRESENTATIVE LITERATURE REVIEW

The 13 representative papers or articles are summarized below, in order of their publication. In many cases, excerpts are provided directly from the studies, as this comprises the most succinct and direct method of presenting the study findings. It should be noted that much of the concern in the literature regarding gentrification pertains to effects on lower-income or disadvantaged households and/or ethnic minorities, and thus the findings are often presented in this context.

1. Lance Freeman, Columbia University, and Frank Braconi, then Executive Director of Citizen Housing and Planning Council, New York City, 2004.

This article is one of the most oft-cited papers in the literature about gentrification and displacement. It was authored in 2004 by Lance Freeman, Ph.D., then Assistant Professor in the Urban Planning Department of the Graduate School of Architecture, Planning, and Preservation at Columbia University, and Frank Braconi, then Executive Director of the Citizen Housing and Planning Council in New York City, a nonpartisan policy research organization focusing on housing, planning, and economic development issues in city, state, and federal politics.

This paper presents findings on a study of gentrification and displacement in New York City in the 1990s. Freeman and Braconi conducted the study to advance the research findings on the relationship between residential displacement and gentrification, citing various results from prior studies with disparate and inconclusive findings regarding the relationship between the two phenomena. Using New York City as their subject, Freeman and Braconi set out to study the following:

"To discern how gentrification is related to displacement, we examined the relationship between residence in a gentrifying neighborhood and residential mobility among disadvantaged households. If gentrification increases displacement, all other things being equal, we should observe higher mobility rates among disadvantaged households residing in gentrifying neighborhoods than among those residing elsewhere in the city." 67

The statistical analysis completed by Freeman and Braconi included many variables on housing and demographic characteristics, as well as neighborhood classifications. There are many findings from this study, with some particularly germane to San Francisco, given the market presence of rent control, in both New York City and San Francisco. Some of the verbatim findings of the study, are as follows:

"Rent stabilization is by far the more common form of rent regulation in New York City. Our results indicate that poor tenants in such units are insignificantly less likely to exit than those in unregulated units. Rent stabilization does appear, however, to substantially reduce the odds that a less-educated household will move from their dwelling unit during any given time period. We also tested in our regressions a variable interacting residence in a rent-regulated unit and in a gentrifying area and found that it was not significant. This indicates that while rent regulation tends to decrease tenant mobility, it does not do so more in gentrifying areas than in others." 68

"We found that increases in rent are indeed related to the probability of a household moving. But as was the case with the seven gentrifying neighborhoods, these increases were associated with a *lower* probability of moving rather than a higher one." 69

"Gentrification has typically been depicted as a process of higher socioeconomic households displacing disadvantaged households. Indeed, some have defined

⁶⁷ Lance Freeman and Frank Braconi, "Gentrification and Displacement: New York City in the 1990s", American Planning Association. Journal of the American Planning Association, Winter 2004, page 42.

⁶⁸ lbid, page 45.

⁶⁹ Ibid, page 48.

gentrification as this type of displacement... The assumption behind this view is that displacement is the principal mechanism through which gentrification changes the socioeconomic character of a neighborhood. The results presented here,, suggest that a rethinking of the gentrification process is in order. Insofar as many of the other reasons people change residence (marriage or divorce, change of job, want a bigger unit, want to own, etc.) would not be expected to diminish as their neighborhood gentrifies, the reduced mobility rates we find in gentrifying neighborhoods are inconsistent with a process dependent on the massive displacement of disadvantaged residents. Rather, demographic change appears to occur primarily through normal housing succession and may even be slowed by a below-normal rate of exit by existing residents."⁷⁰

There are other findings of this and subsequent studies on gentrification by Freeman. Some of these findings are included in the summaries below of other studies, many of which include literature reviews. However, in their conclusion, Freeman and Braconi state the following:

"Our analysis indicates that rather than speeding up the departure of low-income residents through displacement, neighborhood gentrification in New York City was actually associated with a lower propensity of disadvantaged households to move. These findings suggest that normal housing succession is the primary channel through which neighborhood change occurs. Indeed, housing turnover may actually be slowed by the reduced mobility rates of lower-income and less-educated households. The most plausible explanation for this surprising finding is that gentrification brings with it neighborhood improvements that are valued by disadvantaged households, and they consequently make greater efforts to remain in their dwelling units, even if the proportion of their income devoted to rent rises."

2. Terra McKinnish, University of Colorado at Boulder: Randall Walsh, University of Colorado at Boulder; and Kirk White, Duke University, 2008

In May 2008, three academics prepared a working paper for the National Bureau of Economic Research. These academics include Terra McKinnish, Ph.D., Professor of Economics at the University of Colorado at Boulder, Randall Walsh, Ph.D., Assistant Professor of Economics at the University of Colorado at Boulder (now Associate Professor of Economics at University of Pittsburgh, Department of Economics), and Kirk White, Ph.D., now Economist in the Business Economic Research Group, Center for Economic Studies (formerly of the USDA and US Census Bureau).

This paper uses confidential Census data, specifically the 1990 and 2000 Census Long Form data, to study the demographic processes underlying the gentrification of low-income urban neighborhoods during the 1990's. In contrast to previous studies, the analysis is conducted at the more refined census-tract level with a narrower definition of gentrification and more closely matched comparison neighborhoods. The analysis is also richly disaggregated by demographic characteristic, uncovering differential patterns by race, education, age, and family structure that would not have emerged in the more aggregate analysis in previous studies. The areas included in the study were the 72 Consolidated Metropolitan Statistical Areas in the United States with populations of at least 500,000 in 1990, and thus includes a national sample.

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⁷⁰ Ibid.

⁷¹ Ibid, page 51.

The results provide no evidence of disproportionate displacement of low-education or minority householders in gentrifying neighborhoods.⁷² But the study did find evidence that gentrifying neighborhoods disproportionately retain black householders with a high school degree. More specifically, "The bulk of the increase in average family income in gentrifying neighborhoods is attributed to black high school graduates and white college graduates. The disproportionate retention and income gains of the former and the disproportionate in-migration of the latter are distinguishing characteristics of gentrifying U.S. urban neighborhoods in the 1990's."⁷³

This paper also included a literature review, with the authors citing that the literature most related to their study is that pertaining to the link between gentrification and out-migration in low-income neighborhoods. For this purpose, they review three specific studies, pertaining to 2002 analysis of Boston by Vigdor, a 2004 study by Freeman and Braconi in New York City, and a 2005 analysis by Freeman of a sample of U.S. neighborhoods. Of the Vigdor study, the authors state "He finds no evidence that low-income households are more likely to exist the current housing unit if they are located in a gentrifying zone."⁷⁴ Of the Freeman and Braconi study they cite that "Identifying seven neighborhoods in Manhattan and Brooklyn that gentrified during the 90's, they find that low-income households in the gentrifying neighborhoods were less likely to move than low-income households in non-gentrifying neighborhoods."75 Finally, of the 2005 Freeman study, which extended the preceding work to a sample of U.S. neighborhoods, and thus required a broader definition of gentrification for study purposes, they state "He gain finds little evidence that gentrification is associated with displacement of lowincome households." Thus, in conclusion regarding this portion of their literature review, the authors cite the following: "This literature investigates whether there is empirical evidence to support the widely held belief that gentrification causes the displacement of low-income minorities from their neighborhoods. The most recent studies, although constrained by data limitations, find little evidence of displacement."77

3. Ingrid Gould Ellen and Katherine M. O'Regan, NYU, Wagner Graduate School and Furman Center, 2011

In March 2011 Ingrid Gould Ellen, Ph.D., and Katherine M. O'Regan, Ph.D., published an article on gentrification and displacement in the journal Regional Science and Urban Economics. At the time, Ellen was the Paulette Goddard Professor of Urban Policy and Planning and Director of the Urban Planning Program, NYU and O'Regan was Professor of Public Policy and Planning at NYU's Wagner Graduate School of Public Service (Regan is now Assistant Secretary for Policy Development and Research at the U.S. Department of Housing and Urban Development). The research in this paper was conducted while the authors were Special Sworn Status researchers of the U.S. Census Bureau at the New York Census Research Data Center.

The purpose of this paper was to examine whether the economic gains experienced by low-income neighborhoods in the 1990s followed patterns of classic gentrification, i.e., through the in-migration of higher income white, households, and out migration (or displacement) of the

⁷² Terra McKinnish, Randall Walsh, Kirk White. "Who Gentrifies Low-Income Neighborhoods?" National Bureau of Economic Research, Working Paper 1403, May 2008, page 3.

⁷³ Ibid, page 2.

⁷⁴ Ibid, page 4.

⁷⁵ Ibid.

⁷⁶ Ibid, page 5.

⁷⁷ Ibid, page 4.

original lower income, usually minority residents, spurring racial transition in the process.⁷⁸ An abstract of this paper, published on-line, cites the following summary finding:

"Using the internal Census version of the American Housing Survey, we find no evidence of heightened displacement, even among the most vulnerable, original residents. While the entrance of higher income homeowners was an important source of income gains, so too was the selective exit of lower income homeowners. Original residents also experienced differential gains in income and reported greater increases in their satisfaction with their neighborhood than found in other low-income neighborhoods. Finally, gaining neighborhoods were able to avoid the losses of white households that non-gaining low income tracts experienced, and were thereby more racially stable rather than less."

Further, as cited in the study findings, Ellen and O'Regan state:

"The picture our analyses paint of neighborhood change is one in which original residents are much less harmed than is typically assumed. They do not appear to be displaced in the course of change, they experience modest gains in income during the process, and they are more satisfied with their neighborhoods in the wake of the change. To be sure, some individual residents are undoubtedly hurt by neighborhood change; but in aggregate, the consequences of neighborhood change — at least as it occurred in the 1990s — do not appear to be as dire as many assume." ⁷⁹

4. Silva Mathema, Poverty & Race Research Action Council, 2013

In October 2013, while a Research Associate with the Poverty & Race Research Action Council in Washington, D.C., Silva Mathema, Ph.D., prepared an updated literature review on gentrification, with a focus on the theories and realities of gentrification. Upon reviewing close to 30 cited papers on many aspects of gentrification, Mathema provides the following summary of recent gentrification research:

"Some studies have found little to no evidence of gentrification-induced displacement and laud gentrification for promoting urban revival and development (Betancur 2011). Using American Housing Survey's data on residential turnover, Ellen and O'Regan (2011) did not find increased displacement of vulnerable original residents in neighborhoods that experienced large economic gains during the 1990s. They also did not observe any drastic change in racial composition of the neighborhoods in the 1990s. This finding is significant because gentrification is usually associated with exodus of low-income minority residents from transitioning neighborhoods. In fact, there was increase in level of neighborhood satisfaction among original residents in growing neighborhoods. Similarly, Freeman's (2009) research suggests that gentrification does not affect neighborhood level diversity negatively. Likewise, McKinnish (2010), analyzing the census tract data, found no evidence of displacement among minority households in gentrifying neighborhoods. In fact, he suggested that these diverse

⁷⁹ See paper excerpt cited in: https://journalistsresource.org/studies/economics/real-estate/gentrification-urban-displacement-affordable-housing-overview-research-roundup

⁷⁸ http://www.sciencedirect.com/science/article/pii/S0166046211000044.

neighborhoods were attractive to middle class black families who were likely to move into these areas." 80

Mathema concludes by recognizing that gentrification has received renewed attention from policymakers, and states that localities experiencing such transformations will "need to be cognizant of the main players, the state of gentrification, and historical and racial context of the neighborhood, to be able to design programs that aim to promote social justice and equitable development in the gentrifying neighborhoods."⁸¹

5. Harvard Shorenstein Center Project, 2014

In 2014 the Harvard Shorenstein Center Project published an overview and research roundup on gentrification, urban displacement, and affordable housing. The roundup includes an overall summary of the literature prepared by the Center along with links and synopses of a selection of eight studies on gentrification and its effects, a few of which included analysis of displacement.

The Center's overall summary references that the first longitudinal studies quantifying trends in gentrification generally found that low-income resident displacement due to gentrification was limited. They state the following about Lance Freeman's 2005 study:

"In 2005, Lance Freeman of Columbia University published an influential nationwide study that found that low-income residents of gentrifying urban neighborhoods were only slightly more likely to leave than those in non-gentrifying neighborhoods — 1.4% versus a 0.9%."⁸²

They further indicated, however, that in 2008 Freeman indicated that more research was needed, and that "The empirical evidence [on gentrification] is surprisingly thin on some auestions and inconclusive on others."

This roundup cites other study findings, such as the following:

"Recent studies of neighborhood change have examined other effects of gentrification on low-income residents. Research published in 2010 and 2011 found evidence that gentrification could boost income for low-income residents who remained and also raised their level of housing-related satisfaction.

Even if the proportion of low-income residents displaced by gentrification is low, research indicates that the aggregate number displaced can be high and the consequences of displacement particularly harmful. A 2006 study estimated that about 10,000 households were displaced by gentrification each year in New York City. Follow-up interviews found that among those displaced, many ended up living in overcrowded apartments, shelters or even became homeless."⁸⁴

⁸⁰ Silva Mathema, "Gentrification: An updated Literature Review," Poverty & Race Research Action Council, October 2013, page 3.

⁸¹ Ibid, page 5.

⁸² Harvard University, Kennedy School of Government, Shorenstein Center on Media Politics and Public Policy, "Gentrification, Urban Displacement and Affordable Housing: Overview and Research Roundup," August 2014.

⁸³ Ibid.

⁸⁴ Ibid.

These somewhat contrary statements indicate the literature is at odds, with limited definitive results. Toward this end, the roundup states:

"The major studies on gentrification share several important limitations: They have not consistently examined the fate of displaced low-income residents; they do not look at the effects of gentrification over multiple decades; and most use data from the 1980s and 1990s — preceding major increases in rental prices throughout the 2000s and before the Great Recession. There is also no consensus on how to measure gentrification, so existing studies may be missing important demographic transitions in U.S. neighborhoods."

6. Joseph Cortwright, City Commentary, cityobservatory.org, 2015

Economic Analyst Joseph Cortright, President and Principal Economist of Impressa, a Portland-based consulting firm specializing in metropolitan economies, knowledge-based industries, and education policy, authored an on-line commentary addressing the confusion between gentrification and displacement. This commentary was in response to a series on gentrification published by Governing Magazine in February 2015.

In his commentary, Cortright states that:

"There's precious little evidence that there has been, in the aggregate, any displacement of the poor from the neighborhoods Governing flags as "gentrifying." If there were displacement, you'd expect the number of poor people in these neighborhoods to be declining. In fact, nationally, there are more poor people living in the neighborhoods that they identify as "gentrifying" in 2013 than there were in 2000. Governing's gentrifying neighborhoods have gained poor AND nonpoor residents according to Census data. And even after "gentrifying," these neighborhoods still have higher poverty rates, on average, than the national average.

Careful academic studies of gentrifying neighborhoods, by Columbia's Lance Freeman and the University of Colorado's Terra McKinnish, show that improving neighborhoods actually do a better job of hanging on to previous poor and minority residents than poor neighborhoods that don't improve. The University of Washington's Jacob Vigdor has estimated that even when rents go up, existing residents generally attach a value to neighborhood improvements that more than compensates for the higher costs." ⁸⁶

Cortright further addresses other study findings, pertaining to poverty and gentrification, but these are separate from the discussion regarding the relationship between displacement and gentrification.

7. Richard Florida, Martin Prosperity Institute at the University of Toronto and Global Research Professor at New York University, 2015

Richard Florida, Ph.D., Professor of Business and Creativity, Rotman School of Management, University of Toronto, authored a commentary on gentrification and displacement in 2015 in

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⁸⁵ Ibid.

⁸⁶ Joe Cortright, "How Governing got it wrong: The problem with confusing gentrification and displacement," Cityobservatory.org Commentary, June 2, 2015.

CityLab, an on-line publication of The Atlantic Magazine. This commentary pertains to an August 2015 review of gentrification, displacement, and the role of public investment, published by the Federal Reserve Bank of San Francisco, and authored by academics from UC Berkeley and UCLA, but also includes summaries of other study findings regarding gentrification and displacement. Florida begins by citing some of the findings of Lance Freeman of Columbia University, including the first study cited in this section. Florida states the following about Freeman's work:

"Perhaps the foremost student of gentrification and displacement is Lance Freeman of Columbia University. His 2004 study with Frank Braconi found that poor households in gentrifying neighborhoods of New York City were less likely to move than poor households in non-gentrifying neighborhoods. This of course may have to do with the fact that there are less poor households in gentrifying neighborhoods to begin with. Still, the authors concluded that "a neighborhood could go from a 30% poverty population to 12% in as few as 10 years without any displacement whatsoever." In a subsequent 2005 study, Freeman found that the probability that a household would be displaced in a gentrifying neighborhood was a mere 1.3 percent. A follow-up 2007 study, again with Braconi, examined apartment turnover in New York City neighborhoods and found that the probability of displacement declined as the rate of rent inflation increased in a neighborhood. Disadvantaged households in gentrifying neighborhoods were actually 15 percent less likely to move than those in non-gentrifying households.

And, in a 2009 study, Freeman found that gentrifying neighborhoods are becoming more racially diverse by tracking neighborhood change from 1970-2000 (although he does note that cities overall are becoming more diverse as well). Freeman also discovered that changes in educational diversity were the same for both gentrifying and non-gentrifying areas. Ultimately, while some residents were displaced from 1970-2000, gentrifying neighborhoods were generally more diverse when it came to income, race, and education as opposed to non-gentrifying neighborhoods." ⁸⁷

Florida also references findings that suggest gentrification can reduce displacement. Specifically, he states:

"Counterintuitively, several studies have even found that gentrification can in some cases reduce displacement. Neighborhood improvements like bars, restaurants, waterfronts, or extended transit can and sometimes do encourage less advantaged households to stay put in the face of gentrification. A 2006 study found that displacement accounted for only 6 to 10 percent of all moves in New York City due to housing expenses, landlord harassment, or displacement by private action (e.g. condo conversion) between 1989 and 2002. A 2011 study concluded that neighborhood income gains did not significantly predict household exit rates. What did predict outmigration was age, minority status, selective entry and exit, and renting as opposed to buying."88

In further discussing study findings, Florida cites that "Indeed, displacement is becoming a larger issue in knowledge hubs and superstar cities, where the pressure for urban living is accelerating. These particular cities attract new businesses, highly skilled workers, major developers, and large corporations, all of which drive up both the demand for and cost of housing. As a result,

Richard Florida, "The Complicated Link Between Gentrification and Displacement," Citylab (Atlantic Magazine), September 8, 2015.
 Ibid.

local residents - and neighborhood renters in particular - may feel pressured to move to more affordable locations." This Florida comment followed general reference to findings from the Urban Displacement Project at UC Berkeley, which has authored many articles about gentrification, and sought to develop indicators that would identify census tracts in the Bay Area that are at risk of displacement and/or gentrification. In particular, Florida provides a link to a paper written by one of his colleagues, which seeks to distill some of the Urban Displacement Project findings (see http://www.citylab.com/housing/2015/08/mapping-gentrification-and-displacement-in-san-francisco/402559/). The author of this document, Tanvi Misra, who is a CityLab colleague of Florida's, summarizes Karen Chapple of the Urban Displacement Project's findings as follows, demonstrating the complex relationship between gentrification and displacement:

"Displacement can be physical (as building conditions deteriorate) or economic (as costs rise). It might push households out, or it might prohibit them from moving in, called exclusionary displacement. It can result from reinvestment in the neighborhood — planned or actual, private or public — or disinvestment.

Thus, displacement is often taking place with gentrification nowhere in plain sight. In fact, stable neighborhoods at both the upper and lower ends of the income spectrum are experiencing displacement."⁸⁹

See a review below regarding some of the findings from the Urban Displacement Project.

8. University of California, Berkeley, Urban Displacement Project, 2015

The Urban Displacement Project at the University of California at Berkeley is research and action initiative of UC Berkeley in collaboration with researchers at UCLA, community based organizations, regional planning agencies and the State of California's Air Resources Board. The project aims to understand the nature of gentrification and displacement in the Bay Area and Southern California. The studies prepared by this project have spawned a great many papers, both by the Urban Displacement Project and by others commenting on its findings and analyzing its datasets. This paper, in particular, is an Executive Summary including a succinct literature review, summary of case studies, brief comment on anti-displacement policy analysis, and summary methodology overview. This paper states that "As regions across California plan for and invest in transit oriented development, in part as a response to SB 375 and the implementation of their Sustainable Communities Strategies, communities are increasingly concerned about how new transit investment and related new development will affect the lives of existing residents, particularly low-income communities of color."90 Thus, the Urban Displacement Project "analyzed the relationship between transit investment and neighborhood change, identifying factors that place neighborhoods at risk of displacement and mapping Bay Area neighborhoods according to levels of risk."91

The Urban Displacement Project defines gentrification as the influx of capital and higher-income, higher-educated residents into working-class neighborhoods, and says it has already transformed about 10% of Bay Area neighborhoods, with displacement, which can be physical

⁸⁹ See http://www.citylab.com/housing/2015/08/mapping-gentrification-and-displacement-in-san-francisco/402559/).

⁹⁰ University of California, Berkeley, "Urban Displacement Project," December 2015, page 1.

⁹¹ Ibid.

or economic, occurring in 48% of Bay Area neighborhoods. ⁹² The Urban Displacement Project indicates that displacement, whether physical or economic, may result from disinvestment as well as investment, and thus is often taking place in the absence of visible gentrification.

This paper cites several key study findings from the Urban Displacement Project.

- Regionally, there has been a net gain in 94,408 low-income households between 2000 and 2013. However, there has been a concurrent loss of almost 106,000 naturally-occurring affordable housing units (where low-income people pay 30% or less of their income on rent).
- More than half of low-income households, all over the nine-county region, live in neighborhoods at risk of or already experiencing displacement and gentrification pressures.
- The crisis is not yet half over: More tracts are at risk of displacement in the future compared to those already experiencing it (in other words, the number of tracts at risk of displacement are 123% higher than the numbers already experiencing it).
- Still, more than half of neighborhoods in the nine-county Bay Area are quite stable, or just becoming poorer.
- In low-income areas, this is due to a combination of subsidized housing production, tenant protections, rent control and strong community organizing.
- Displacement extends far beyond gentrifying neighborhoods: The Bay Area's affluent neighborhoods have lost slightly more low-income households than have more inexpensive neighborhoods a story of exclusion.
- We are losing "naturally occurring" affordable housing in neighborhoods often more quickly than we can build new housing.
- There is no clear relationship or correlation between building new housing and keeping housing affordable in a particular neighborhood.⁹³

Notably, this paper identifies "exclusionary displacement" as what occurs when households are prohibited from moving in.

Beyond these key findings, this Executive Summary includes a summary literature review. This literature review does not shed much light on the question of displacement's relationship to gentrification, other than citing that despite analytic challenges in measuring displacement, "most studies agree that gentrification at a minimum leads to exclusionary displacement and may push out some renters as well." However, this paper provides a few comments on case studies performed for nine Bay Area neighborhoods, and presents these additional findings (among others):

- Gentrification may not precede displacement. Gentrification is often assumed to be
 a precursor to residential displacement, yet in many of our cases we found that
 displacement precedes gentrification and that the two processes are often occurring
 simultaneously.
- Gentrification and displacement are regional. Although gentrification and displacement are often seen as a neighborhood or local phenomenon, our cases show that they are inherently linked to shifts in the regional housing and job market.

⁹² Ibid.

⁹³ Ibid, page 2.

⁹⁴ Ibid, page 3.

- Despite continued pressures and much anxiety, many neighborhoods that expected
 to be at risk of displacement such as East Palo Alto, Marin City and San
 Francisco's Chinatown have been surprisingly stable, at least until 2013, the most
 recent year with available data. This is likely due to a combination of subsidized
 housing production, tenant protections, rent control and strong community
 organizing.
- Policy, planning and organizing can stabilize neighborhoods. Many of the cases have shown remarkable stability, largely due to strengths of local housing policy, community organizing, tenant protections and planning techniques.

This Executive Summary concludes with the following statement: "Even though many Bay Area neighborhoods are at risk of displacement or exclusion, such change is not inevitable. Subsidized housing and tenant protections such as rent control and just-cause eviction ordinances are effective tools for stabilizing communities, yet the regional nature of the housing and jobs markets has managed to render some local solutions ineffective."

9. Miriam Zuk and Karen Chapple, University of California, Berkeley, Institute of Governmental Studies, 2016

This research brief provides a summary of research into the relationship between housing production, filtering, and displacement based on analysis of an extensive dataset for the San Francisco Bay Area developed by the Urban Displacement Project at UC Berkeley. It was prepared by Zuk, Ph.D., Director and Senior Researcher, and Chapple, Ph.D., Professor of City and Regional Planning, both with the Center for Community Innovation at UC Berkeley's Institute of Governmental Studies. The study's findings regarding the effects of market rate housing production on housing costs are discussed in a separate chapter in this report (see Chapter V. Housing Production Effects on Housing Costs). However, the findings in this article also have relevancy to the question of the relationship between gentrification and displacement.

To the extent that new housing development can be construed as gentrification, the summary findings of this study are as follows:

- "At the regional level, both market-rate and subsidized housing reduce displacement pressures, but subsidized housing has over double the effect of market-rate units.
- Market-rate production is associated with higher housing cost burden for low-income households, but lower median rents in subsequent decades.
- At the local, block group level in San Francisco, neither market-rate nor subsidized housing production has the protective power they do at the regional scale, likely due to the extreme mismatch between demand and supply. Although more detailed analysis is needed to clarify the complex relationship between development, affordability, and displacement at the local scale, this research implies the importance of not only increasing production of subsidized and market-rate housing in California's coastal

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⁹⁵ Ibid, page 4.

communities, but also investing in the preservation of housing affordability and stabilizing vulnerable communities." 96

In brief, this study appears to conclude that at the local level in San Francisco, the relationship between gentrification and displacement is indeterminate, and deserving of additional analysis to best probe the relationship.

10. Lei Ding, Federal Reserve Bank of Philadelphia, Jackelyn Hwang, Princeton University, and Eileen Divringi, Federal Reserve Bank of Philadelphia, 2016

This academic paper was prepared for the Federal Reserve Bank of Philadelphia in September 2016 by the following authors: Lei Ding, Ph.D., Community Development Economic Advisor, Community Development Studies & Education Department of the Federal Reserve Bank of Philadelphia; Jackelyn Hwang, Ph.D., Postdoctoral Research Fellow at Princeton University (forthcoming Assistant Professor of Sociology at Stanford University, September 2017); and Eileen Divringi, Community Development Research Analyst in the CDS&E Department of the Federal Reserve Bank of Philadelphia.

This paper also includes an extensive literature review section, with a topic specifically focused on gentrification and residential displacement, citing that residential displacement has been a central point of contention surrounding gentrification. In framing the review, the authors state:

"As neighborhoods gentrify and new residents of a higher socioeconomic status relative to incumbent residents move in and housing values and rents rise, housing and living costs may lead less advantaged incumbent residents to move out of the neighborhood against their will. Most existing studies on the population composition of gentrifying neighborhoods find that demographic changes take place at the aggregate neighborhood level. This implies that long-term, less advantaged residents are indeed moving out of the neighborhood. Further, anecdotal accounts show that residents move out of gentrifying neighborhoods by choice or through eviction as landlords increase rents, property taxes increase as local home values and rents rise, or because developers offer existing residents relatively large cash sums and then renovate the properties for larger profits (Newman and Wyly, 2006; Freeman, 2005). Few studies, however, have examined the moves of individual residents in gentrifying neighborhoods to support this."

The authors then proceed to review approximately ten studies exploring different aspects of the issue, many of which were cited by other authors reviewed above, as well as in this current analysis. While each study has its strengths and weaknesses, and unique data constraints, the authors conclude this literature review by stating:

"Overall, existing studies generally do not find evidence of elevated rates of mobility among less advantaged residents compared with similar residents in low-income neighborhoods that do not gentrify. The findings suggest that residential moves from gentrifying neighborhoods reflect normal rates of housing turnover among less

⁹⁶ Miriam Zuk, Karen Chapple, "Housing Production, Filtering and Displacement: Untangling the Relationships," University of California, Berkeley, Institute of Governmental Studies Research Brief May 2016, page 1.

⁹⁷ Lei Ding, Jackelyn Hwang, Eileen Divringi, "Gentrification and Residential Mobility in Philadelphia," Discussion Paper: Federal Reserve Bank of Philadelphia, September 2016, page 3.

advantaged residents and that the neighborhood-level demographic changes are largely due to the in-migration of high socioeconomic status residents."

Some of the perceived weaknesses in these studies, or alternate explanations for not detecting higher mobility rates, are among the reasons the authors conducted their study, examining residential mobility in Philadelphia from 2002 – 2014. As noted by the authors in the study conclusions:

"This case study of Philadelphia leverages a unique data set to shed light on the heterogeneous consequences of gentrification on residential mobility patterns. Our findings contribute to debates on gentrification and displacement by uncovering important nuances of residential mobility associated with the destinations of movers, vulnerable subpopulations, the pace of gentrification, and economic cycles. Previous studies have not explored these important dimensions of gentrification nor have they examined these patterns as gentrification has grown and expanded relative to its past since the late 1990s.

We find that gentrifying neighborhoods in Philadelphia, especially those in the more advanced stages of gentrification, have higher mobility rates on average compared with nongentrifying neighborhoods, but these movers are more likely to be financially healthier residents moving to higher-quality neighborhoods. Consistent with other recent studies of mobility and gentrification (Ellen and O'Reagn, 2011: Freeman, 2005: McKinnish et al., 2010), we generally do not find that more vulnerable residents in gentrifying neighborhoods have elevated rates of mobility. As discussed earlier, Philadelphia has a number of distinct features that may mitigate the pace of residential displacement, such as its high vacancy rates and property tax assessment practices. It is also possible that displacement among vulnerable residents has not yet occurred during the study period or could be better observed when more comprehensive data are available. The slightly higher mobility rates among low-score residents in neighborhoods already in the more advanced stages of gentrification lend support for this. It is also possible that we do not observe displacement occurring within census tracts, but, if this is the case, localized moves, though still costly, among vulnerable residents in gentrifying census tracts may have less negative consequences for these residents who would still be proximate to the increased amenities that come with gentrification (McKinnish et al., 2010).

When more vulnerable residents move from gentrifying neighborhoods, however, they are more likely than their counterparts in nongentrifying neighborhoods to move to neighborhoods with lower incomes than the neighborhoods from where they move. These results suggest that gentrification redistributes less advantaged residents into less advantaged neighborhoods, contributing to the persistence of neighborhood disadvantage. Therefore, even though we do not observe higher mobility rates among these groups, the results still demonstrate that gentrification can have negative residential consequences for these subpopulations." ⁹⁸

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⁹⁸ Ibid, pages 42 and 43.

11. Derek Hyra, American University, 2016

In this paper published in November 2016, Hyra, Ph.D., an Associate Professor in the Department of Public Administration and Policy at American University, cites that the causes and consequences of gentrification, e.g., an influx of upper-income people to low-income areas, are complex and multilayered.⁹⁹ He further states that perhaps the most controversial gentrification topic is its residential displacement consequences. 100 However, he cites that there is near empirical consensus that "mobility rates among low-income people are equivalent in gentrifying versus more stable low-income neighborhoods." ¹⁰¹ In supporting this statement he cites no less than six studies conducted between 2004 and 2015 (several of which are also cited herein). Hyra believes this should not be interpreted as evidence gentrification is not related to a shrinking supply of affordable housing units, but rather that low-income people tend to move at a high rate from all neighborhood types. While Hyra believes understanding the relationship between gentrification and residential displacement is critical, he believes other important gentrification consequences exist, and he spends the balance of his short paper on exploring other potential consequences, such as political and cultural displacement, and discussing potential future research questions. These research questions and investigations include exploring the role of race in supply and demand-side gentrification explanations, as well as future investigations and governmental policy reforms to increase the changes that low- and moderate-income people benefit from the process of gentrification, such as providing affordable housing opportunities and supporting community-led organizations. 102

12. Karen Chapple, Paul Waddell, and Daniel Chatman, with Miriam Zuk, University of California, Berkeley and the University of California, Los Angeles, April 26, 2017

This paper is a very extensive and comprehensive review of theory and research regarding the relationship between fixed-rail transit neighborhoods and displacement, using case studies in Los Angeles and the San Francisco Bay Area to examine patterns of neighborhood change in relation to transit proximity. The impetus behind this study is to assess the effect of pursuing more compact, transit-oriented development as a key strategy to achieve greenhouse gas reductions through regional sustainable communities strategies (SCS), in compliance with State of California climate change legislation. As noted in the study's Executive Summary, "Concern has been raised that such development and investment patterns may result in heightened property values and the displacement of low income households." 103

A key objective of the study was to examine "the relationship between fixed-rail transit neighborhoods and displacement in California by modeling past patterns of neighborhood change in relation to transit proximity." The report also sought to analyze the relationship between displacement and travel behavior. The many types of variables included in the study's quantitative and qualitative case study analysis included neighborhood-level data, address-level data, and parcel-level data. The neighborhood-level analysis included variables such as

⁹⁹ Derek Hyra, "Commentary: Causes and Consequences of Gentrification and the Future of Equitable Development Policy," November 2016, page 170.

¹⁰⁰ Ibid, page 171.

¹⁰¹ Ibid.

¹⁰² Ibid, page 173.

¹⁰³ Karen Chapple, Paul Waddell and Daniel Chatman, with Miriam Zuk, "Developing a New Methodology for Analyzing Potential Displacement," April 26, 2107, page vi.
¹⁰⁴ Ibid.

demographic, housing, and socioeconomic characteristics; movement in/out of neighborhood; and public housing unit counts and Section 8 voucher recipients (all neighborhood-level datasets). The address-level analysis included variables such as number of housing units constructed; number of jobs, establishments, and business sales; number of evictions by type; and presence of a rail station. The parcel-level analysis included numerous variables probing changes associated with a plot of land, such as transaction history, land-use changes, new residential structure construction, major renovations, and conversions of apartments to condominiums. These data, along with other data constructs, were inputs to the investigators' development of proxies to assess different types of displacement (e.g., economic, physical, and exclusionary). The study years represented by the data reflected 2000 to 2013.

A heavy focus of the study was to assess vehicle miles traveled (VMT) among different groups relative to their transit proximity. But in addition, its findings have bearing on the knowledge base associated with residential gentrification and displacement. Aside from the findings associated with VMT, some of the case study findings associated with examining gentrification and displacement in fixed-rail transit neighborhoods included the following:

"Gentrification in Los Angeles and the Bay Area transit neighborhoods cannot be attributed to new residential development, as the vast majority of transit neighborhoods in both Los Angeles and the Bay Area experienced relatively little residential development from 2000 to 2013. In the Bay Area, over half of market rate residential development occurred in tracts that did not gentrify." 105

The preceding is a very high-level summary of just one small aspect of a detailed and well-researched study. It is, however, a finding most relevant to theme addressed in this literature review, regarding the relationship between home construction, increasing rents, and displacement.

13. Miriam Zuk et al., University of California at Berkeley, 2018

This Zuk et al. study includes a section reviewing the academic literature assessing the relationship between gentrification and displacement. As the most recent academic paper summarizing the literature on residential displacement, it is apt to review the findings presented in this paper, which are summarized below.

The studies cited by Zuk et al. are primarily focused on displacement, including displacement as an outcome of more than just gentrification, such as neighborhood revitalization and upgrading. The research identified by Zuk et al. that best assesses the gentrification and displacement nexus span the period 1981 to 2016, with only two studies conducted in the 1980s and four in the 2000s, and four in the 2010's. As with studies focusing on just gentrification, the definitions of displacement vary widely, including the methods of measurement. Examples of how displacement is operationalized in these studies include the following: eviction rates; exit rates for low credit score residents; household exit rates; moves for reasons including downsizing, price, eviction, divorce, joining the armed forces; loss of vulnerable populations such as working class, renters, and non-white; and any non-voluntary reason for moving except lifecycle factors, such as divorce. Each study's definition included just a few of these variables. Just as these factors vary, so do the measures of gentrification in the study. Some of these include lower household income, growth in rent or home value, increase in the share of college-educated residents, average household income increases above a set threshold, neighborhood

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¹⁰⁵ Ibid, page 91.

gain in income in a certain percentage above the metropolitan area gain, reduction in new housing stock, and growth in white population relative to other neighborhoods. Again, each study included only one or several of these criteria in their operational definition of gentrification.

These studies varied in their approaches and results, but Zuk et al. identify one consistent finding across all the studies. This finding is that "in-movers to gentrifying neighborhoods are wealthier, Whiter, and of higher educational attainment than incumbent residents, and out-movers are more likely to be renters, poorer and people of color than in-movers." Zuk et al. also indicate that the research consistently shows that rent appreciation predicts displacement.

These findings would suggest that the studies consistently conclude that gentrification induces displacement. However, this is not the case. Instead, some of the studies found some degree of residential stability in gentrifying neighborhoods, such as the Freeman and Braconi paper reviewed above. Or another study that found low-income residents in gentrifying neighborhoods were not disproportionately likely to move out, another that found that another that found that gentrification explained only o. For example, one study found that low educational attainment predicted housing stability rather than turnover, and another found that crowding, frequency of previous moves, unemployment, and marital status predicted displacement. 107

¹⁰⁶ Miriam Zuk, Ariel H. Bierbaum, Karen Chapple, Karolina Gorska, and Anastasia Loukaitou-Sideris, "Gentrification, Displacement, and the Role of Public Investment," page 12. ¹⁰⁷ Ibid, see summary matrix on page 14.