해외출장복명서

기　간:　2014. 7. 21~2014. 7. 29

출장지:　미국

출장자:　김근용, 박천규, 김태환

국토연구원 주택토지연구본부

I. 출장개요

1. 출 장 지: 미국 San Diego, Los Angeles

2. 출장기간: 2014. 7. 21~7. 29

3. 출 장 자

소속	직급	성명	비고
국토연구원	선임연구위원	김근용	
국토연구원	책임연구원	박천규	
국토연구원	연구원	김태환	

4. 출장목적

□ 국토연구원과 University of California San Diego, University of Southern California 간의 연구워크숍 개최 및 지역현장 방문을 통해 부동산시장의 동태적 분석과 정책 시뮬레이션에 대한 경험을 공유하고 연구에 유용한 시사점을 도출

□ 주택금융정책, 부동산시장 분석 및 모니터링 방법 개발 등에 관한 해외 협동연구 추진방안 협의

II. 출장일정

날짜	출발지	도착지	방문기관/장소	주요 수행업무	관계자
7.21 (월)	인천	LA	-	- 이동	-
	LA	San diego	-		
7.22 (화)	San diego	San diego	Woodbury School of Architecture	- Housing and Subcenters : Land use pattern theories and results for Tijuana and San Diego - Microscopic Analysis of Local Housing Market	Tito Alegris
7.23 (수)	San diego	San diego	Ted Smith's office	- City Museum project description - Urban regeneration in Korea	Ted Smith
7.24 (목)	San diego	LA	-	- 현장답사 - 이동	
7.25 (금)	LA	LA	University of Southern California	- Introduction of Mortgage & MBS - Housing policy in Korea - 해외 협동연구방안 협의	Richard K. Green
				- Housing Demand in U.S. - KRIHS Consumer Sentiment index in Real Estate Market - Establish and Utilize Panel Data on Real Estate Market	Jung Hyun, Choi Yoon Kyung, Choi
7.26 (토)	LA	LA	-	- 현장답사	
7.27 (일)	LA	LA	Southern California Association of Governments	- The impact of Gentrification on Neighborhoods - Urban regeneration in Korea	Yoon Kyung, Choi
				- SCAG 소개 - Regional Transportation Plan(2012-2035)	Simon Choi
7.28 (월)	LA	-	-	- 이동	
7.29 (화)	-	인천	-		

III. 수행사항

1. 연구워크숍 개최(San Diego 1차)

□ 일시 및 장소: 2014. 7. 22(화) Woodbury School of Architecture

□ 참석자: Tito Alegris

□ 주요내용

○ 주거지가 소득, 인종 등 다양한 요인에 의해 분화되는 과정에 관한 이론을 설명하고 Tijuana와 San Diego 지역을 사례로 한 실증분석 결과를 발표

○ 사람들이 주택을 마련하는 과정은 자신의 경제적 여건(economic field) 과 함께 지역에 대한 지식(knowledge field)에 의존하며 그 결과 소득, 인종 등에 따른 사회적 공간분화(Socio-spatial segregation)가 발생

- 기존의 이론과 연구에서 경제적 요인을 통해 주거지분화를 설명하려는 모델이 주를 이루었으나 사람들이 주거지에 대해 가지고 있는 지식에 대한 고려가 필요함을 제시
- 주거지선택과 사회적 공간분화에 영향을 미치는 경제적 요인과 가구의 지식에 대해 정의하고 각각의 유형을 정리하였으며 인종, 소득계층 등에 따른 사회적 분화를 계량적으로 분석할 수 있는 지표를 제시, 사례지역을 대상으로 실증분석한 결과와 시사점을 발표

○ 경제적 측면에서의 주거지선택

- 먼저 주거비용을 낮추면서 좀 더 살기 좋은 주거지를 찾는 유형으로 도심지에 인접하여 교통비용을 줄이는 형태, 교통 및 건강과 관련된 비용을 줄이면서 도시화된 지역의 Amenity를 누리는 형태, 가족의 reproduction activity에 중점을 두고 주거지는 선택하는 형태가 있음
- 다음으로 주택의 자산가치에 중점을 두고 주거지를 선택하는 유형으로 환금성, 주택금융, 불법적으로 토지를 이용한 이후 합법화를 기대(주로 라틴아메리카 지역)하는 형태 등이 있을 수 있음

○ 지식적 측면에서의 주거지선택

- 주택시장의 구조적 특성을 감안할 때 사전에 최선의 선택을 위한 모든 정보를 획득하는 것은 불가능하지만 사회적 지식을 바탕으로 주거지를 선택하는 매커니즘이 존재

- 먼저 실생활을 통해 축적된 무의식적인 지식으로 이러한 지식은 자신이 생활하는 주거지에서의 일상적인 생활을 통해 축적되며 이는 도시의 사회적 지형에 대한 개개인의 이미지를 형성하고 이를 바탕으로 주거지를 선택, 비슷한 지식을 가진 사람들이 한 곳에 모여 살게 되는 결과를 낳으며 이는 소득계층별 주거지 분화를 심화시키는 요인으로 작용
- 다음으로 도시의 주요시설 등의 이용하면서 축적된 경험적 지식으로 이러한 지식에 중점을 두고 주거지를 선택하는 사람들은 현재 주거지에 집착하지 않으며 단지 도시자원의 이용가능성에 중점을 두고 주거지를 선택, 이 경우 소득에 의한 주거지 분화를 약화시키고 사회적 혼합을 강화하는 쪽으로 주거지선택 패턴이 나타남

ㅇ Tijuana와 San Diego 지역에 대한 실증분석 결과
- Tijuana에 비해 San Diego 지역이 소득계층별 사회적 분화 정도가 큰 것을 나타났으며 특히 San Diego 지역의 경우 인종에 따른 사회적 분화정도가 큰 것으로 나타남
- San Diego의 경우 도심지를 중심으로 인구의 80%가 거주하는 지역까지 도심지와 멀어질수록 사회적 분화 정도를 나타내는 지표가 상승하는 경향을 보임

▲ 연구워크숍(San Diego 1차) 사진

2. 연구워크숍 개최(San Diego 2차)

□ 일시 및 장소: 2014. 7. 23(수) Ted Smith's office

□ 참석자: Ted Smith

□ 주요내용

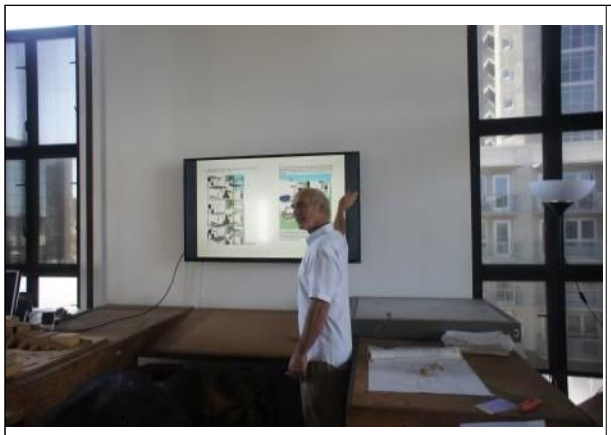
ㅇ 대학생, 사회초년생, 장애인, 저소득가구 등을 위한 주택과 소규모 필지를 활용한 주택개발 성공 경험을 소개하고 해당 프로젝트가 성공할 수 있었던 요인을 제시

ㅇ 발표자는 소규모 주택지를 개발하여 상대적으로 저렴한 주거비용으로 생활할 수 있는 주택을 공급하는 프로젝트를 진행하였으며 주택의 설계와 디자인, 건축 재료와 주택내 시설 등을 선택하는데 실제 주택에 거주한 가구들의 특성과 지불가능성(affordability)을 고려

- 높은 주택가격과 임대료로 주거를 마련하는데 어려움을 겪는 사람들을 위한 주택은 최대한 건설비용과 주거비용을 낮추는데 중점(trade offs between amenity and affordability)을 둘 필요가 있음을 강조
- 좁은 공간을 효율적으로 사용할 수 있는 설계, 내외장 등에 사용되는 불필요한 비용의 절감, 다소간의 불편을 감소하더라도 필요성이 낮은 시설들의 과감히 제거 등 비용을 낮추는데 중점을 두고 프로젝트를 진행
- 다만 이러한 주택은 수요가 제한적이며 기존 주택시장과 비교해 틈새시장을 개척하는 성격이 강하지만 대부분의 사업이 성공적으로 진행되었음

ㅇ 이러한 주택이 가지는 특징은 다음과 같음

- 주로 경제력이 낮은 젊은 층을 대상으로 하는 주택으로 판매보다는 임대에 목적을 두고 주택을 건설(미국에서도 젊은 층은 주택을 소유하기보다 임차하려는 경향이 강함)
- 기존의 주택에 비해 소규모이며, 대중교통 이용이 용이하고 주요시설이 인접해 있는 다운타운과 가까운 지역에 입지하고 있음을 감안하여 주차장 규모는 축소(주차장 설치에 관한 법적기준 중 최소 기준을 적용받는 수준을 만족하도록 건축)
- 엘리베이터를 설치하지 않아도 되는 수준에서 층수를 제한, 샌디에고 지역의 기후를 감안하여 에어컨 등은 미설치, 주방은 공용으로 사용할 수 있도록 배치, 건축재료는 상대적으로 저렴한 철재를 사용




▲ 연구워크숍(San Diego 2차) 사진

3. 연구워크숍 개최(USC 1차)

□ 일시 및 장소: 2014. 7. 25(금) University of Southern California

□ 참석자: Richard K. Green

□ 주요내용

- o 한국의 발전 과정 및 금융시장에 대한 관심이 많으며, 발전 성과에 대해 높게 평가. 남미 등 개도국 발전 모델로 한국 사례를 중요하게 인식
  - 최근 남미지역에서 개최된 세미나에서 국가발전을 위한 사례로 한국의 발전과정과 성과에 대한 관심이 필요함을 제시한 바 있음
- o 미국의 LTV, DTI 관련 규제의 히스토리와 실태에 대해 간단하게 설명하였으며, 규제가 있다고 하더라도 이를 확인할 수 있는 검증시스템이 미흡하여 대출관련 서류에 대한 검증 강화에

대한 이슈가 중요하게 부각

o 미국은 골드만삭스 등 월스트리트 정치적 영향으로 LTV, DTI 규제가 느슨하다고 평가하고 있으며, 이에 대한 한국 사례에 대해 궁금함(정치경제학적 접근)

o MOU 등에 관한 구체적인 사항은 지속 논의 필요

o 협동연구 추진 가능성 검토
- 양 기관 주요 관심사항 파악: 미국의 주택금융규제 관련 히스토리, 한국의 주택금융규제와 관련한 정치경제학적 접근, 미국와 한국 실태와의 비교 등
- 협동연구 추진 방식 검토: 원고청탁, 세미나, 초청 및 특강 등

▲ 연구워크숍(USC 1차) 사진

4. 연구워크숍 개최(USC 2차)

□ 일시 및 장소: 2014. 7. 25(금) University of Southern California

□ 참석자: Jung Hyun, Choi, Yoon Kyung, Choi

□ 주요내용

o 주택수요와 관련한 최근 미국의 연구동향과 주요내용에 대해 발표

o 주택수요와 관련한 연구는 주택수요가 무엇인지 규명하려는 연구와, 주택수요가 누구로부터 발생하는지에 중점을 둔 연구, 이를 설명하는 이론과 수요측정 방법을 개발하고자 하는 연구 등이 주로 진행되고 있음

- 주택수요를 규명하고자 하는 연구는 주로 Type of Housing(Tenure Choice, Housing Structure), Household Composition, Location 등을 주요 주제로 다루고 있음
- 주택수요의 주체를 규모하려는 연구에서는 전통적인 가구단위 접근과 함께 개인단위 접근의 필요성과 타당성에 대한 논의가 진행되고 있음

o 점유형태 선택과 관련해서는 사용자비용 모델, 세금, 거래비용, 신용제약, 주택시장 여건, 사회·인구학적 요인, 심리적 요인 등 다양한 측면에서 접근이 이루어지고 있음

o 최근 청년층의 실업난, 어려운 경제사정 등으로 분가가구가 감소하고 부모 등의 집으로 합가하는 가구가 증가하면서 나타나는 잠재적인 주택수요에 대한 논의가 진행되고 있음

- 이와관련하여 자가거주율을 분가가구 비율(headship rate)를 고려하여 가구가 아닌 인구단위로 측정하는 방안과 시사점에 대한 연구를 진행한 바 있음

▲ 연구워크숍(USC 2차) 사진

5. 연구워크숍 개최(SCAG)

□ 일시 및 장소: 2014. 7. 27(일) Southern California Association of Governments

□ 참석자: Yoon Kyung, Choi, Simon Choi

□ 주요내용

- SCAG에 대한 소개 및 역할, 최근 발표된 Regional Transportation Plan(2012-2035)의 주요내용에 대한 설명
  - SCAG(Southern California Association of Government)는 1965년 캘리포니아 주정부법과 연방정부법에 의해 설립된 Metropolitan Planning Organization로 6개 카운티와 191개 도시를 포함하는 지역에 대한 계획을 수립
  - SCAG는 커뮤니티의 지속가능성 제고와 발전에 대한 전략, 지역교통개선계획, 지역의 주택수요 배분, South Coast의 대기의 질 관리 계획을 포함하는 광역교통계획을 수립하는 역할을 담당하며 한국의 국토연구원와 유사한 성격을 가진 기관임

- RTP(2012-2035)의 주요내용
  - 비전, 교통투자계획, 재정계획, 지속가능한 커뮤니티 전략, 성과예측, 공공참여, 전략계획 등의 내용을 담고 있음
  - 한국의 경우 국토종합계획이 최상위 법정계획으로 국토의 이용에 과한 전반적인 내용을 담고 있으나 캘리포니아의 경우 광역교통계획에서 관련 내용을 포함하고 있음
  - 주택과 관련된 계획은 지속가능한 커뮤니티 전략의 일부분으로 계획에 포함되어 있으며 신규주택공급과 교통여건 개선 등을 통해 주거지와 직장간의 균형(jobs-housing balance)을 제고하는데 중점을 두고 있음

- SCAG와 국토연구원은 기관의 성격과 역할에서 유사한 부분이 많아 향후 그동안의 경험과 노하우 등에 대한 상호교류가 확대된다면 시너지 효과를 거둘수 있을 것으로 생각

- Highland Park에 대한 Gentrification 효과에 대한 연구 내용 발표
  - Gentrification에 따른 인구구조 변화, 경제적 영향 등을 highland Park를 사례로 분석한 결과, 인구 및 가구의 유입은 증가하였으며 소수 인종 비율은 감소하였고, 교육수준과 자가보유율은 상승하였으며, 주택가격과 임대료도 상승한 것으로 나타남

- highland Park의 Gentrification 현상은 현재에도 지속되고 있으며 이에 따른 영향을 점점 확대되고 있는 상황으로 특히 인구구조 및 인종구성 등에 더 큰 변화가 진행되고 있음
- 따라서 Gentrification이 일어나고 있는 지역에서 이러한 변화에 어떻게 대응할 것인지에 대한 준비가 필요함

▲ 연구워크숍(SCAG) 사진

Ⅳ. 부록

☐ Housing and Subcenters : Land use pattern theories and results for Tijuana and San Diego(7.22)

☐ City Museum project description(7.23)

☐ Housing Demand in U.S.(7.25)

☐ Regional Transportation Plan 2012-2035(7.27)

☐ The impact of Gentrification on Neighborhoods(7.27)

※ 일부 주요내용을 위주로 재정리하여 첨부

Woodbury University

San Diego, CA, July 22, 2014

Housing and subcenters: Land use pattern theories and results for Tijuana and San Diego

Tito Alegría
Department of Urban and Environmental Studies, EL COLEF, Tijuana, México

Residential Land use

-Appears in the process of getting housing

-Depends on people's economic and knowledge resources

-Appears as Socio-spatial segregation (by income, race, etc.)

Field, and economic and knowledge capitals

-A family's objectives and results of localization in the urban space depend on its level and type of economic and knowledge resources.

-Each resource kind corresponds to a field which is defined as a space (non territorial) where the force relationships among the agents (individuals or groups) spread.

-The field's structure is the distribution among the agents and classes of the capital specific to the field (i.e. economic or knowledge) accumulated in previous struggles, this capital guide ulterior strategies.

-Each economic class M is divided in N classes according to knowledge, so that the differences in the type and level of knowledge will propitiate that agents with same economic level have different localizations. Vice versa, given one type of knowledge the differences in the economic resources will generate different localizations.

Economic field

First objective type

To reduce costs of living in the city getting better habitability.

Families look for this objective adopting 3 strategies (on 3 scales of urban habitability) to get housing:

i) to be located near the consumption and work circuits (located urban resources) to reduce the transport cost

ii) to be located in neighborhoods totally urbanized to reduce costs in health and transports and to take advantage of the positive externalities (amenities)

iii) to settle in housings with the space and protection necessary to carry out all the activities of family reproduction.

Economic field

Second objective type

Obtain saving and capitalization of property appreciation.

To get this objectives families carry out strategies that allow them to acquire property rights of their housing.

The diverse forms of acquiring property rights (without counting the inheritance) can group in three strategies:

i) direct purchase

ii) through a financing

iii) invading a land illegally and later to regularize it (as it happens in any Latin America city).

The decision of where to localize varies according to the strategy adopted to acquire property rights.

The two objective types are gotten in a differential way among people, and according to their particular accumulated economic capital. People who have more capital will be able to get those objectives with more easiness than the others.

Economic field

In San Diego

-People look for bigger housing space when they look for a residence to increase future savings and capitalization.

-People with more capital (income) have the highest probability of ending up segregated, in the largest houses located in the urban periphery (where there are new and bigger houses). For this high-income group, the first objective (to reduce cost of living) is less imperative because they experience reduced transportation costs (in relation to income), thereby favoring the saving and capitalization strategy.

-Low-income people: few can have access to property, then they will not be able to realize the saving and capitalization objective. The spatial consequence is that most of them will locate where there is a supply of housing for rent following the localization pattern of these rentals: disperse among the least peripheral areas of the city. Among these options, people with low incomes will prefer those that diminish their cost of living in the city (first type of objective).

Economic field

In Tijuana

-Families prefer housing in totally urbanized neighborhoods (with all the public services), and closer to the consumption and employment circuits due to higher transportation costs (relative to salary). High and middle-income groups can pay for housing in these neighborhoods

-Higher income people, however, tend to reside in neighborhoods less segregated due to two combined processes: their unwillingness to relocate and some residents experience decrease in income over time. Unwillingness to relocate is based on family heritage and the availability of space to build more houses keeping high prices and segregation.

Inheritance of property, in contrast, impels de-segregation by income when the income of the descendants is smaller than that of the parents. Also, many of descendants turn their inherited old big houses into apartments buildings geared towards middle income people.

Economic field

In Tijuana

-Low income people generally invade a land lot to secure a place to live. In order to invade, time ago they usually formed an invader group, and today the invasion is individual.

-Then, little proportion of low-income families rent apartment or house

-Their options of land for housing -without urbanization and non desired by private sector- are few and usually on city's periphery

-At the beginning of the squatter settlement, socially homogeneous neighborhoods are formed. Over time many of the original families increase their income, and informal rent and sale housing sub-markets appear which attracts middle-low income people to the neighborhood. This process permits that many originally illegal neighborhoods appear in census as socially mixed neighborhoods: low segregation.

People in both cities have the implicit objective of capital accumulation while looking for a residence, but not the objective of being segregated. However, segregation is a result of this process and corresponding with the economic field mechanisms

Knowledge Field

-Due to structural conditions of the residential market it is impossible to know all the election possibilities before making the best acquisition decision (that allows the higher utility or satisfaction).

-However, although incomplete and sometimes distorted, there is a knowledge on the access mechanisms to housing that is constituted inside the social knowledge field.

-Knowledge is defined as the group of dispositions incorporates to the peculiar habitus of each person and guide her behavior.

-Knowledge is distributed in an unequal way among people depending on the numerous dimensions that structure to the social groups. The accumulation of capital knowledge of the individuals is the result of its daily participation in different fields.

Knowledge Field

Practical & unconscious knowledge

-Their accumulation depends mainly on the time, and they are constrained by the geography of the daily life, mainly for the residential space.

-People and groups that more time has inhabited the city will have more of these knowledge types. They are people that better know their daily geography and those that have a defined image of the city's social geography.

-Being in process of residential change, people with bigger practical and unconscious knowledge will trend to prefer the non new neighborhoods (those already well-known) of the city, generating a concentration of people of similar knowledge. This concentration makes diminish the segregation by income.

Knowledge Field: Empiric knowledge

-Empiric knowledge accumulation has less temporal and spatial restrictions

-People develop it mainly in the temporarily determined possibility of participating in institutional spaces (unions, political parties, business cameras, professional associations, clubs, government, etc.) with little dependence on residential localizations.

-Prone to acquire this knowledge type are people with more schooling or having control positions in their work or participating of institutionalized social networks.

-Being in process of residential change, people with more empiric knowledge will have the possibility to spread in search of immobile advantages (localization) and exercising mobile advantages (financial or access to a particular housing submarket).

Then these people will localize in disperse way, but near to urban resources. This localization pattern, upon generating social mixture, makes diminish the segregation by income.

Socio-residential segregation

General definition

-Condition of territorial exclusion of the different social groups.

-The segregation appears in the process of getting housing:

In a competitive environment, social-residential segregation is a macro spatial pattern that is a result of the micro-decisions people make when getting housing.

Two segregation types

a) Segregation by differentiation

Spatial exclusion among social groups.

In methodological terms it is related to segregation inside zones.

b) Segregation by localization

Spatial exclusion of some social groups with regard to the urban resources.

In methodological terms it is related to segregation among zones.

Both segregation types exist in the reality.

Segregation by differentiation according to income and race

$$S_j = \sum_{i=1}^{n} \left(\frac{n}{n-1} \right) \left(p_{ij} - \frac{1}{n} \right)^2$$

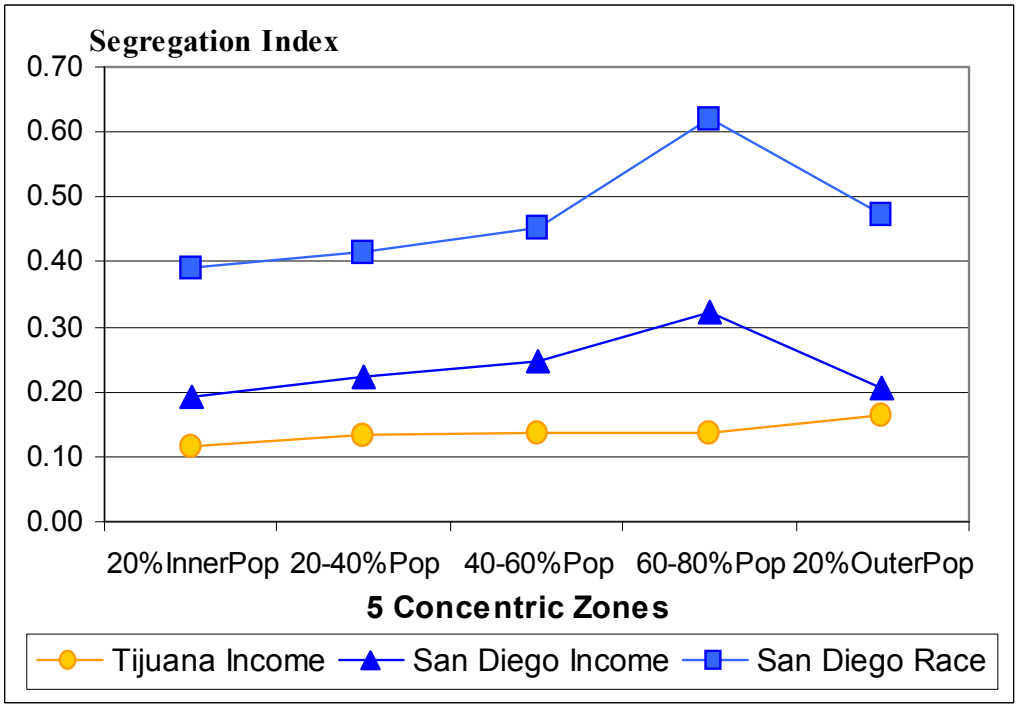
Sj = segregation by income index in zone j ($0 \leq S \leq 1$)
pij = population proportion of income group i in zone j
n = number of income groups (4 groups: 0-1 MW, 1-2 MW, 2-5 MW, more than 5 MW)

Sj = 0, null segregation among groups, great social heterogeneity in zone j
Sj = 1, absolute segregation among groups, total social homogeneity in zone j

Segregation by differentiation according to income and race

$$S_j = \sum_{i=1}^{n} \left(\frac{n}{n-1} \right) \left(p_{ij} - \frac{1}{n} \right)^2$$

Graph of Average Segregation Index by Income and Race in 5 Concentric Zones (Each with 20% of Total Population) from Center to Urban Periphery



Descriptive Statistics

Statistics	Segregation by Income		Segregation by Race
	Tijuana	San Diego	San Diego
Minimum	0.02	0.03	0.00
Maximum	0.33	1.00	1.00
Mean	0.14	0.23	0.46
Std. Deviation	0.04	0.14	0.24

Statistical model of segregation by differentiation according to income

$$S_j = \alpha (I_{1j})^{\beta 1} (I_{2j})^{\beta 2} (I_{25j})^{\beta 3} (I_{5j})^{\beta 4} (U_j)^{\beta 5} (B_j)^{\beta 6}$$

Sj = segregation by income in zone j

I1j = resident workers' proportion in zone j (families in San Diego) with 0-1 minimum wages

I2j = resident workers' proportion in zone j (families in San Diego) with 1-2 minimum wages

I25j = resident workers' proportion in zone j (families in San Diego) with 2-5 minimum wages

I5j = resident workers' proportion in zone j (families in San Diego) with more than 5 minimum wages

Uj = population in zone j with university education (empirical knowledge)

Bj = population in zone j was born in the region (practical/unconscious knowledge)

β1, β2, β3, β4 = income elasticities

β5, β6 = knowledge elasticities, α = constant of regression

Segregation by Income as a Function of Income and Knowledge

Type of Variables	Specific Variables	Tijuana		San Diego	
		Model 1	Model 2	Model 1	Model 2
Constant	(Constant)	-3.21	-3.34	-0.16	0.28
	Sig.	*0.00*	*0.00*	*0.00*	*0.00*
Income groups	Ln Workers proportion 0-1 MW	-0.44	-0.46	-0.08	
	Sig.	*0.00*	*0.00*	*0.00*	
	Ln Workers proportion 2-5 MW	0.43	0.33	-0.21	-0.20
	Sig.	*0.00*	*0.00*	*0.00*	*0.00*
	Ln Workers proportion 5+ MW	-0.34	-0.29		0.08
	Sig.	*0.00*	*0.00*		*0.00*
Housing opportunities knowledge	Ln Pop.Att.University (Empirical knowledge)		-0.06		
	Sig.		*0.00*		
	Ln Pop.BornInState (Practical/unconscious knowledge)	-0.05		-0.01	-0.02
	Sig.	*0.00*		*0.10*	*0.00*
R Square		0.69	0.69	0.84	0.70

Independent variable: Ln Segregation by income

Commerce and service Land use

-Appears as a hierarchical system of tertiary centers (*modified* Christaller model)

-Depends on spatial distribution of people by income: firms follow people

- Depends on economic characteristics of firms: centers differentiation when following people

Theoretical model of tertiary centers generation

Demand side:

-Consumers' strategic behavior to reduce transaction costs by combining: choosing the smallest travel distance, looking for scale and scope economies in the purchases, and comparing when shopping.

-Nearby consumers' characteristics

-population income

-population density

-segregation by income (diversity of preferences)

Supply side:

-Business' strategic behavior : following the demand

-Business' cost reduction and advantages achieve:

-Scale economies & Technological differences (*Productivity*)

- External advantages : agglomeration

Centrality index

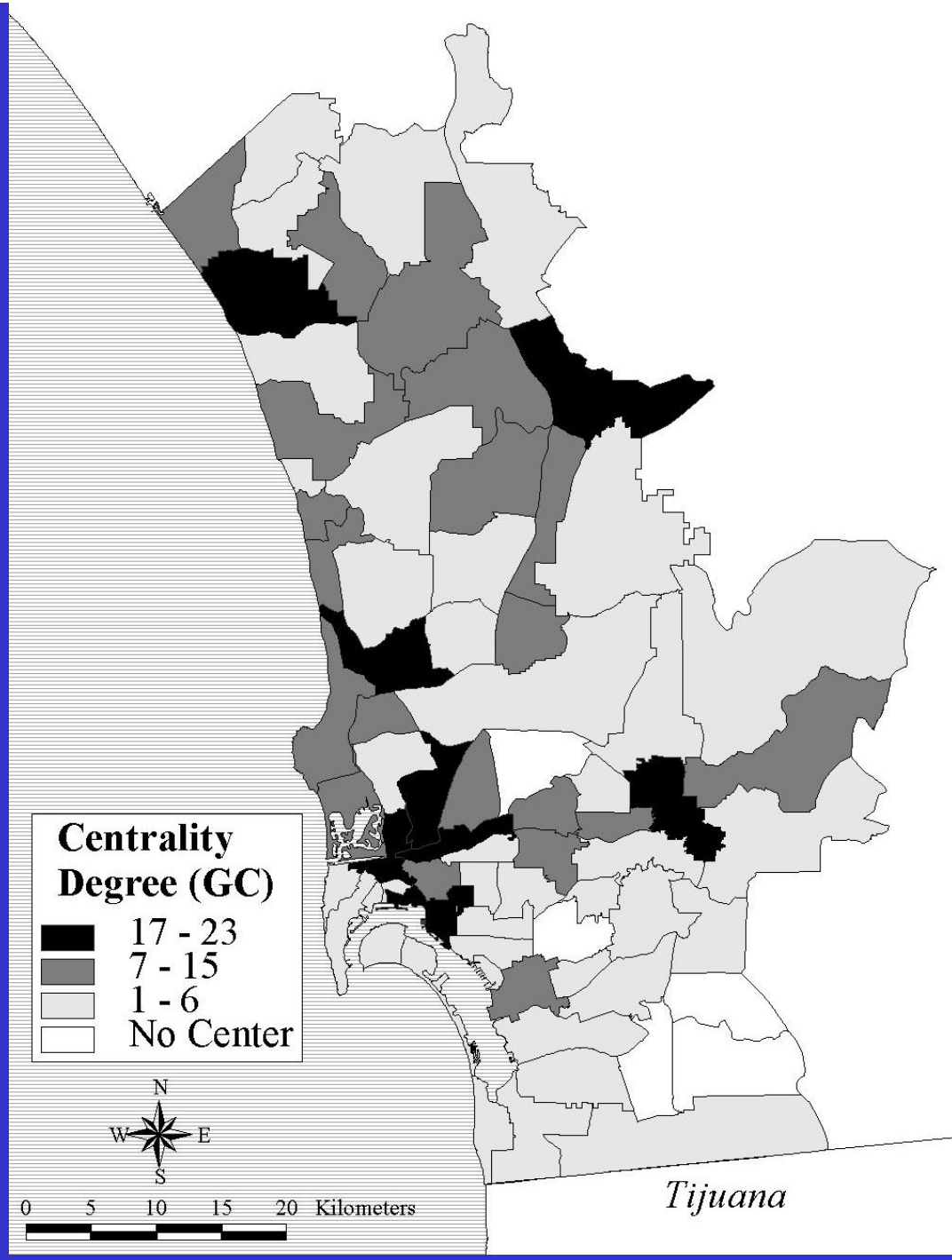
$$C_{ij} = \frac{(E_{ij}/P_j)}{(E_i/P)}$$

Cij = centrality index of activity (branch) i in zone j
Eij = employment of activity i in zone j
Ei = employment of activity i in the whole city
Pj = population in zone j
P = population in the whole city

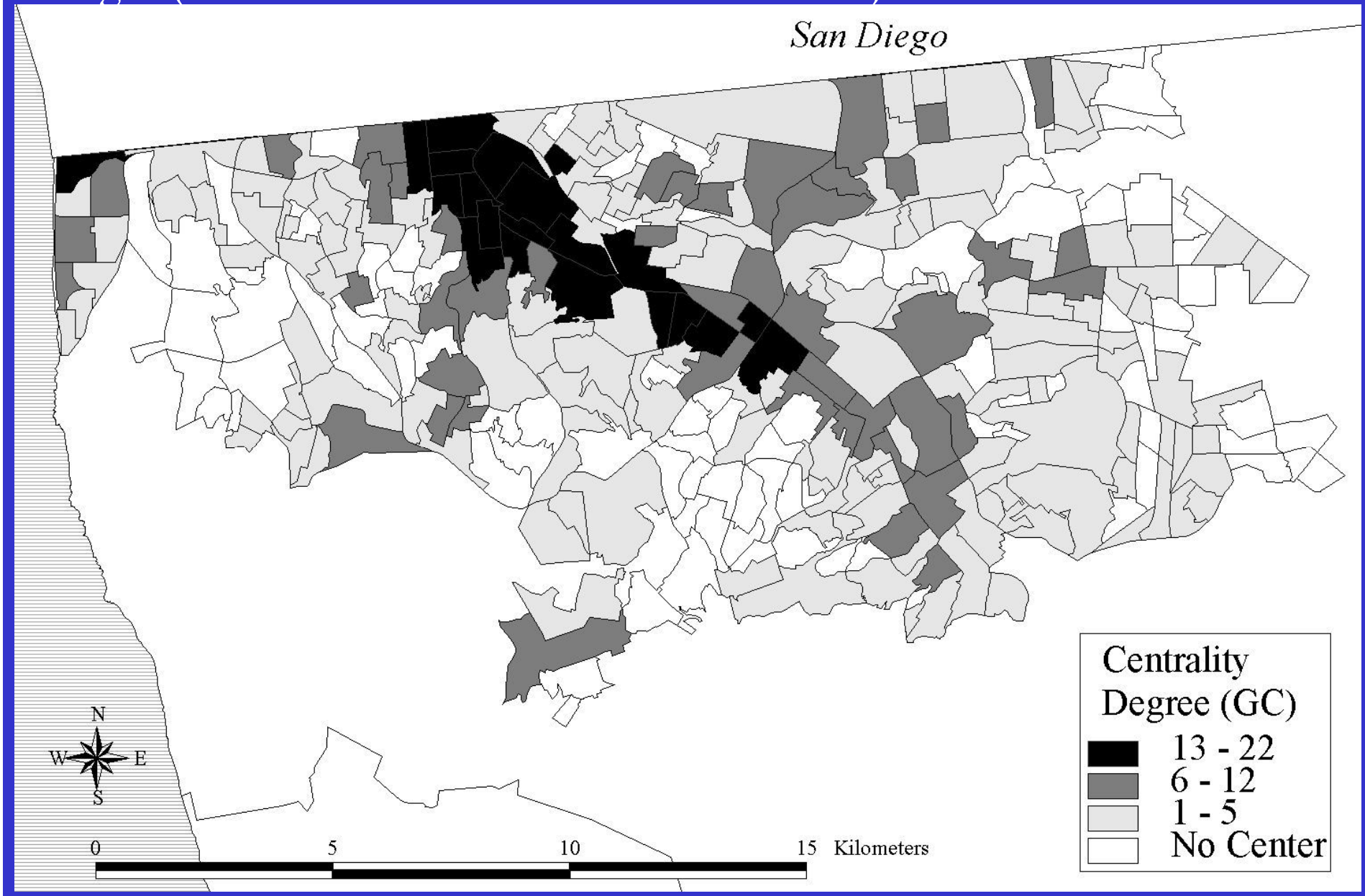
Centrality degree

$$GC_j = \#(C_{ij} > 1)$$

San Diego's 3-levels Centers Hierarchy: Centrality Degree (GC) index by ranges (number of central branches/activities)



Tijuana's 3-levels Centers Hierarchy: Centrality Degree (GC) index by ranges (number of central branches/activities)



Statistical model to test determinants of tertiary centers

$$GC_j = \alpha \left(\frac{V_{sj}}{E_{sj}} \right)^{\beta_1} \left(\frac{V_{cj}}{E_{cj}} \right)^{\beta_2} (De_j)^{\beta_3} (pI_{2j})^{\beta_4} (pI_{5j})^{\beta_5} (pD_j)^{\beta_6} (pS_j)^{\beta_7} (pZ_j)^{\beta_8}_{SD}$$

GCj = centrality degree in zone j

Supply side:

Vsj/Esj = productivity (sales by employee) of service sector in zone j

Vcj/Ecj = productivity (sales by employee) of commerce sector in zone j

Dej = establishment (firm) density in zone j

Demand side:

pI2j = potential in zone j of resident proportion (workers in Tijuana, families in San Diego) earning less than 2 minimum wages

pI5j = potential in zone j of resident proportion (workers in Tijuana, families in San Diego) earning more than 5 minimum wages

pDj = potential in zone j of population density

pSj = potential in zone j of income segregation

pZj = potential in zone j of race segregation (San Diego only)

α, $\beta 1 \ldots \beta 8$ = regression constants

Examples of estimates of indicator potential in zone j

Potential in zone j of income segregation

$$pS_j = \frac{\sum_k \frac{S_k}{d_{jk}^{\phi}}}{\sum_j \sum_k \frac{S_k}{d_{jk}^{\phi}}}$$

Potential in zone j of resident proportion earning more than 5 minimum wages

$$pI_{5j} = \frac{\sum_k \frac{I_{5k}}{d_{jk}^{\phi}}}{\sum_j \sum_k \frac{I_{5k}}{d_{jk}^{\phi}}}$$

j and k are zones [j=1,2,..,n] [k=1,2,..,n], d is distance in kilometers between j and every k, ϕ is exponent of distance [ϕ=0.5, 1, 2 , 3]

Centrality Degree (GC) Regression Models

Variables	Model 1		Model 2
	Tijuana	San Diego	San Diego
Constant	50.805 *0.00*	187.917 *0.01*	52.932 *0.00*
Service Worker Productivity (V/Es)	0.125 *0.03*	0.245 *0.17*	
Commerce Worker Productivity (V/Ec)	0.173 *0.00*	-0.504 *0.11*	
Establishment Density (De)	0.608 *0.00*	0.792 *0.00*	0.769 *0.00*
P1 Resident workers' proportion (families in San Diego) with more than 5 MW (I_5)	0.755 *0.00*	-0.213 *0.69*	
P1 Resident workers' proportion (families in San Diego) with less than 2 MW (I_2)			-0.505 *0.04*
Resident Population Density (D)	-0.473 *0.00*	-0.739 *0.00*	-0.628 *0.00*
P2 Income segregation (S)	-0.425 *0.00*	2.65E-03 *0.99*	
P2 Race segregation (Z)			0.308 *0.06*
R Square	0.68	0.69	0.71

P1 or P2 means: variable potential with exponent 1 or 2 on distance indicator, respectively. Variable statistical significance in italics.

CONCLUSIONS: Explain the formation and location of subcenters:

Supply:

-internal economies of scale and the technological variation are important for Tijuana but do not for San Diego

-agglomeration advantages are important for both cities

-agglomeration advantages are more important than the scale economies and the technological variations

Demand:

-subcenters are spatially attracted by higher income people in Tijuana, and in San Diego for all the incomes except the lower

-subcenters centrality diminishes with low income

-subcenters centrality increases when the zone has low population density

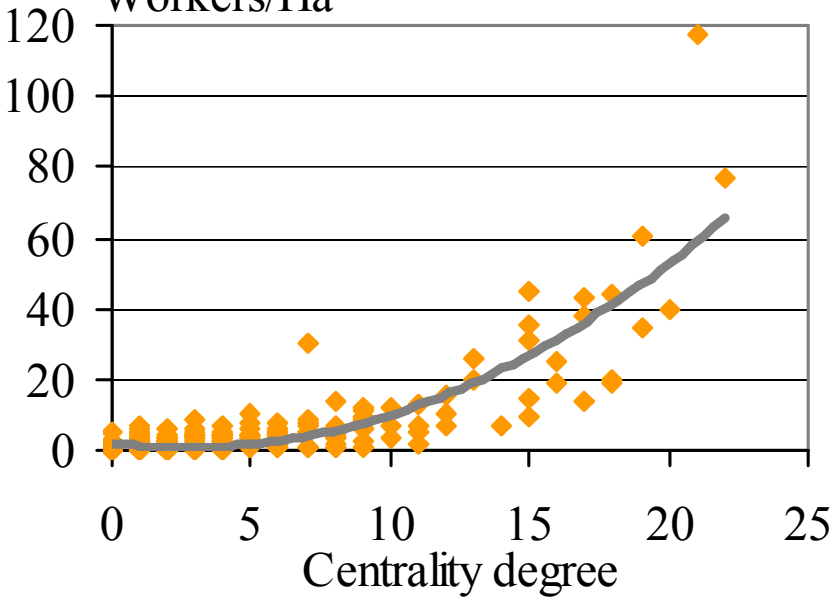
-higher segregation by income diminishes the subcenters centrality in Tijuana

-higher segregation by race increases the subcenters centrality in San Diego

Centrality Degree (GC) Explains Tertiary Employment Density (Commerce and Services)

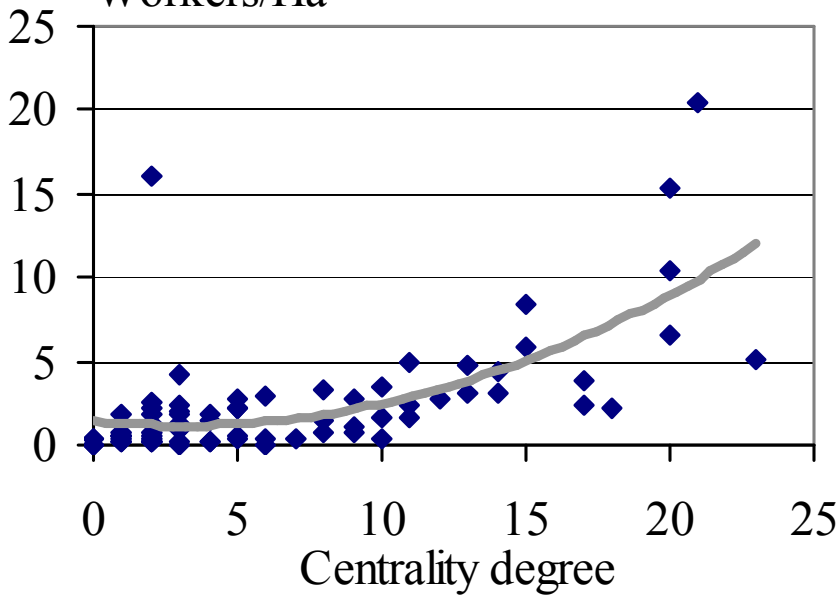
Tijuana

(Trend: polynomial of degree 2 in Centrality degree, R Square 0.75)

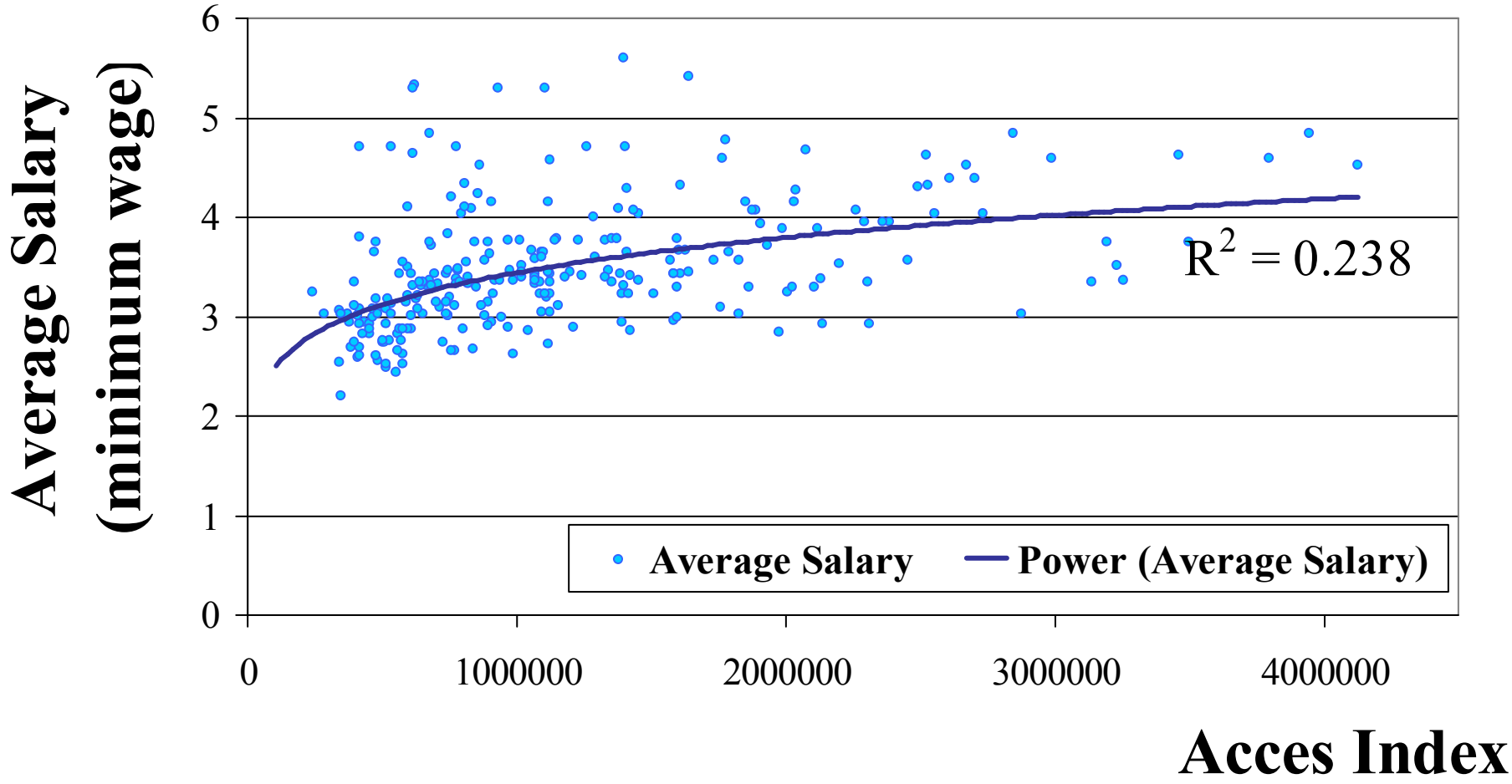


San Diego

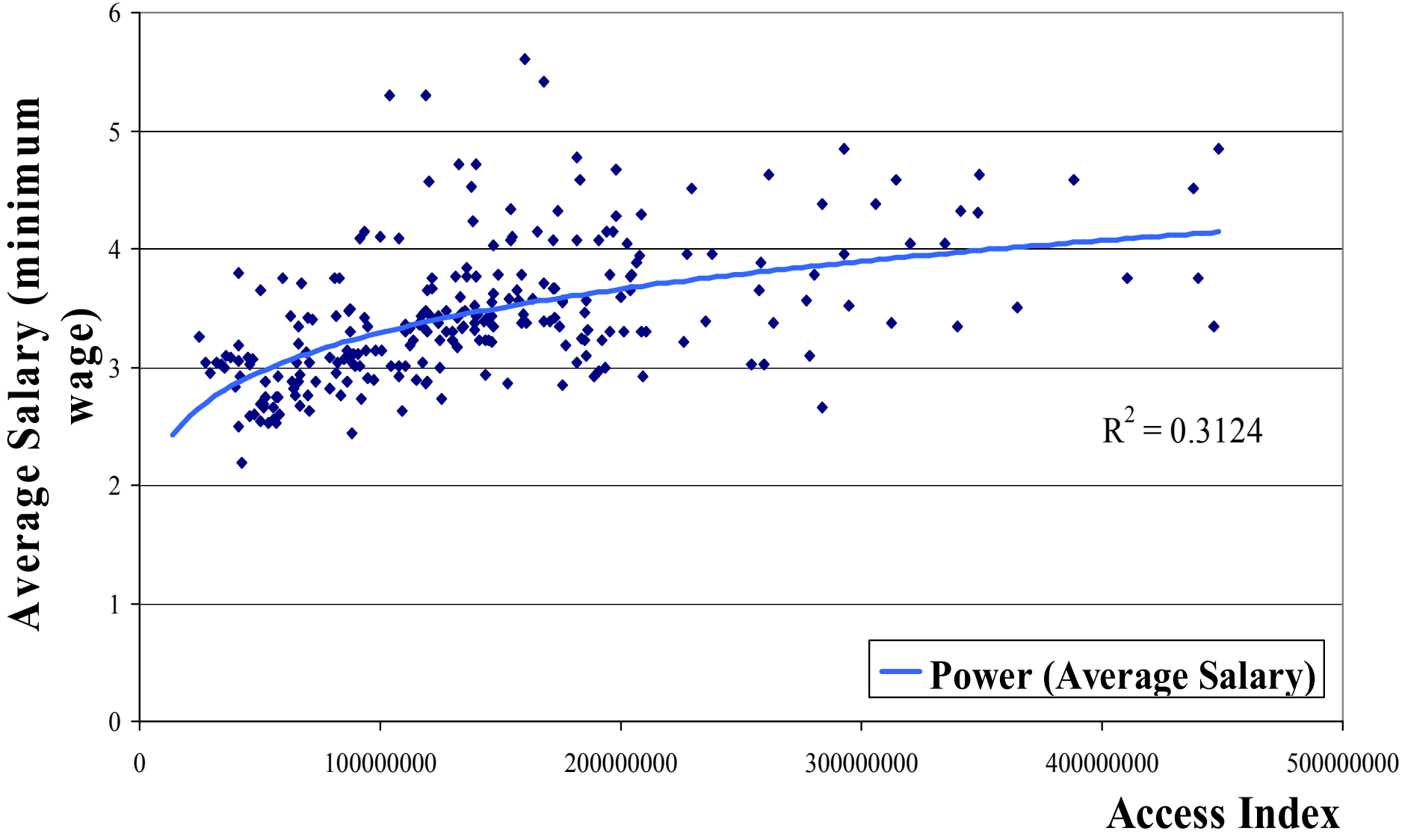
(Trend: polynomial of degree 2 in Centrality degree, R Square 0.43)



Graph 1
Tijuana's neighborhoods 1993: Resident workers' salary by access to tertiary centers



Graph 3
Tijuana's neighborhoods 1993: Resident workers' salary by access to employment places



Potencial de accesibilidad a centros

$$P_j^C = \sum_k GC_k \Big/ d_{jk}^2$$

Potencial de accesibilidad a empleos

$$P_j^E = \sum_k E_k \Big/ d_{jk}^2$$

P^Cj = índice de accesibilidad del barrio j
a los centros de comercio-servicios
P^Ej = índice de accesibilidad del barrio j a los empleos
GCk = grado de centralidad del barrio j
Ek = empleo total en el barrio k
djk = distancia lineal desde el barrio j al k

This project, designed for the same site as to the recent Micro Unit Request for Proposals sets out to achieve the best possible 300 square foot unit. Like all housing, trade offs between amenity and affordability are what constitutes the design. The wonderful opportunity that the micro unit market presents is that it allows unusual choices. This proposal studies the advantages of a shared housing solution.

Housing Demand in U.S.

- USC의 연구를 중심으로

JUNG HYUN CHOI

Housing Demand

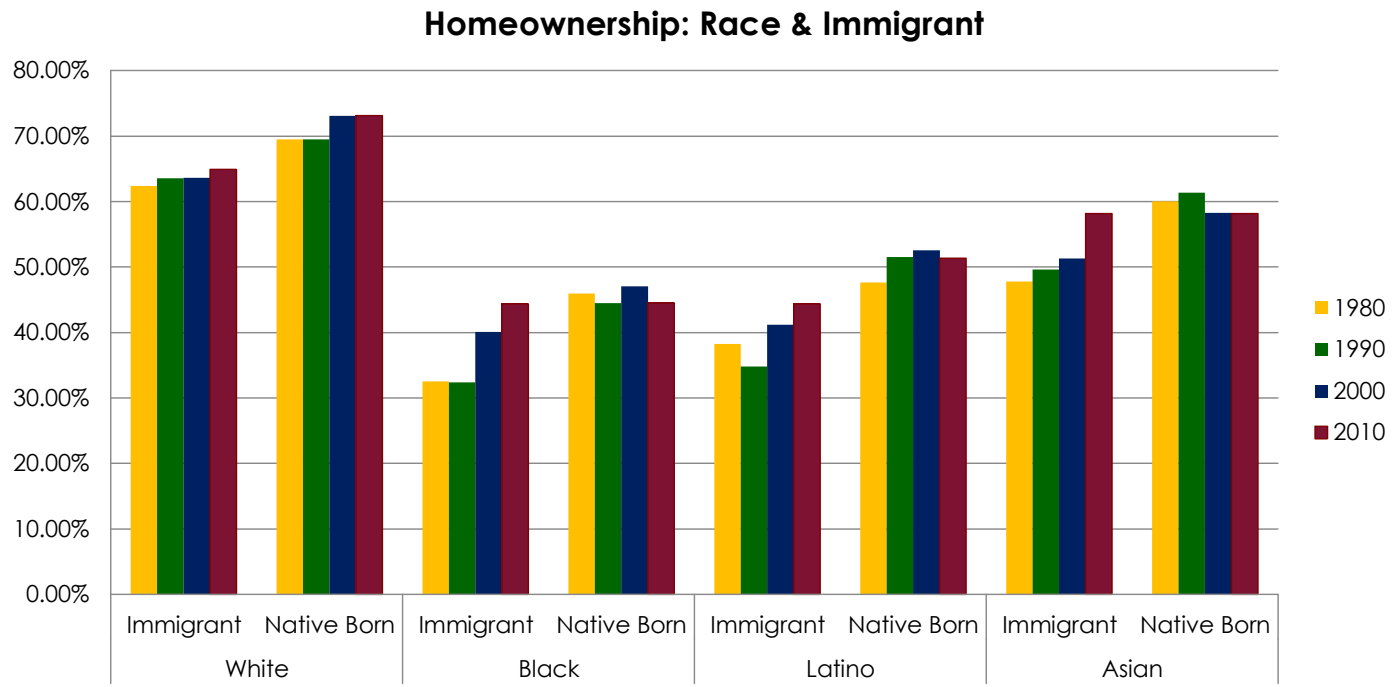
- Demand for What?
  - Type of Housing (Tenure Choice, Housing Structure)
  - Household Composition
  - Location
- Demand from Whom?
  - Individual? Household?
- Theory & Measurement?

Tenure Choice

- User Cost Model
- Tax
- Transaction Cost
- Credit Constraints
- Market Condition (House Price/Rent, Volatility etc…)
- Socio Demographic Factors: Income, Wealth, Education, Age, Race, Immigrant Status…
- Psychological Factors: Expectation etc.

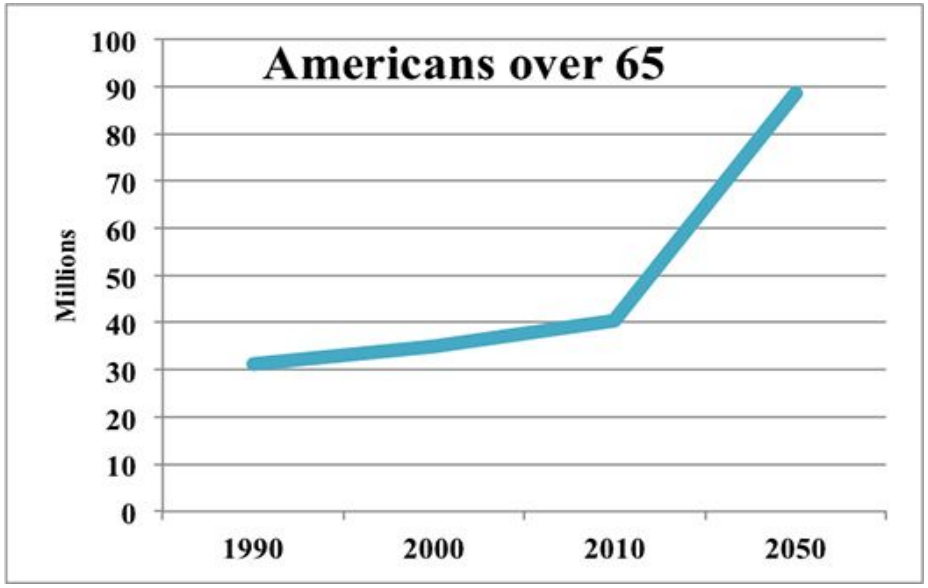
Green, Myers & Painter

Demand of Housing by Race & Immigrant Status



Green vs. Myers: Future Housing Demand

- Aging Society and Changing Housing Demand

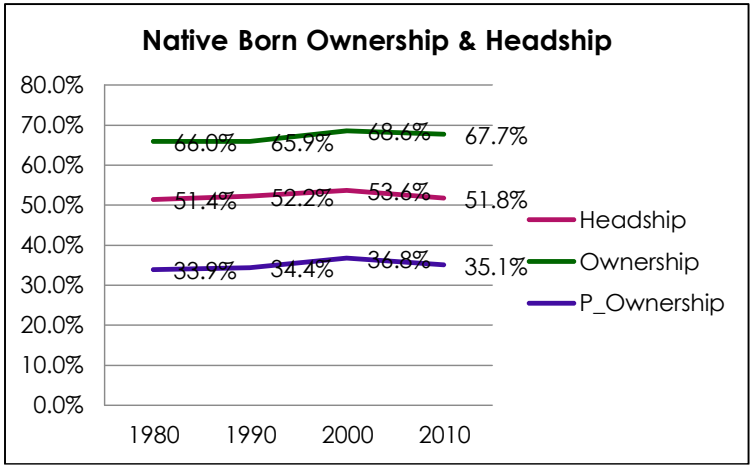


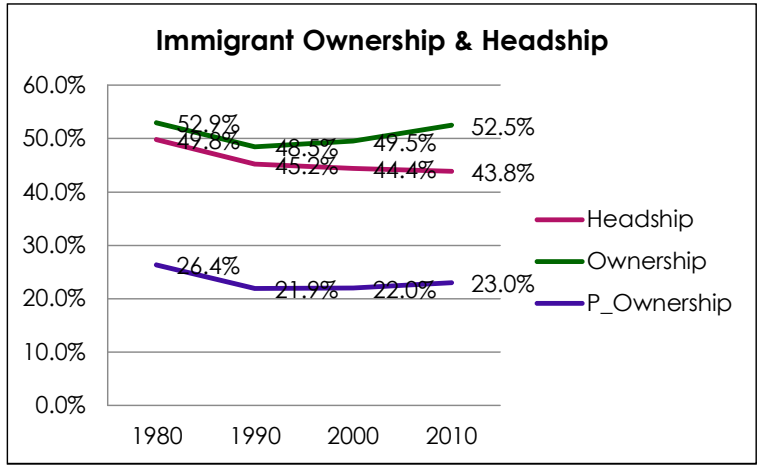
Homeownership & Household Formation

$$\text{Home Ownership} = \frac{\#\text{ of Owners}}{\#\text{ of Households}}$$

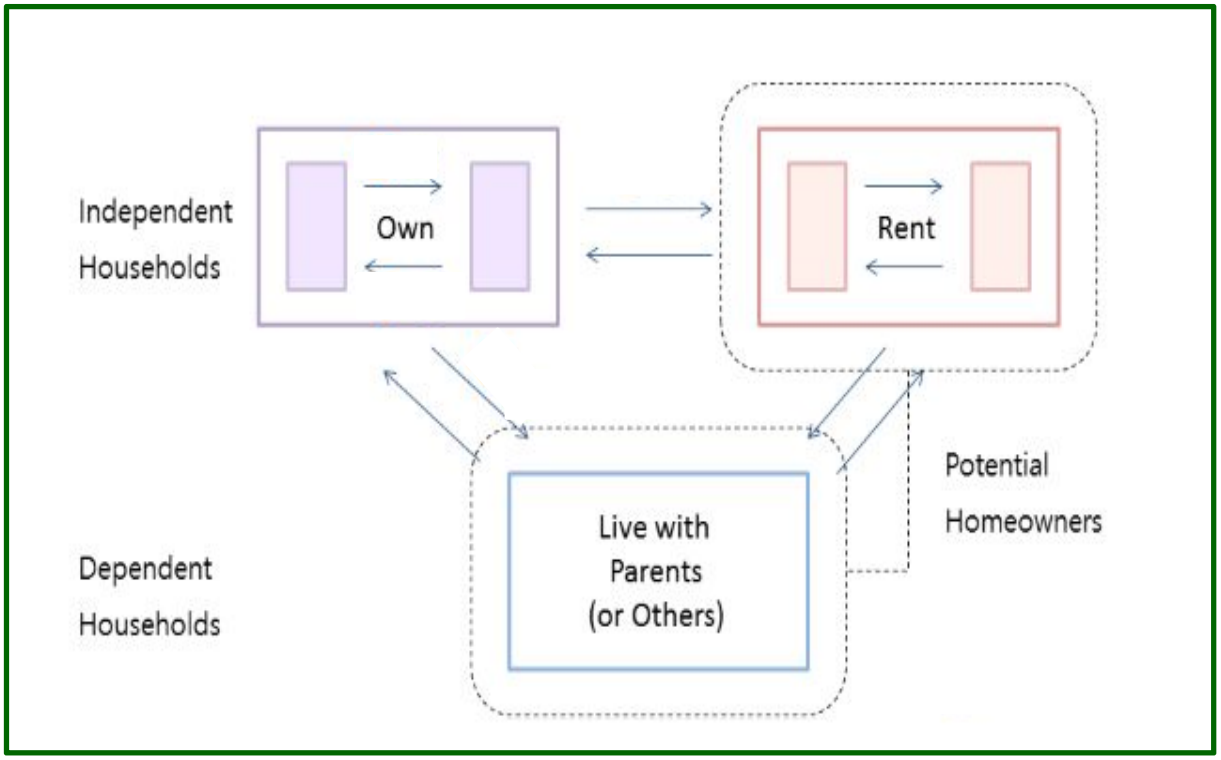
Haurin & Rosenthal (2007)

Myers & Yu (2010)





Homeownership & Household Formation



Lee & Painter (2013)

What happens to household formation during recession?

REGIONAL TRANSPORTATION PLAN

2012–2035 RTP

SUSTAINABLE COMMUNITIES STRATEGY

Towards a Sustainable Future

Southern California Association of Governments

ADOPTED APRIL 2012

Image of bus station courtesy of Metro © 2012 LACMTA
Image of Irvine Village courtesy of MVE & Partners, Irvine, CA

Southern California Association of Governments

REGIONAL TRANSPORTATION PLAN 2012–2035 RTP

SUSTAINABLE COMMUNITIES STRATEGY

Towards a Sustainable Future

CONTENTS

LIST OF FIGURES, TABLES, AND EXHIBITS

Appendices

MISSION STATEMENT

Leadership | Vision | Progress

Leadership, vision and progress which promote economic growth, personal well-being, and livable communities for all Southern Californians.

THE ASSOCIATION WILL ACCOMPLISH THIS MISSION BY:

- Developing long-range regional plans and strategies that provide for efficient movement of people, goods and information; enhance economic growth and international trade; and improve the environment and quality of life.
- Providing quality information services and analysis for the region.
- Using an inclusive decision-making process that resolves conflicts and encourages trust.
- Creating an educational and work environment that cultivates creativity, initiative, and opportunity.

Funding: The preparation of this document was financed in part through funds from the Federal Highway Administration and Federal Transit Administration. Additional financial assistance was provided by the California Department of Transportation.

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Council Member Scott Malsin, WSCCOG
Council Member Paul Marchand, CVAG
Council Member Maricela Morales, VCOG
Council Member Joseph Mosca, SGVCOG
Council Member Allan Songstad, OCCOG
Council Member Daniel Tabor, SBCCOG
Council Member Luis Ayala, SGVCOG

Energy and Environment Committee

Council Member Sheryl Ade, WRCOG
Council Member Layne Baroldi, GCCOG
Council Member Jerri Graham-Mejia, OCCOG
Council Member George Mirabal, GCCOG
Council Member Mitch Ward, SBCCOG
Council Member Jeff Williams, SANBAG
Council Member Carlos Valdez, San Manuel Band of Mission Indians

Transportation Committee

Council Member Tom King, SGVCOG
Council Member Micheal O'Leary, WSCCOG
Council Member Joel Bishop, OCCOG
Council Member Cathy Green, OCCOG
Council Member Malcolm Miller, WRCOG
Council Member John Pomierski, SANBAG

RESOLUTION

RESOLUTION NO. 12-538-2

A RESOLUTION OF THE SOUTHERN CALIFORNIA ASSOCIATION OF GOVERNMENTS APPROVING THE 2012–2035 REGIONAL TRANSPORTATION PLAN/SUSTAINABLE COMMUNITIES STRATEGY (2012–2035 RTP/SCS); RELATED CONFORMITY DETERMINATION; AND RELATED CONSISTENCY AMENDMENT #11-24 TO THE 2011 FEDERAL TRANSPORTATION IMPROVEMENT PROGRAM

WHEREAS, the Southern California Association of Governments (SCAG) is a Joint Powers Agency established pursuant to California Government Code §6500 et seq.; and

WHEREAS, SCAG is the designated Metropolitan Planning Organization (MPO) pursuant to 23 U.S.C. §134(d) for the counties of Los Angeles, Riverside, San Bernardino, Ventura, Orange, and Imperial, and as such, is responsible for preparing and updating the Regional Transportation Plan (RTP) and the Federal Transportation Improvement Program (FTIP) pursuant to 23 U.S.C. §134 et seq., 49 U.S.C. §5303 et seq., and 23 C.F.R. §450.312; and

WHEREAS, SCAG is the designated Regional Transportation Planning Agency (RTPA) under state law, and as such, is responsible for preparing, adopting and updating the RTP and Sustainable Communities Strategy every four years pursuant to Government Code §65080 et seq., and for preparing and adopting the FTIP (regional transportation improvement program, under state law) every two years pursuant to Government Code §§ 14527 and 65082, and Public Utilities Code §130301 et seq.; and

WHEREAS, pursuant to Senate Bill (SB) 375 (Steinberg, 2008) as codified in Government Code §65080(b) et seq., SCAG must prepare a Sustainable Communities Strategy (SCS) that demonstrates how the region will meet its greenhouse gas (GHG) reduction targets as set forth by the California Air Resources Board (ARB) and that will be incorporated into the RTP. As provided by Government Code §65080(d), the subregional Sustainable Communities Strategy for the subregions of Orange County Council of Governments and Gateway Cities Council of Governments are incorporated in their entirety into the Final 2012–2035 RTP/SCS; and

WHEREAS, pursuant to SB 375, ARB set the per capita GHG emission reduction targets from passenger vehicles for the SCAG region at 8% below 2005 per capita emissions levels by 2020 and 13% below 2005 per capita emissions levels by 2035; and

WHEREAS, pursuant to Government Code §65080(b)(2)(B), the SCS must: (1) identify the general location of uses, residential densities, and building intensities within the region; (2) identify areas within the region sufficient to house all the population of the region, including all economic segments of the population, over the course of the planning period of the regional transportation plan taking into account net migration into the region, population growth, household formation and employment growth; (3) identify areas within the region sufficient to house an eight-year projection of the regional housing need for the region pursuant to Government Code Section 65584; (4) identify a transportation network to service the transportation needs of the region; (5) gather and consider the best practically available scientific information regarding resource areas and farmland in the region as defined in subdivisions (1) and (b) of the Government Code Sections 65080 and 65581; and (6) consider the statutory housing goals specified in Sections 65580 and 65581, (7) set forth a forecasted development pattern for the region which when integrated with the transportation network, and other transportation measures and policies, will reduce the GHG emissions from automobiles and light trucks to achieve the GHG reduction targets, and (8) allow the RTP to comply with air quality conformity requirements under the federal Clean Air Act; and

WHEREAS, SCAG is further required to comply with the California Environmental Quality Act ("CEQA") (Cal. Pub. Res. Code § 21000 et seq.) in preparing the 2012–2035 RTP/SCS; and

WHEREAS, the 2012–2035 RTP/SCS must be consistent with all other applicable provisions of federal and state law including:

(1) The Safe, Accountable, Flexible, Efficient Transportation Equity Act: A Legacy for Users (SAFETEA-LU) (23 U.S.C. §134 et seq.);

(2) The metropolitan planning regulations at 23 C.F.R. Part 450, Subpart C;

(3) California Government Code §65080 et seq.; Public Utilities Code §130058 and 130059; and Public Utilities Code §44243.5;

(4) §§174 and 176(c) and (d) of the federal Clean Air Act [(42 U.S.C. §§7504 and 7506(c) and (d)] and EPA Transportation Conformity Rule, 40 C.F.R. Parts 51 and 93;

(5) Title VI of the 1964 Civil Rights Act and the Title VI assurance executed by the State pursuant to 23 U.S.C. §324;

(6) The Department of Transportation's Final Environmental Justice Strategy (60 Fed. Reg. 33896; June 29, 1995) enacted pursuant to Executive Order 12898, which seeks to avoid disproportionately high and adverse impacts on minority and low-income populations with respect to human health and the environment;

(7) Title II of the 1990 Americans with Disabilities Act (42 U.S.C. §§12101 et seq.) and accompanying regulations at 49 C.F.R. §27, 37, and 38;

(8) Senate Bill 375 (Steinberg, 2008) as codified in California Government Code §65080(b) et seq.; and

WHEREAS, in non-attainment and maintenance areas for transportation-related criteria pollutants, the MPO, as well as the Federal Highways Administration (FHWA) and Federal Transit Administration (FTA), must make a conformity determination on any updated or amended RTP in accordance with the federal Clean Air Act to ensure that federally supported highway and transit project

activities conform to the purpose of the State Implementation Plan (SIP); and

WHEREAS, transportation conformity is based upon a positive conformity finding with respect to the following tests: (1) regional emissions analysis, (2) timely implementation of Transportation Control Measures, (3) financial constraint, and (4) interagency consultation and public involvement; and

WHEREAS, on May 8, 2008, the SCAG Regional Council found the 2008 RTP to be in conformity with the State Implementation Plans for air quality, pursuant to the federal Clean Air Act and Environmental Protection Agency (EPA) Transportation Conformity Rule. Thereafter, FHWA and FTA made a conformity determination on the 2008 RTP with said determination to expire on June 5, 2012; and

WHEREAS, on September 2, 2010, in accordance with federal and state requirements, , the SCAG Regional Council approved the 2010/11–2015/16 Federal Transportation Improvement Program (2011 FTIP), which was federally approved on December 14, 2010. The 2011 FTIP represents a staged, multi-year, intermodal program of transportation projects which covers six fiscal years and includes a priority list of projects to be carried out in the first four fiscal years; and

WHEREAS, SCAG staff has engaged in the continuing, cooperative, and comprehensive transportation planning process mandated by 23 U.S.C. §134(c) (3) and 23 C.F.R. §450.312, resulting in the development of the 2012–2035 RTP/SCS; and

WHEREAS, pursuant to Government Code §65080(b)(2)(F) and federal public participation requirements, including 23 C.F.R. §450.316(b)(1)(iv), SCAG must prepare the RTP, including its SCS, by providing adequate public notice of public involvement activities and time for public review. In March 2007, SCAG approved and adopted a Public Participation Plan, to serve as a guide for SCAG's public involvement process. SCAG staff further enhanced the outreach program by incorporating the public participation requirements of SB 375 and adding strategies to better serve the underrepresented segments of the region. As a result of this process, the SCAG Regional Council adopted Amendments #2 and #3 to the Public Participation Plan on December 3, 2009 and January 5, 2012, respectively; and

WHEREAS, pursuant to Government Code §65080(b)(2)(F)(iii), during the summer 2011, SCAG held a series of Sustainable Communities Strategy public workshops throughout the region, with over 700 attendees, including residents, elected officials, representatives of public agencies, community organizations, and environmental, housing and business stakeholders; and

WHEREAS, in accordance with the interagency consultation requirements, 40 C.F.R. 93.105, SCAG consulted with the respective transportation and air quality planning agencies, including but not limited to, extensive discussion of the Draft Conformity Report before the Transportation Conformity Working Group (a forum for implementing the interagency consultation requirements) throughout the 2012–2035 RTP/SCS update process; and

WHEREAS, SCAG released the Draft 2012–2035 RTP/SCS and the associated Draft Amendment #11-24 to the 2011 FTIP and issued a Notice of Availability, for a 55-day public review and comment period that began on December 20, 2011 and ended on February 14, 2012; and

WHEREAS, the Draft Program Environmental Impact Report for the 2012–2035 RTP/SCS (PEIR), was released on December 30, 2011 for a 45-day public review and comment period ending on February 14, 2012; and

WHEREAS, as part of a "bottom up" planning process, SCAG followed the provisions of its adopted Public Participation Plan regarding public involvement activities for the Draft 2012–2035 RTP/SCS. Public outreach efforts included publication of the Draft 2012–2035 RTP/SCS on an interactive web site, distribution of public information materials, six duly-noticed public hearings, and twelve subregional workshops within the SCAG region to allow stakeholders, elected officials and the public to comment on the Draft 2012–2035 RTP/SCS and the Draft PEIR; and

WHEREAS, during the public review and comment period, SCAG received over 260 individual communications (over 1,800 separate comments) in total, regarding either the Draft 2012–2035 RTP/SCS or Draft PEIR, or both; and approximately 2 comments on the Draft Amendment 11-24 to the 2011 FTIP; and

WHEREAS, SCAG staff presented an overview of the comments received on the Draft PEIR, and a proposed approach to the responses, to the Policy Committees and Regional Council at a joint meeting on February 21, 2012; and

WHEREAS, SCAG staff further presented an overview of the comments received on the Draft 2012–2035 RTP/SCS, and a proposed approach to the responses, to the RTP Subcommittee on February 28, 2012 and to the Policy Committees and Regional Council at a joint meeting on March 1, 2012. Each of the comments, letters, and e-mails received was made available on the SCAG web page on March 1, 2012; and

WHEREAS, SCAG staff responses to each comment are provided in the Final 2012–2035 RTP/SCS, Public Participation and Consultation Appendix; and

WHEREAS, in accordance with the interagency consultation requirements, 40 C.F.R. 93.105, SCAG consulted with the respective transportation and air quality planning agencies, including but not limited to, extensive discussion of the Draft 2012–2035 RTP/SCS Conformity Report before the Transportation Conformity Working Group (a forum for implementing the interagency consultation requirements) throughout the update process; and

WHEREAS, the Final 2012–2035 RTP/SCS includes a financially constrained plan and a strategic plan. The constrained plan includes transportation projects that have committed, available or reasonably available revenue sources, and thus are probable for implementation. The strategic plan is an illustrative list of additional transportation investments that the region would pursue if additional funding and regional commitment were secured; and such investments are potential candidates for inclusion in the constrained RTP/SCS through future amendments or updates. The strategic plan is provided for information purposes only and is not part of the financially constrained

and conforming Final 2012–2035 RTP/SCS; and

WHEREAS, the Final 2012–2035 RTP/SCS includes a financial plan identifying the revenues committed, available or reasonably available to support the SCAG region's surface transportation investments. The financial plan was developed following basic principles including incorporation of county and local financial planning documents in the region where available, and utilization of published data sources to evaluate historical trends and augment local forecasts as needed; and

WHEREAS, the Transportation Conformity Report contained in the Final 2012–2035 RTP/SCS makes a positive transportation conformity determination. Using the final motor vehicle emission budgets released by ARB and found to be adequate by the U.S. Environmental Protection Agency (EPA), this conformity determination is based upon staff's analysis of the applicable transportation conformity tests; and

WHEREAS, each project or project phase included in the FTIP must be consistent with the approved RTP, pursuant to 23 C.F.R. §450.324(g). Amendment #11-24 to the 2011 FTIP has been prepared to ensure consistency with the Final 2012–2035 RTP/SCS; and

WHEREAS, conformity of Amendment #11-24 to the FTIP has been determined simultaneously with the 2012 Final RTP/SCS in order to address the consistency requirement of federal law; and

WHEREAS, prior to the adoption of this resolution, the Regional Council certified the Final PEIR prepared for the 2012–2035 RTP/SCS to be in compliance with CEQA; and

WHEREAS, the Regional Council has had the opportunity to review the 2012 Final RTP/SCS and its related appendices as well as the staff report related to the 2012 Final RTP/SCS, and consideration of the 2012 Final RTP/SCS was made by the Regional Council as part of a public meeting held on April 4, 2012.

NOW, THEREFORE BE IT RESOLVED, by the Regional Council of the Southern California Association of Governments, as follows:

1. The Regional Council approves and adopts the Final 2012–2035 RTP/SCS for the purpose of complying with the requirements of SAFETEA-LU and all other applicable laws and regulations as referenced in the above recitals. In adopting this Final 2012–2035 RTP/SCS, the Regional Council finds as follows:

a. The Final 2012–2035 RTP/SCS complies with all applicable federal and state requirements, including the SAFETEA-LU planning provisions. Specifically, the Final 2012–2035 RTP/SCS fully addresses the requirements relating to the development and content of metropolitan transportation plans as set forth in 23 C.F.R.§450.322 et seq., including issues relating to: transportation demand, operational and management strategies, safety and security, environmental mitigation, the need for a financially constrained plan, consultation and public participation, and transportation conformity; and

b. The Final 2012–2035 RTP/SCS complies with the emission reduction targets established by the California Air Resources Board and meets the requirements of Senate Bill 375 (Steinberg, 2008) as codified in Government Code §65080(b) et seq. by achieving per capita GHG emission reductions relative to 2005 of 9% by 2020 and 16% by 2035; and

2. The Regional Council hereby makes a positive transportation conformity determination of the Final 2012–2035 RTP/SCS and Amendment #11-24 to the 2011 FTIP. In making this determination, the Regional Council finds as follows:

a. The Final 2012–2035 RTP/SCS and Amendment #11-24 to the 2011 FTIP passes the four tests and analyses required for conformity, namely: regional emissions analysis; timely implementation of Transportation Control Measures; financial constraint analysis; and interagency consultation and public involvement; and

3. In approving the Final 2012–2035 RTP/SCS, the Regional Council also approves and adopts Amendment #11-24 to the 2011 FTIP, in compliance with the federal requirement of consistency with the RTP; and

4. In approving the Final 2012–2035 RTP/SCS, the Regional Council incorporates all of the foregoing recitals into this Resolution; and

5. SCAG's Executive Director or his designee is authorized to transmit the Final 2012–2035 RTP/SCS and its conformity findings to the FTA and the FHWA to make the final conformity determination in accordance with the Federal Clean Air Act and EPA Transportation Conformity Rule, 40 C.F.R. Parts 51 and 93.

APPROVED AND ADOPTED by the Regional Council of the Southern California Association of Governments at its regular meeting on the 4th day of April, 2012.

Pam O'Connor
President
Council Member, City of Santa Monica

Attested by:

Hasan Ikhrata
Executive Director

Joann Africa
Chief Counsel

THE IMPACT OF GENTRIFICATION ON NEIGHBORHOODS

Sol Price School of Public Policy
University of Southern California
Yunkyung Choi

Background of Highland Park

Mid 20th

- After World War II, White people left but Latino moved in
- Became a Bohemian capital with puck rock and DJ culture

2000

As a spill over effect of gentrified communities like Silver Lake and Echo Park, Highland Park starts to be gentrified

Present

Influx of wealthy → Rising rents → Outflow of poor

"Highland Park is the Hottest Up-and-Coming Market in the US"

Rank	Metro Area	Neighborhood	Listings	Sales	Price
1	Los Angeles	Highland Park	-48%	+73%	+31%
2	San Diego	Mira Mesa	-69%	+48%	+21%
3	Los Angeles	Faircrest Heights	-63%	+17%	+29%
4	Los Angeles	Eagle Rock	-54%	+44%	+11%
5	Bay Area	Livermore	-71%	+13%	+20%
6	Bay Area	Willow Glen	-60%	+9%	+32%
7	Los Angeles	Glassell Park	-64%	+31%	+17%
8	Chicago	Logan Square	-10%	+94%	+20%
9	Bay Area	The Mission	-29%	+17%	+80%
10	Seattle	N. Maple Leaf	-44%	+15%	+22%

Source: Curbed LA, January 15, 2013

Gentrification on Highland Park

Research Question 1.

How does gentrification affect on population in Highland Park?

Research Question 2.

How does gentrification affect on Economics in Highland Park?

Overview of Research

Dataset

Census

American Community Survey (ACS)

Time Frame

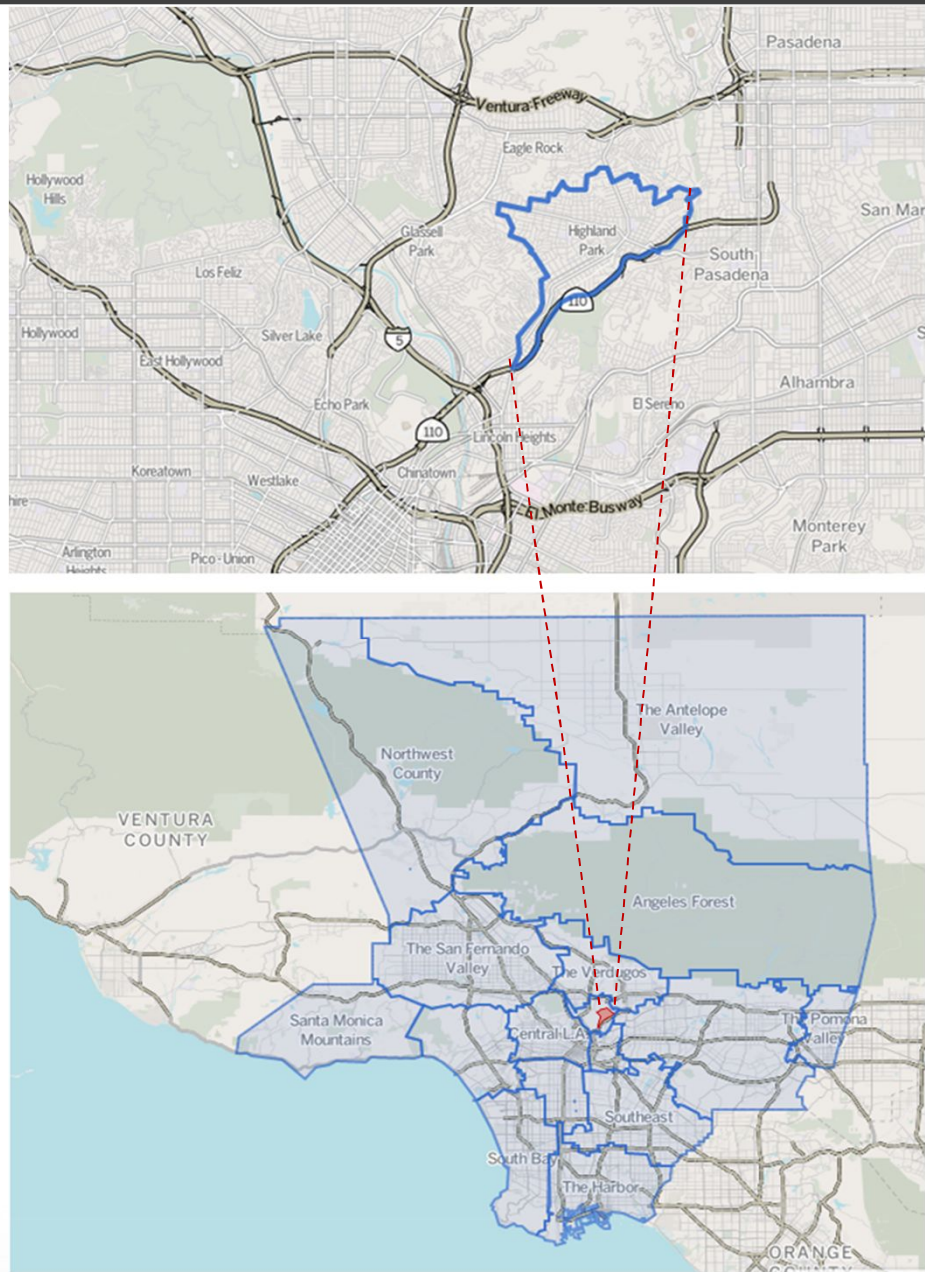
2000 – 2010 (2011)

Geographical Analysis

Highland Park

VS.

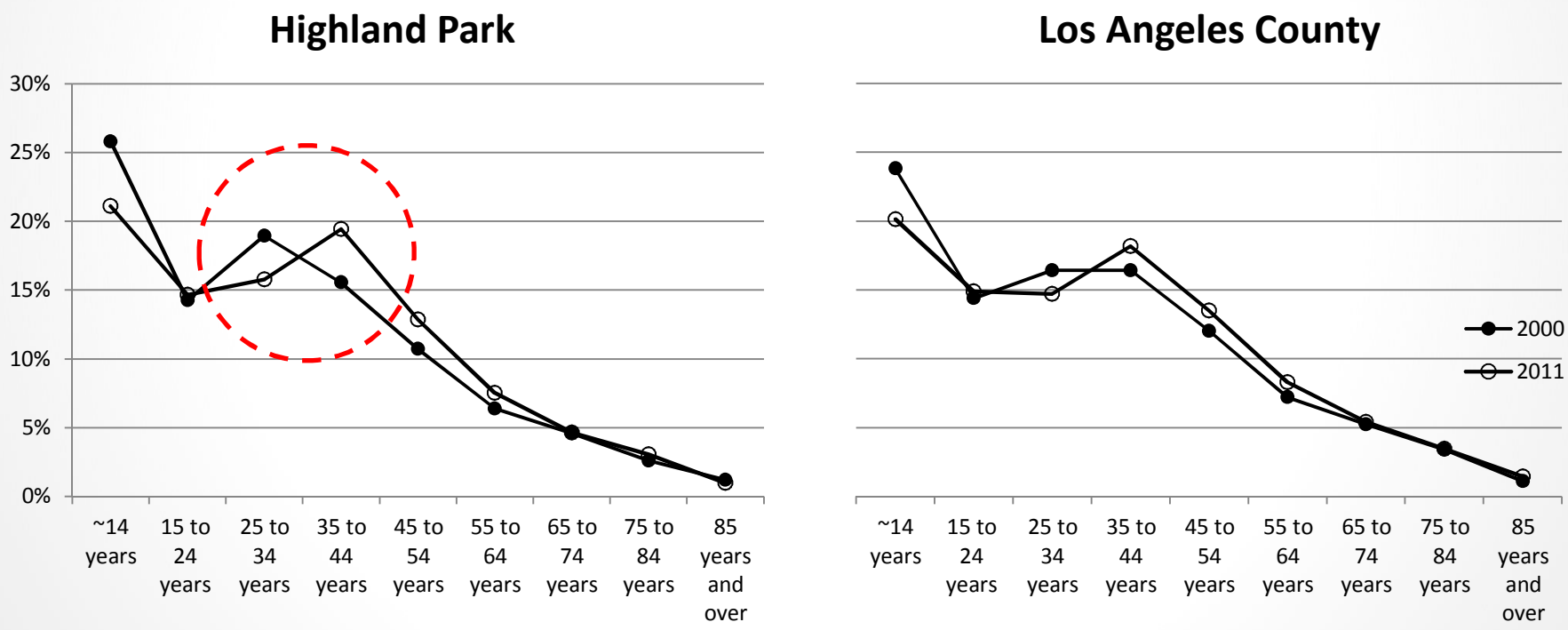
Los Angeles County



Population Shifts by Age

Population Share by Age

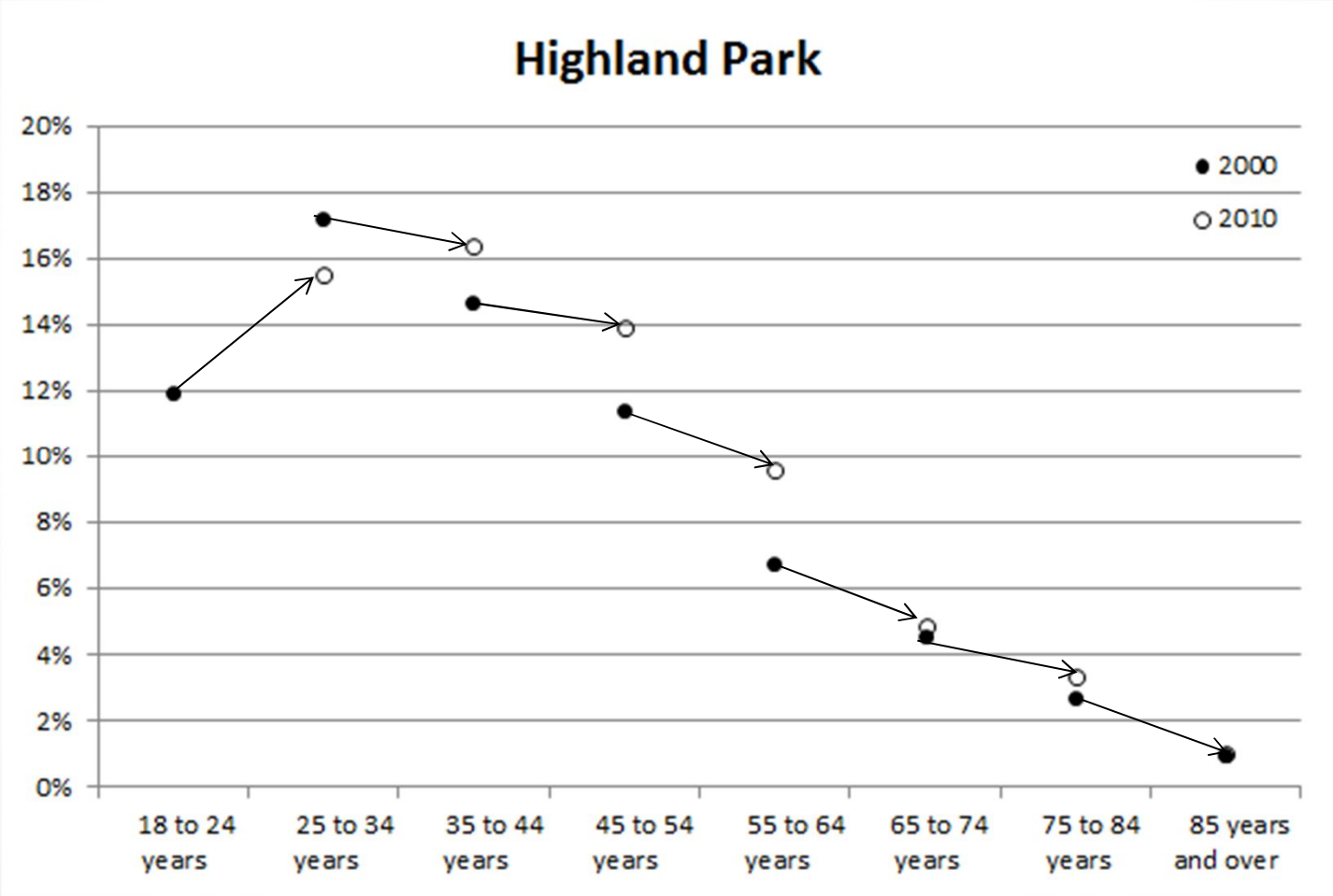
Young generation share is higher than Los Angeles County



Sources: P008, Census 2000 SF3; B01001, 2006-2010 American Community Survey 5-Year Estimates

Population Shifts by Age

Population Changes by Cohort in Highland Park



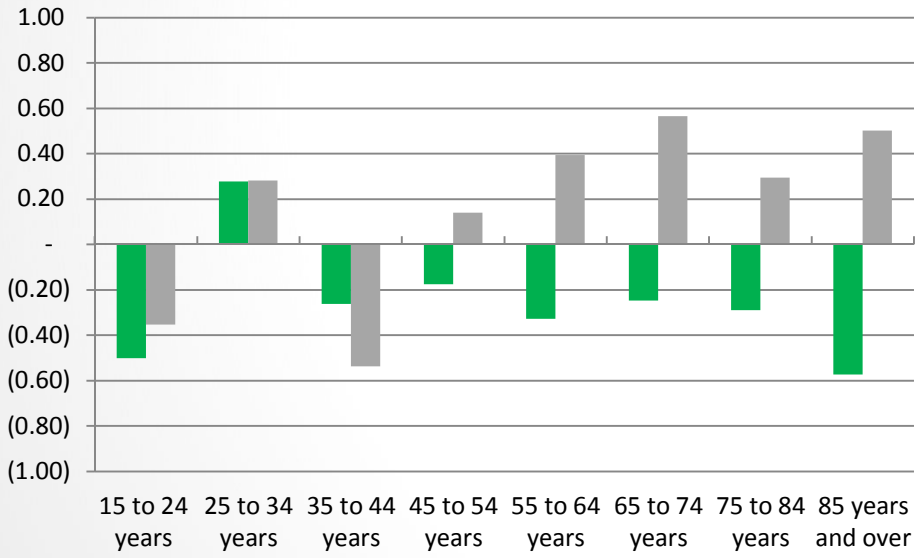
Sources: P008, Census 2000 SF3; B01001, 2006-2010 American Community Survey 5-Year Estimates

Population Shifts by Age

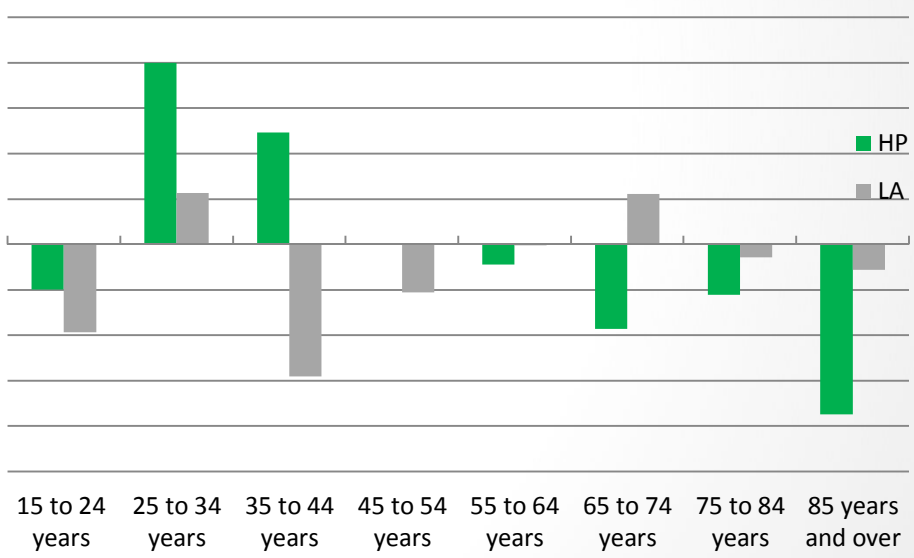
Race Change Rate by Age Cohort

Old Hispanic or Latino moved out, while young White moved in Highland Park

Hispanic Cohort Changes



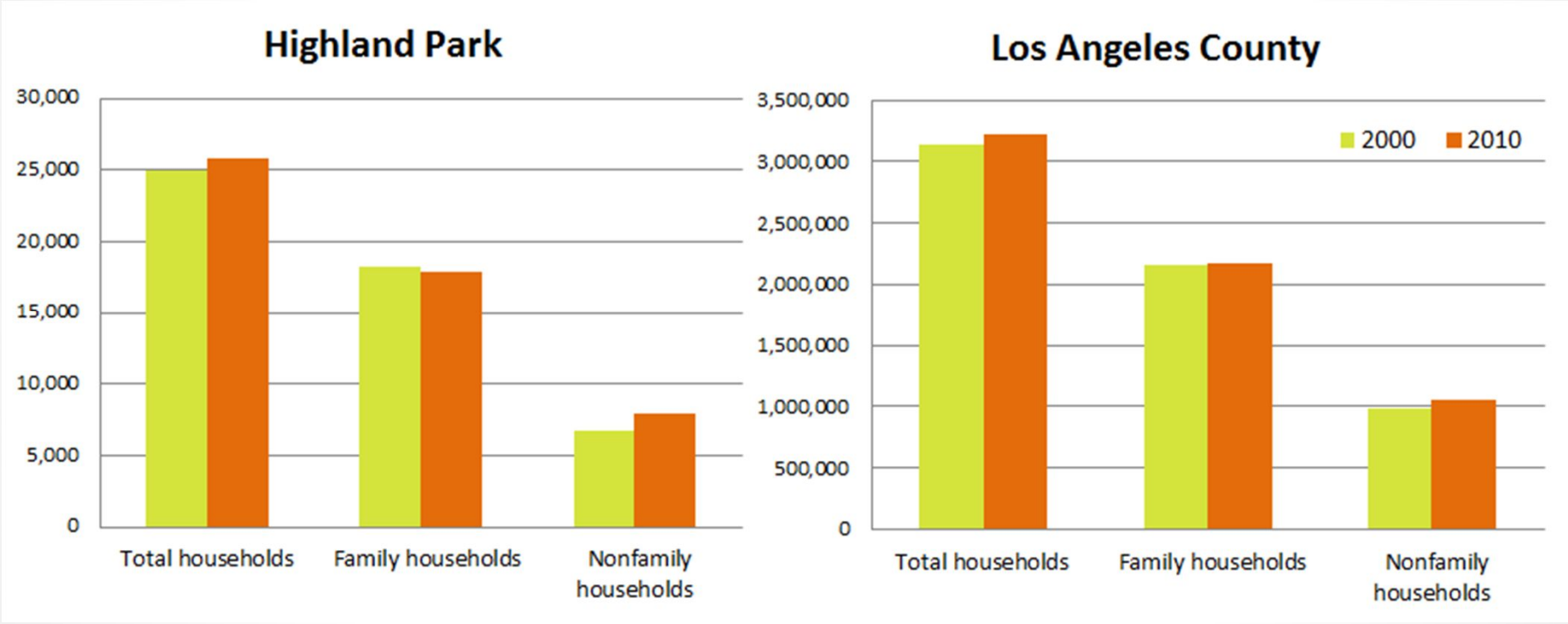
White Cohort Changes



Source: P012H, P012I, Census 2000 SF 1; B01001I, B01001H, 2006-2010 American Community Survey 5-Year Estimates

Household Type

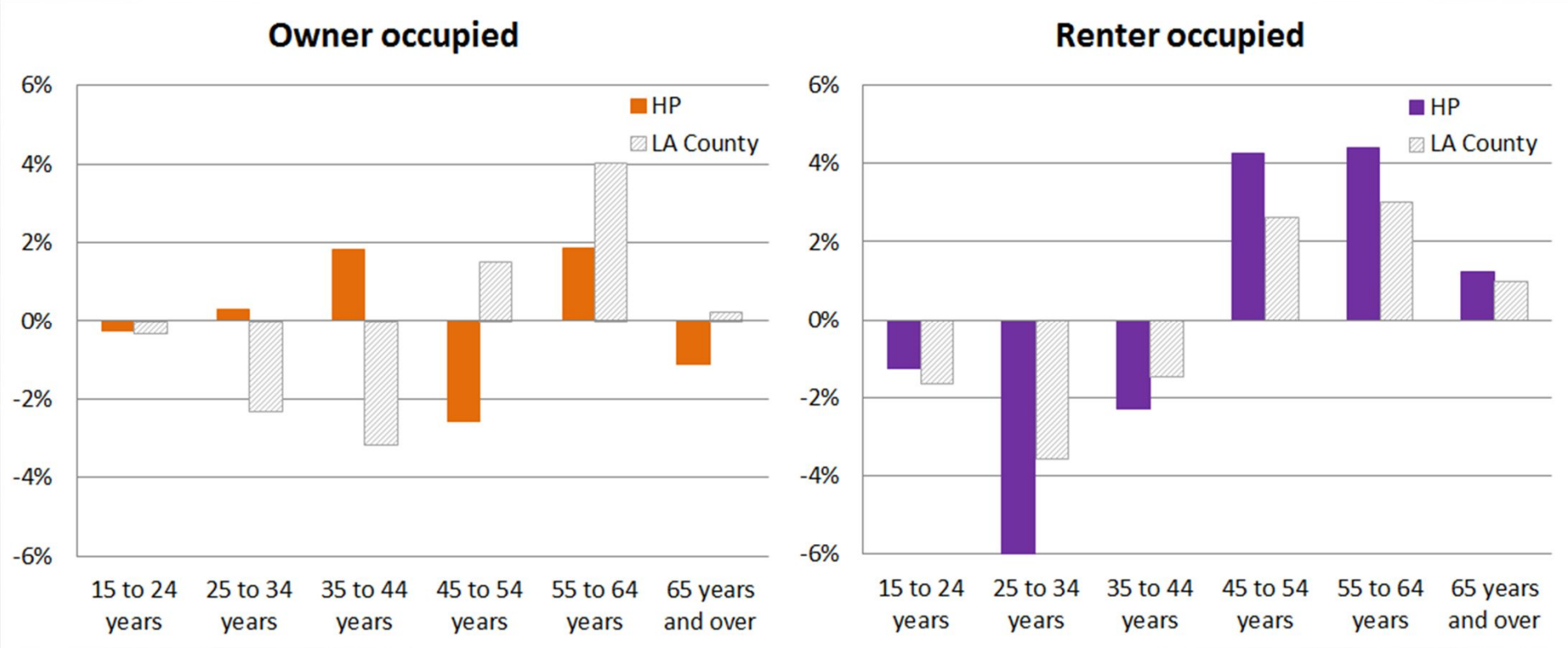
Household type, 2000-2010



Source: U.S. Census, 2000, SF3, P014; ACS, 2006-2010, B11016

Tenure by Age of Householder

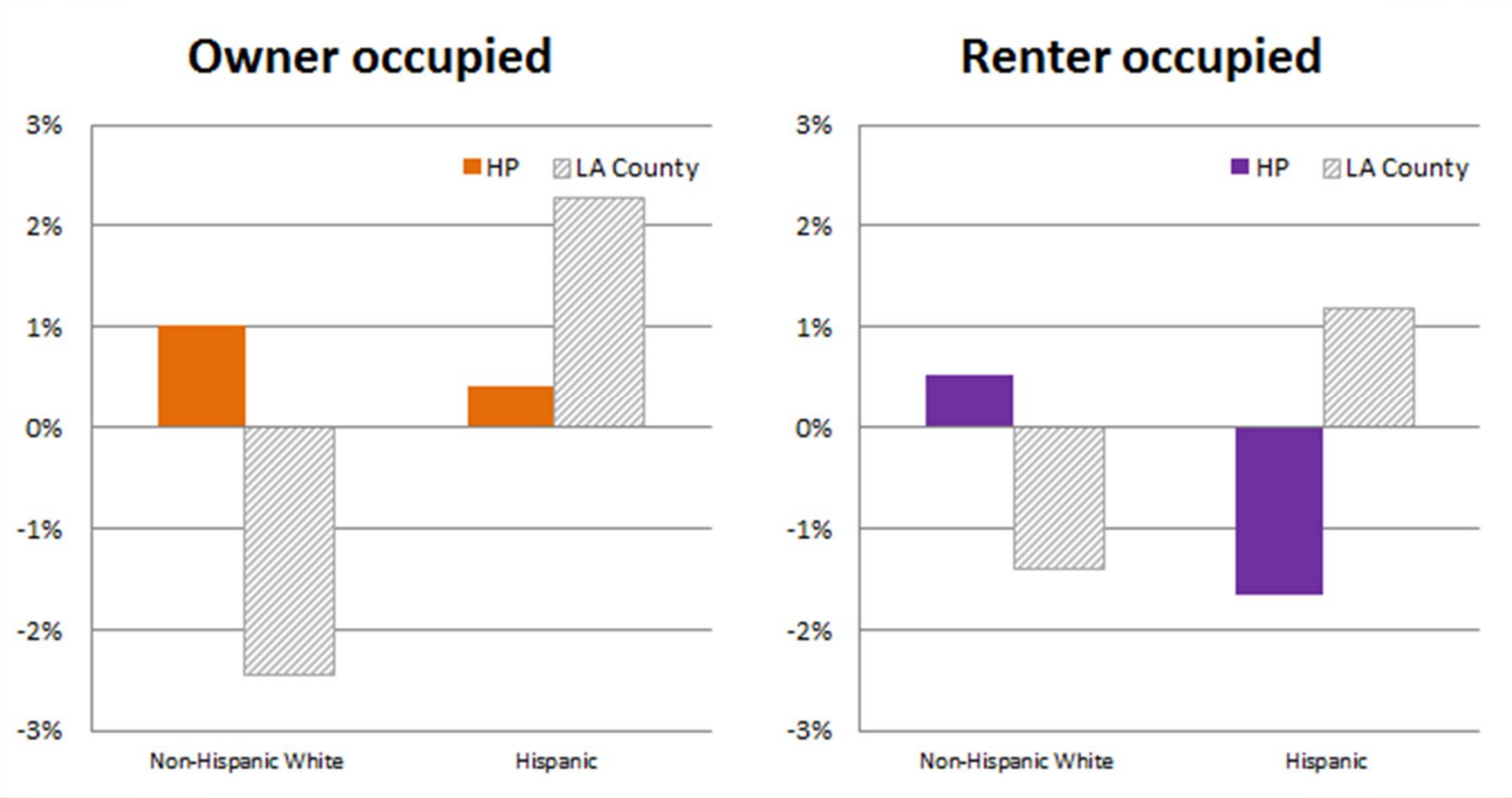
The Changes in the share of tenure by age of householder, 2000-2010



Source: U.S. Census, 2000, SF1, QT-H2; ACS, 2006-2010, B25007

Tenure by ethnicity

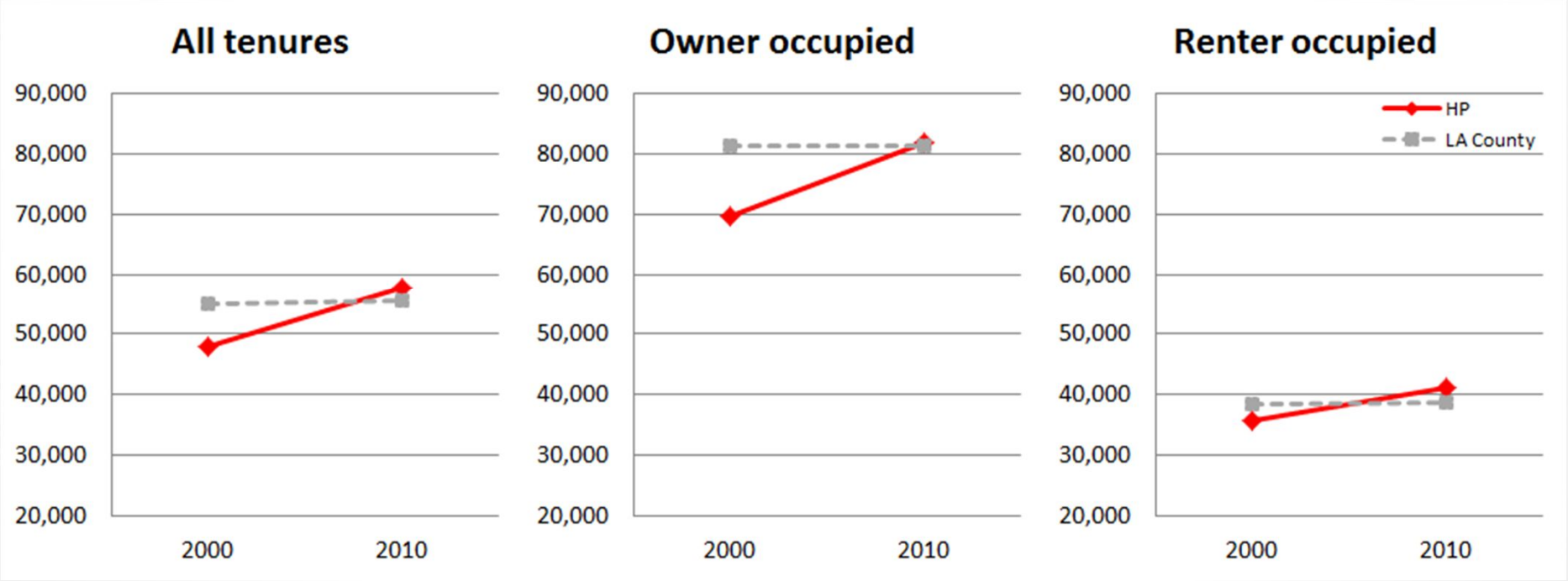
The Changes in the share of tenure by ethnicity, 2000-2010



Source: U.S. Census, 2000, SF1, H012, H031; ACS, 2006-2010, B25003H, B25003I

Economic Indicators

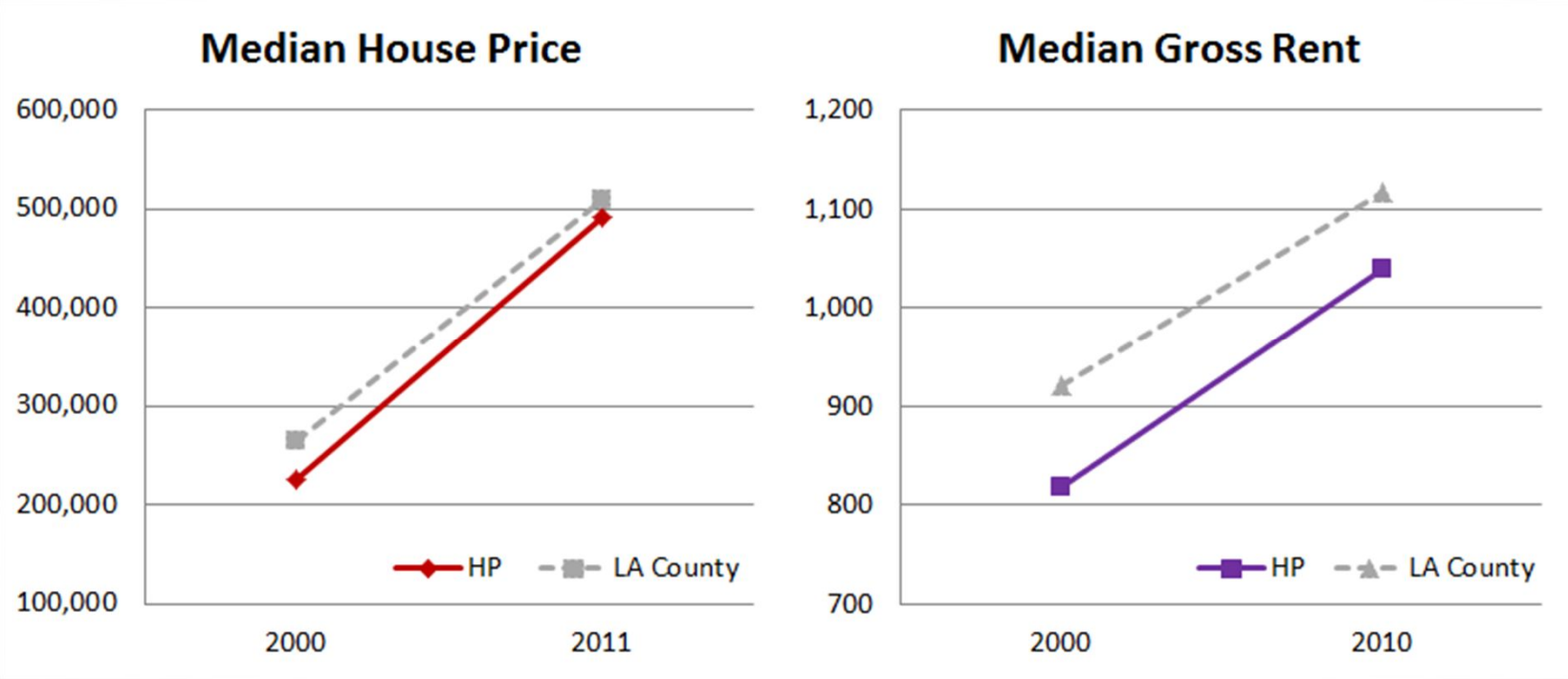
Median Household Income (adjusted to 2010 dollars), 2000-2010



Sources: HCT012, H063, H085, Census 2000 SF3; B19013, B25064, B25107, 2007-2011 American Community Survey 5-Year Estimates

Economic Indicators

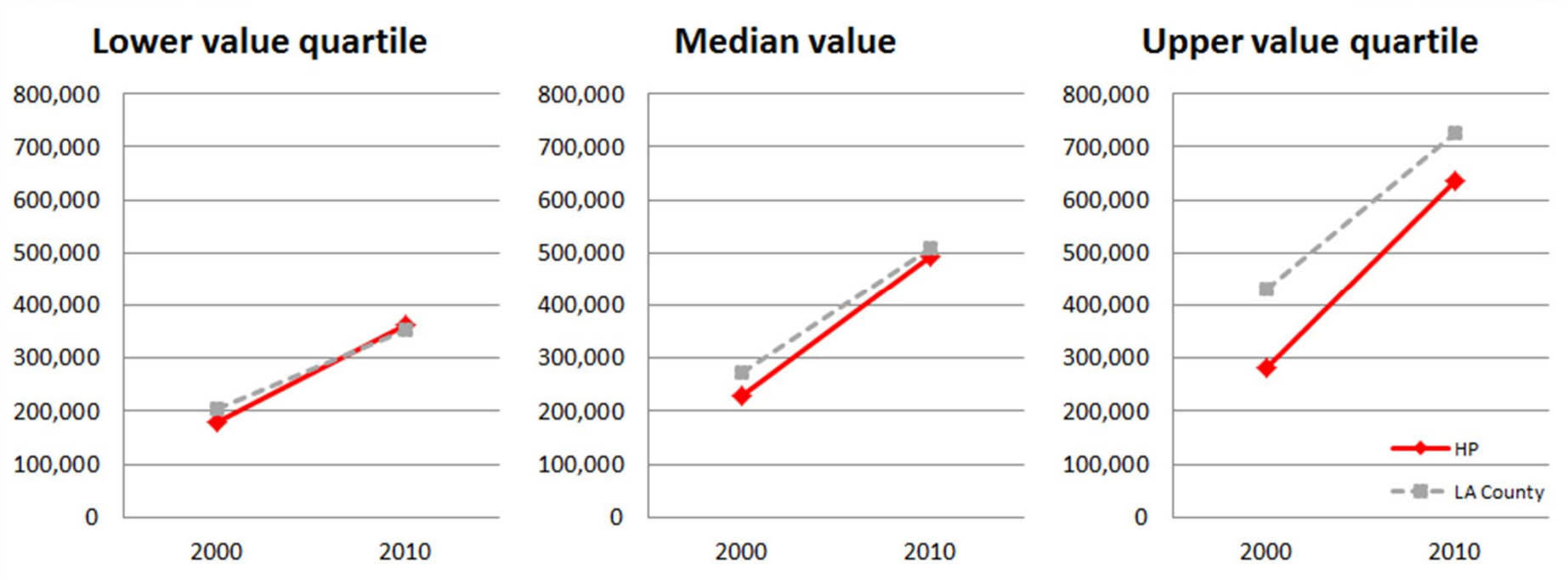
House Values by Quartile (adjusted to 2010 dollars), 2000-2010



Source: U.S. Census, 2000, SF3, H085, H063; ACS, 2006-2010, B25107, B25064

Economic Indicators

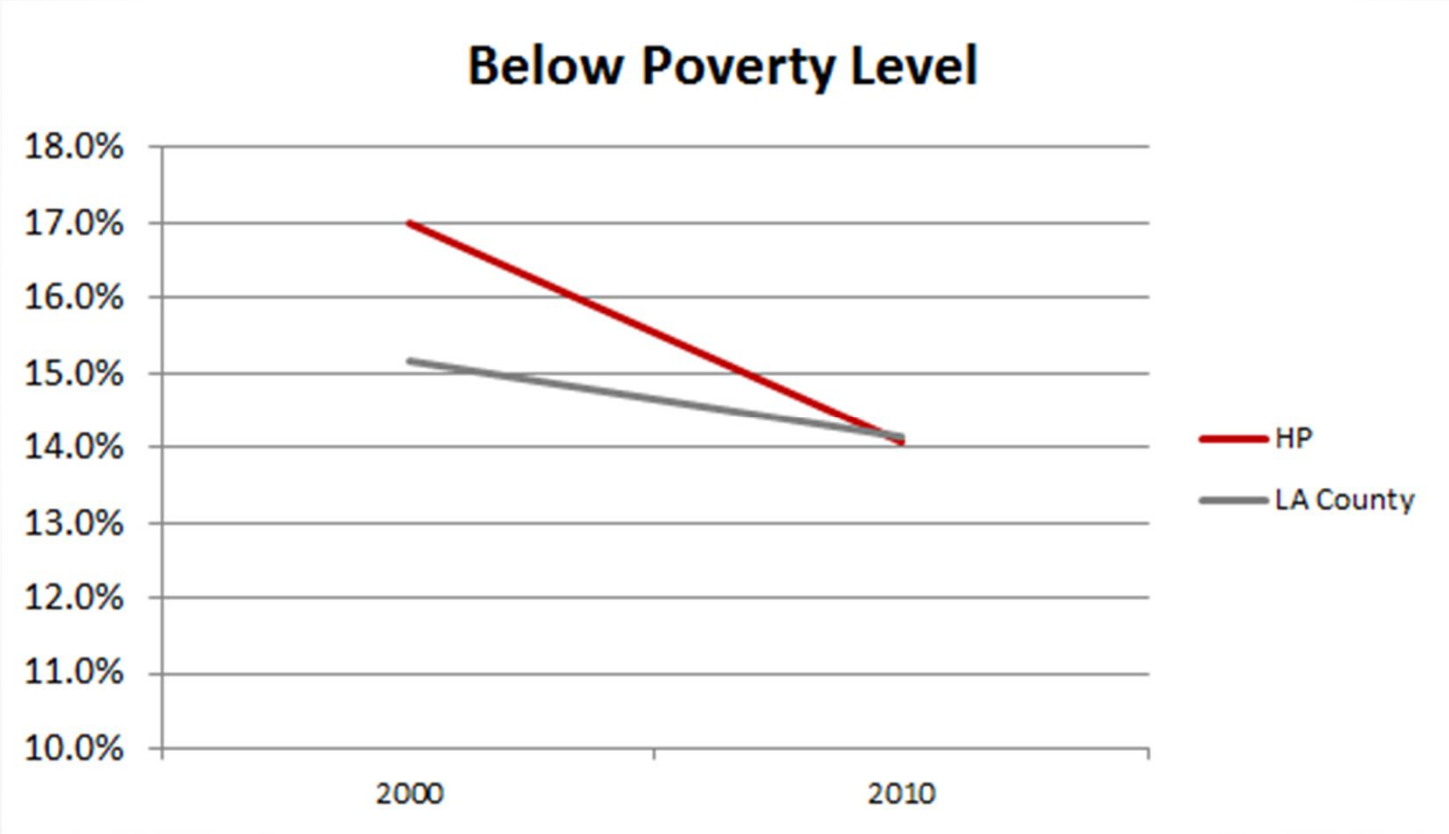
Median House Price and Gross Rent (adjusted to 2010 dollars), 2000-2010



Source: U.S. Census, 2000, SF3, H075, H076, H077; ACS, 2006-2010, B25076, B25077, B25078

Economic Indicators

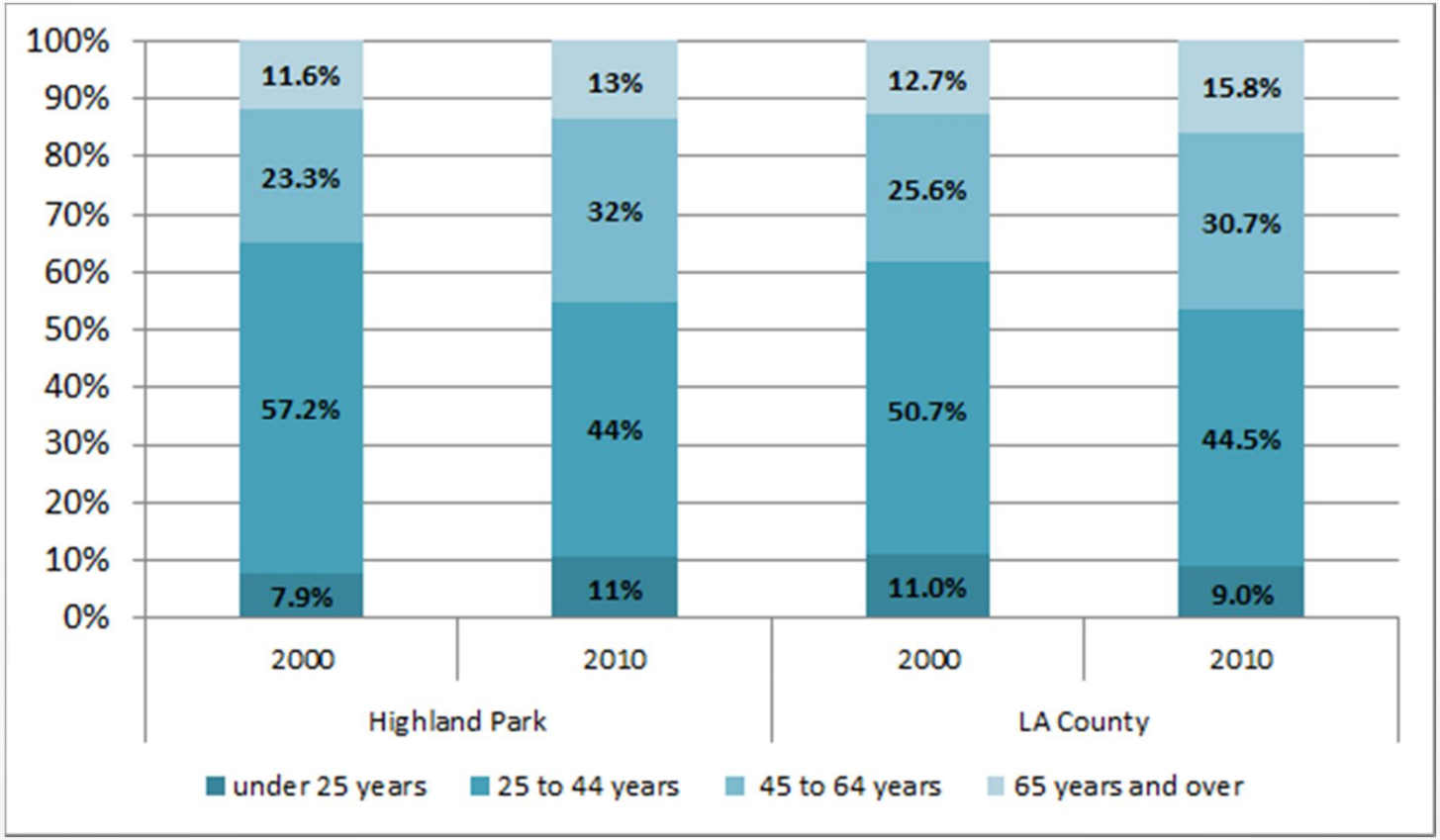
Rate of Below Poverty Level



Source: Census 2000, HCT024; ACS 2006-2010,B17017

Economic Indicators

Share of below poverty level by householder age



Source: Census 2000, HCT024; ACS 2006-2010,B17017

Key Findings

- Influx of population and household
- Decline in racial minority
- Increased education level
- Increased homeownership
- Rise of house price and rent

Concluding Thoughts

- Gentrification in Highland Park would continue and its impacts would increase.
- Gentrification would lead the further changes in ethnic composition and household formation
- How to prepare the future changes in gentrifying area?