



METROLOGIC
CREATING AND SUSTAINING THE PLACES WHERE JOBS GROW

Gregg Logan, Managing Director, May 4, 2011

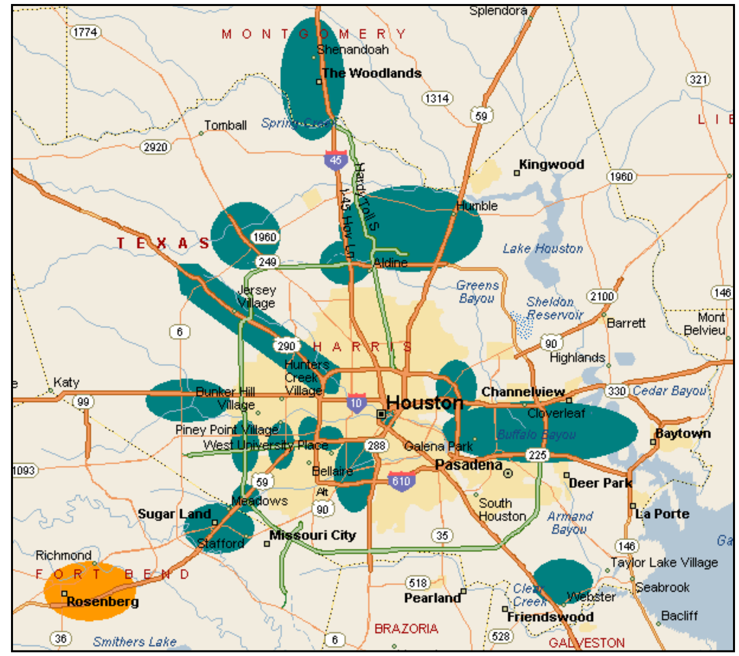
METROLOGIC
CENTRAL PLACES – JOB CORE AREAS – LAND USE INTERSECTION

- Economic development depends on many factors:
  - Leadership
  - Vision
  - Education
  - Adaptability
  - **Creating, sustaining the places where jobs grow**

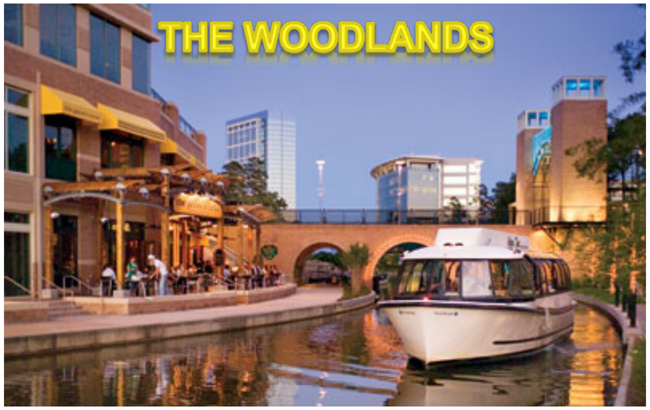
- "Job infrastructure:
  - Employment Cores - Placemaking
    - Strengthening Existing Cores
    - Planning for New Cores
      - Greenfield
      - Infill and Redevelopment

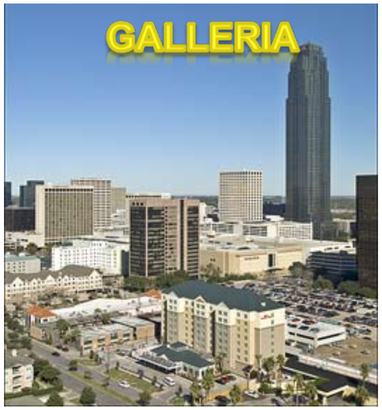
METRO CORES AND ECONOMIC DEVELOPMENT

- Regions composed of a hierarchy of Cores, or “centers”
  - **30% to 40% of jobs, including highest paying, locate in these Cores**
    - *The number, quality, characteristics of Cores in a region influences job growth*
  - **Anticipate where Cores are needed, facilitate (re)development**
    - *Predictability: know the reasons they grow in specific locations, plan for it*
  - **Understand criteria for creating/ sustaining quality job Cores**
  - **Provide the features, amenities, infrastructure required**



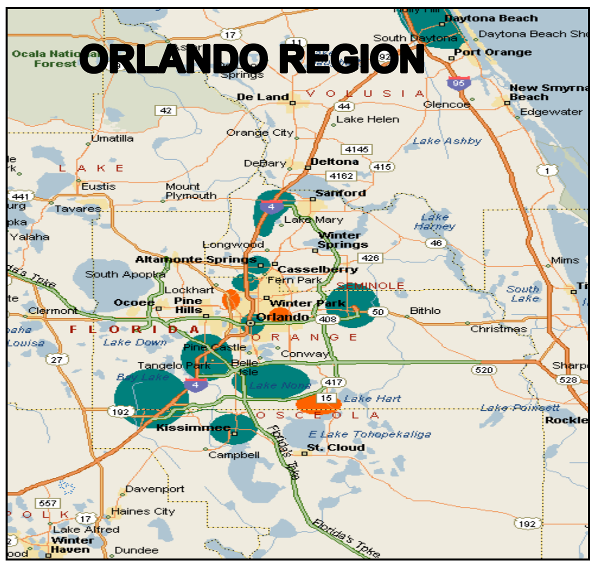
METRO CORE EXAMPLES
KEY REGIONAL JOB PLACES

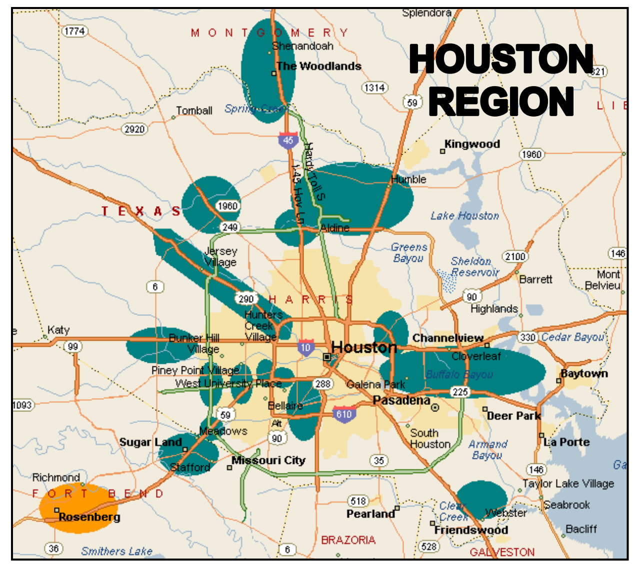




METRO CORES: REGIONAL JOB FOCAL POINTS

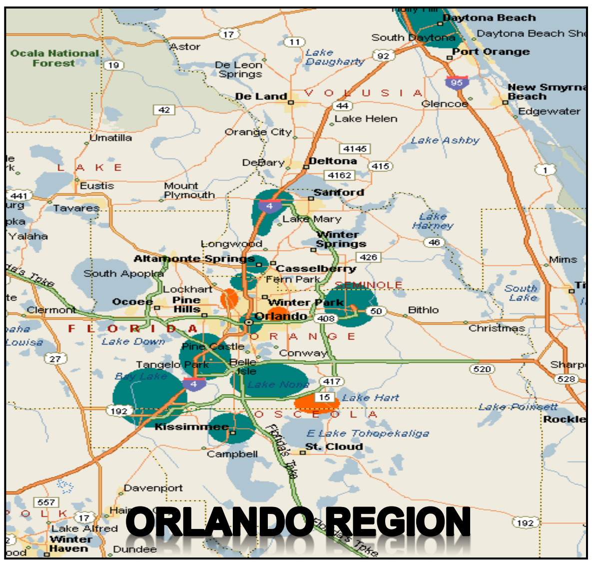
- Activity centers
- Large concentration of employees, especially the highest paying "export" oriented jobs
- Tend to locate about five miles apart, near major transportation nodes
  - Framework for understanding metropolitan growth trends enhancing planning for economic development

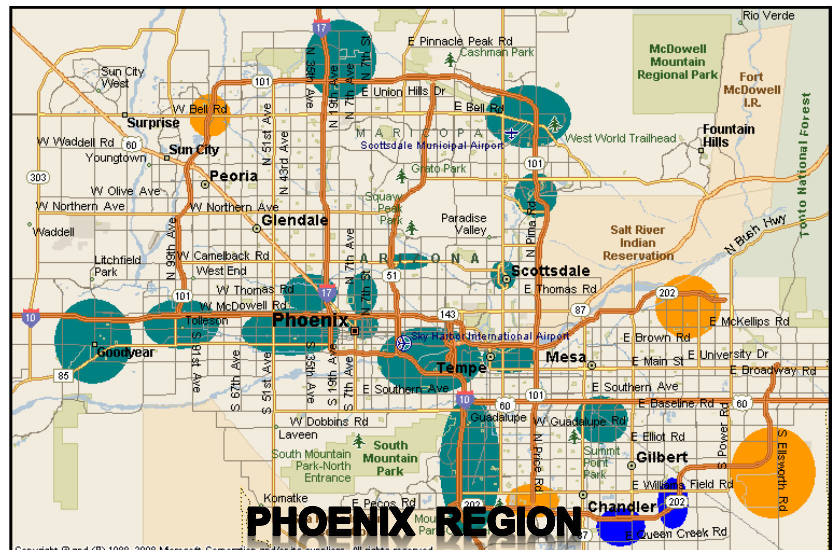




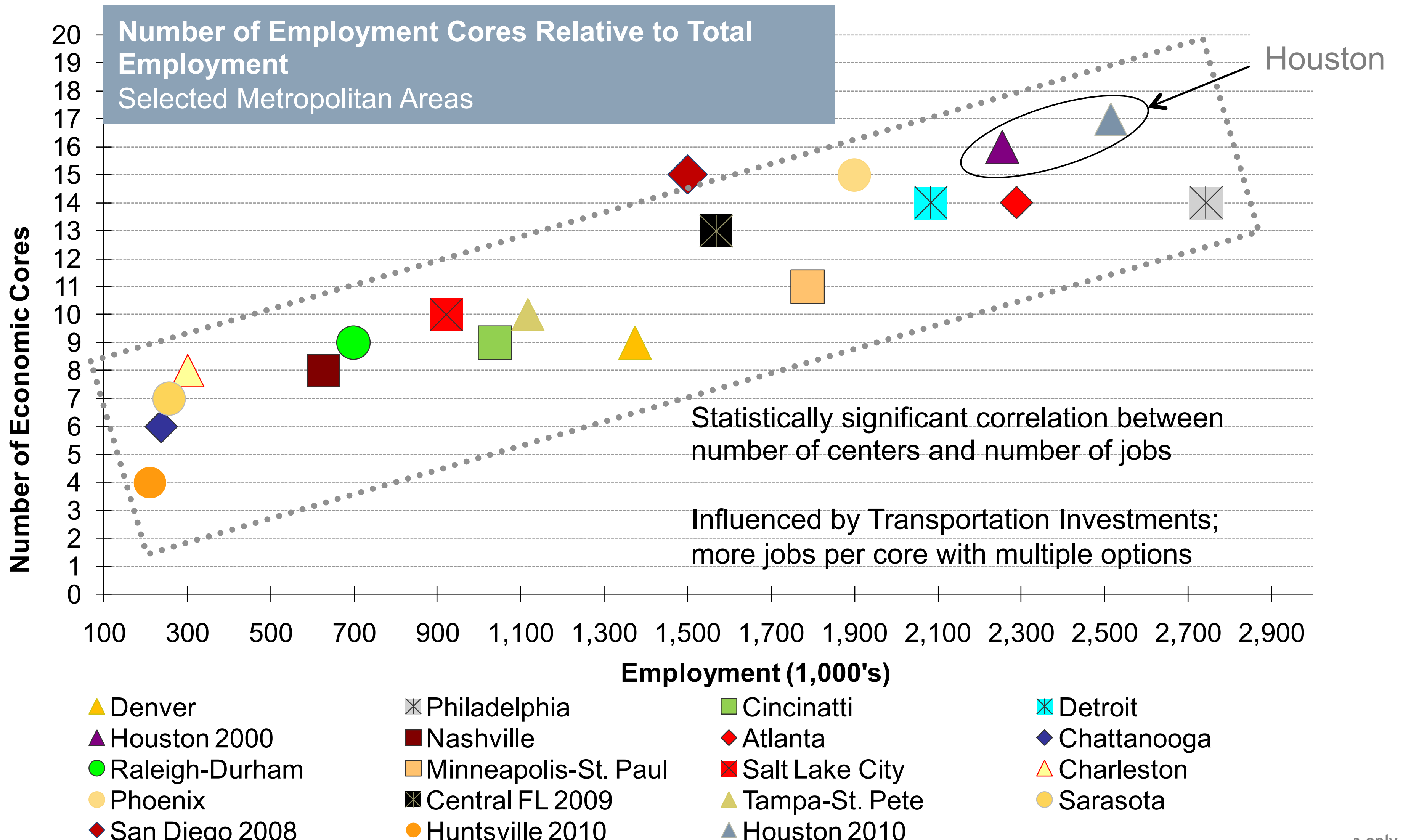
METRO CORES: REGIONAL JOB FOCAL POINTS

- **Unique** attributes distinguish metropolitan regions
- Yet striking **similarities** in terms of development
- **“Rules”** relative to their location, evolution
- Consistent types of “Centers” or **employment “Core’s” across regions**
- High **correlation** between number of **Cores** and total **Jobs**
- On average 38% of jobs, especially highest paying, locate in these Cores





TOTAL JOBS CORELATED TO NUMBER OF CORES



EMPLOYMENT CORES AND TRANSPORTATION

- Most employment cores located along major transportation infrastructure
  - High paying jobs concentrate along major highways
    - Clustered at interchanges
  - Cores with most “jobs per core” - mature areas with multiple transportation options
- System to system interchanges have most jobs
  - Double number of jobs
  - Regional connectivity

6 TYPES OF JOB CORES
SHARE SIMILAR CHARACTERISTICS ACROSS REGIONS

Urban Centers	• Cultural, financial, and often governmental centers • Typically largest concentration of high-density office	Downtown Houston
Catalytic Core	• Locations determined by individual actors, e.g. governments, corporations, universities	Texas Medical Center, NASA Johnson Space Center
Industrial Core	• Locate around major transportation, major freeways and interstates, rail lines, airports, and seaports • Competitively priced land	Beltway and SW Freeway, Northwest Freeway Corridor, Intercontinental Airport (IAH), Northeast Loop, Pasadena/ Shipping Channels, Stafford/ Sugarland (shifting to office)
Favored Quarter Office Core	• Fans out from downtown in direction of dominant regional growth • Follows executive housing concentrations • High-end office space often along the region's principle interstate	Greenway Plaza, Galleria, SW/ West Park Toll, Westchase, Katy Freeway/Energy Corridor, The Woodlands, Greenspoint
Historic Satellite Cities/Towns	• Regions grow incorporating smaller cities and towns that were once free standing entities • Older commercial stock, smaller employment base, but • Can grow into more regionally important cores	
Retail Cores	• Retail cores lacking regional serving/office-oriented employment	FM 1960 Tomball

Small Region (<1.5M Jobs) Core Characteristics

Small Regions (Employment Below 1.5 Million)	
Average Number of Cores	8
Size Range (#Jobs) of Cores:	15,000-58,000
Average Size of Cores in Excluding CBD:	29,000
Average % of Employment Within Cores	38%

Source: RCLCO

LARGE REGION CORE CHARACTERISTICS

Large Region (Employment Above 1.5 Million)	
Average Number of Cores	14
Size Range (# Jobs) of Cores :	47,000-74,000
Average Size of Cores Excluding CBD:	53,000
% of Employment Within Cores	38%

Source: RCLCO

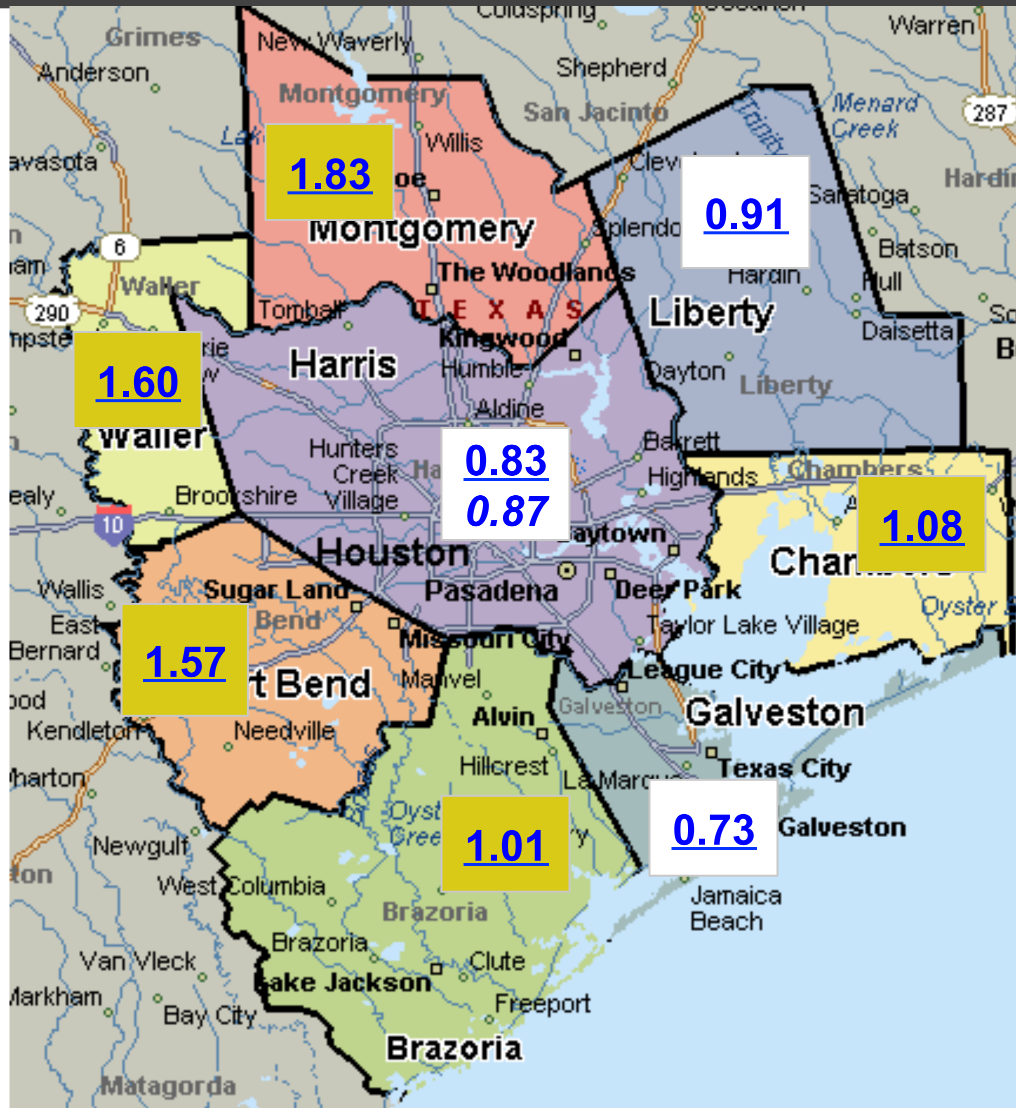
Predicting Growth

Three Core Types Drive Growth

- **Existing Core** – large employment cores already shaping regional growth patterns-tend to have more than 25,000 jobs
- **Emerging Cores** – enough job growth over next 10 to 20 years to shape regional growth and development patterns - will have approximately 25,000 or more by 2030
- **Likely New Core** – areas of regions likely attract significant employment growth in the next 20 years, but will have less than 25,000 jobs in 2030

MOMENTUM INDEX: GROWTH NORTH AND WEST

2010-2040



Score of less than 1 means area is LOSING market share

Score of greater than 1 means area is GAINING market share

Formula:

Numerator = share of region's growth

Denominator = share of population

SOURCE: HGAC Projections

MOMENTUM INDEX: GROWTH NORTH AND WEST

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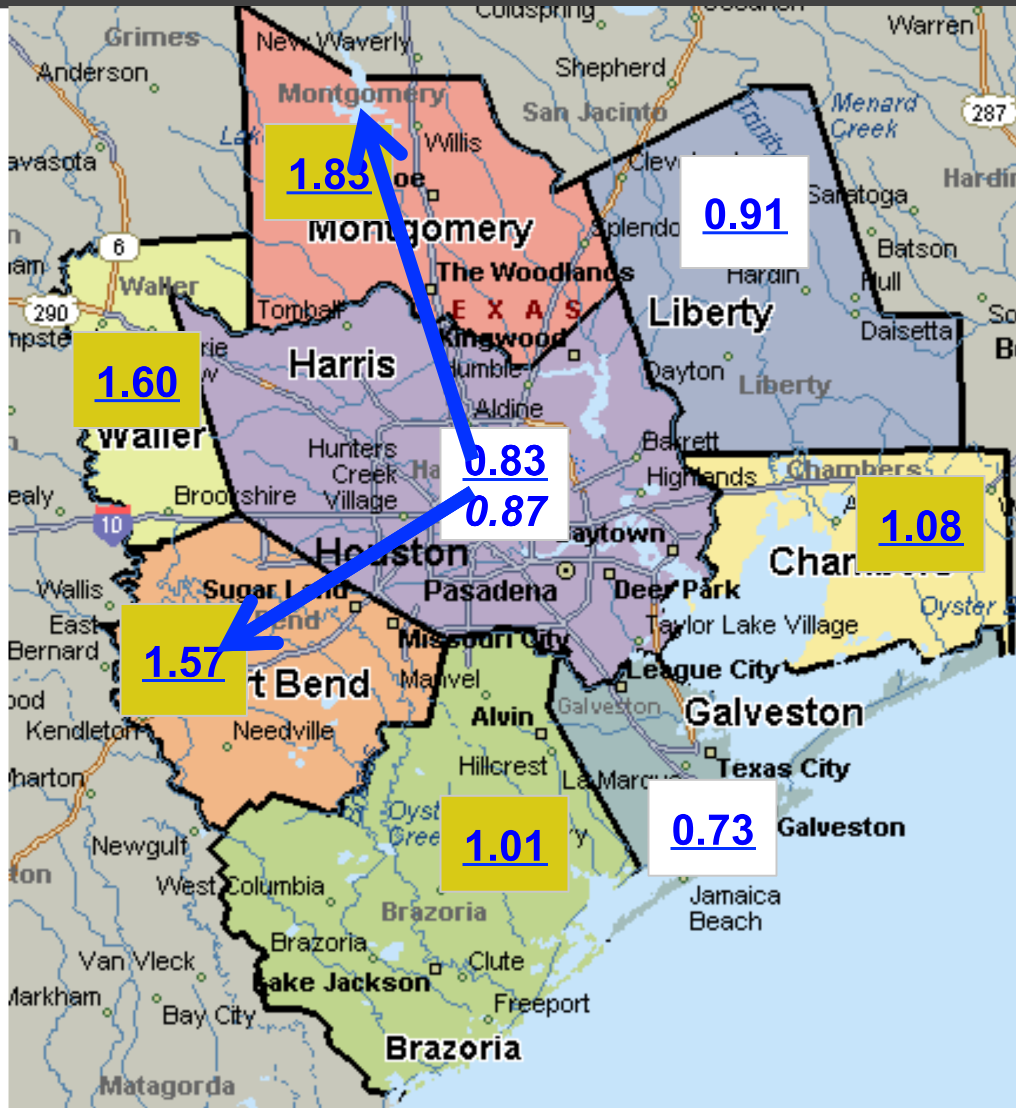

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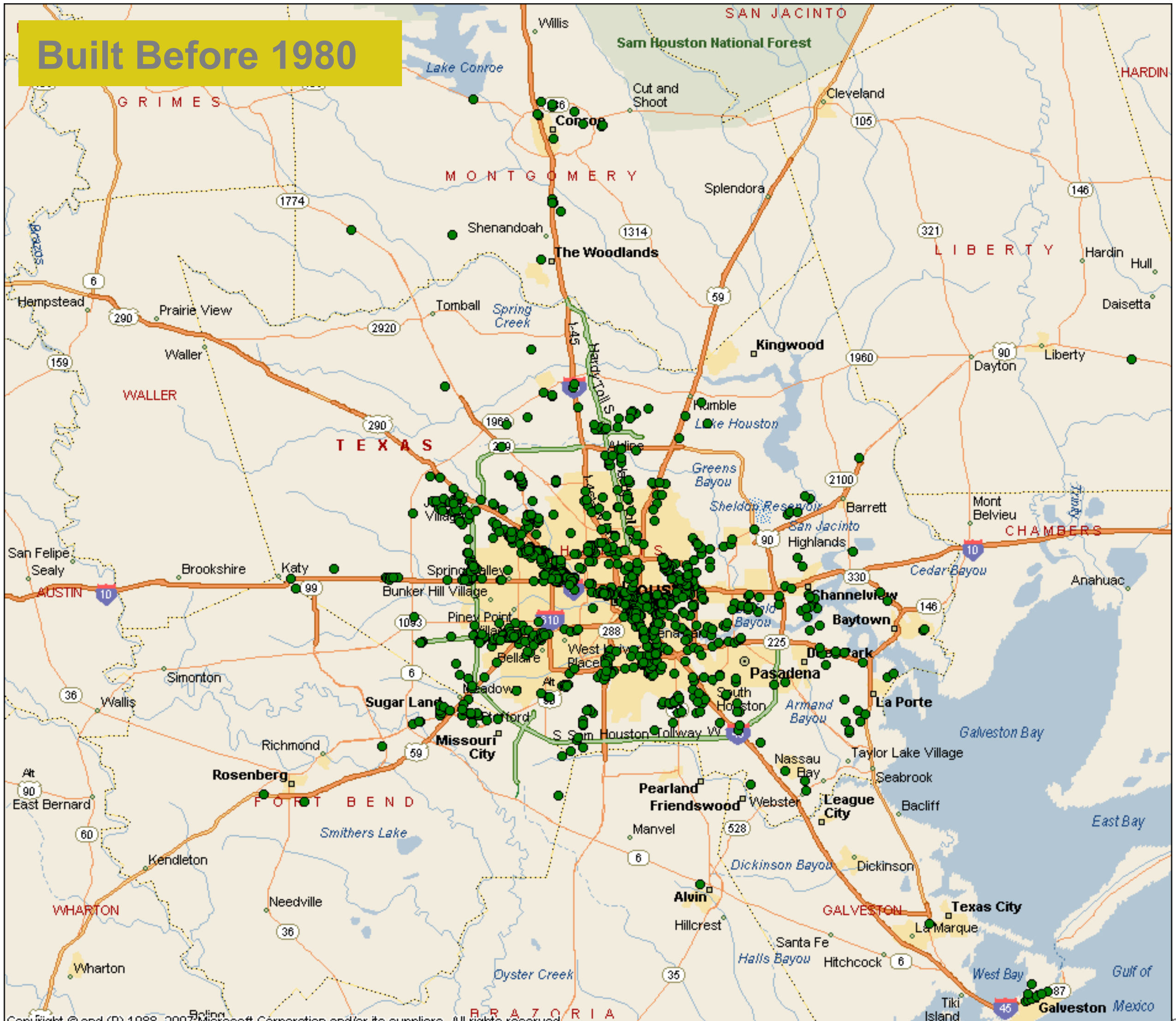
INDUSTRIAL DEVELOPMENT – 50,000SF+

LARGEST CONCENTRATIONS SE AND NW OF DOWNTOWN



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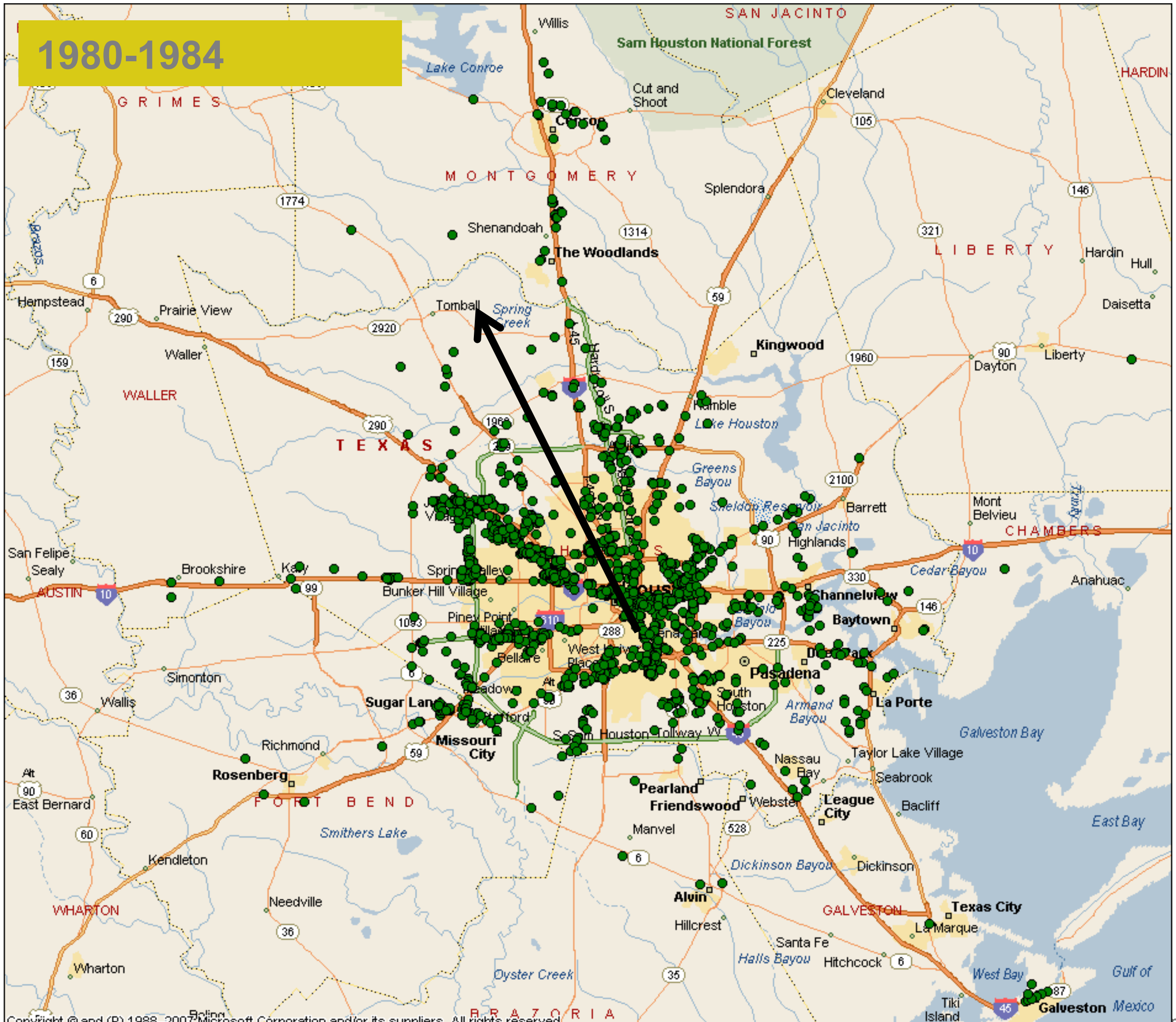
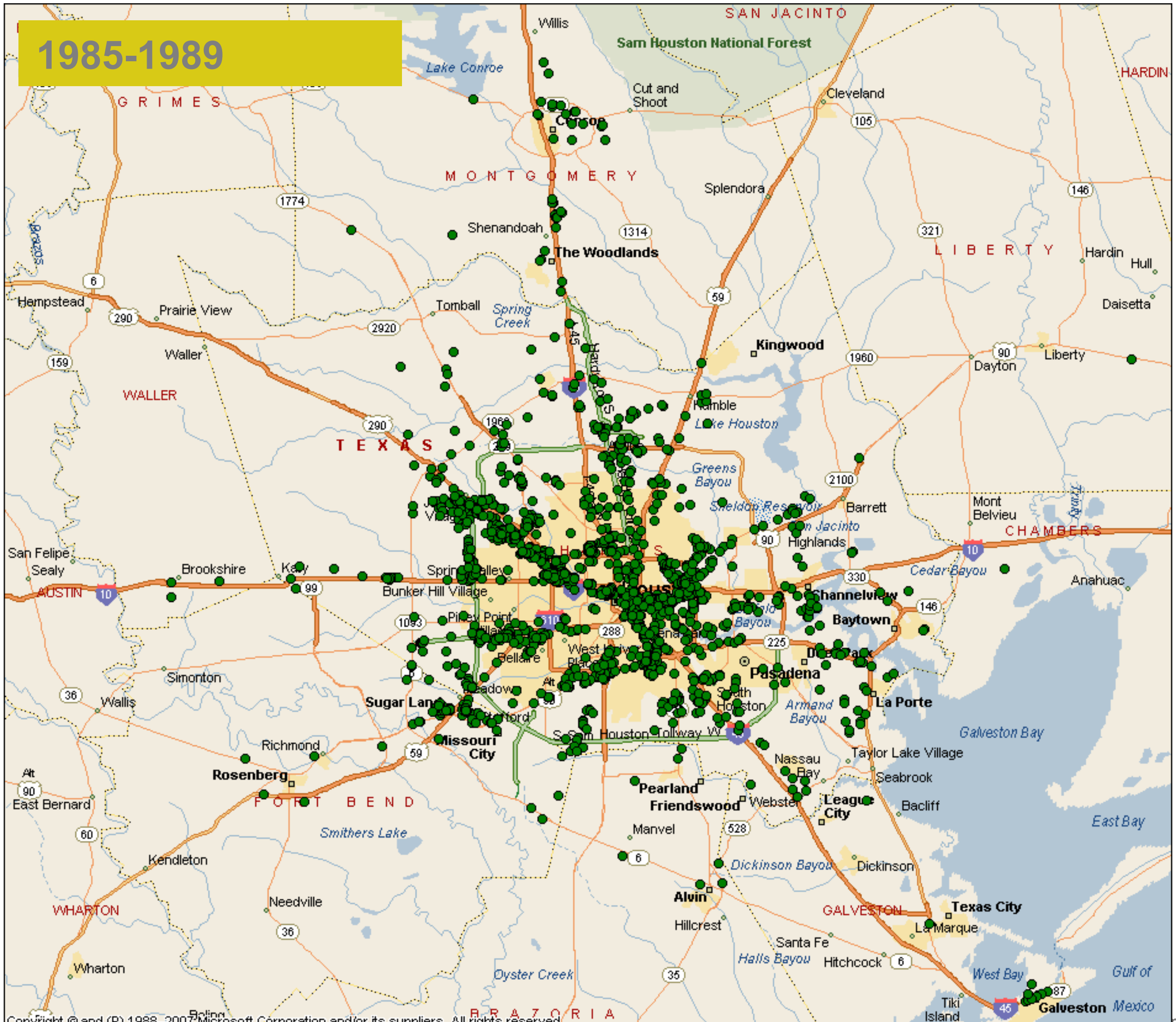
INDUSTRIAL DEVELOPMENT – 50,000SF+
MOVING AND NORTH AND NORTHWEST



INDUSTRIAL DEVELOPMENT – 50,000SF+

MORE DEVELOPMENT OUTSIDE THE BELTWAY



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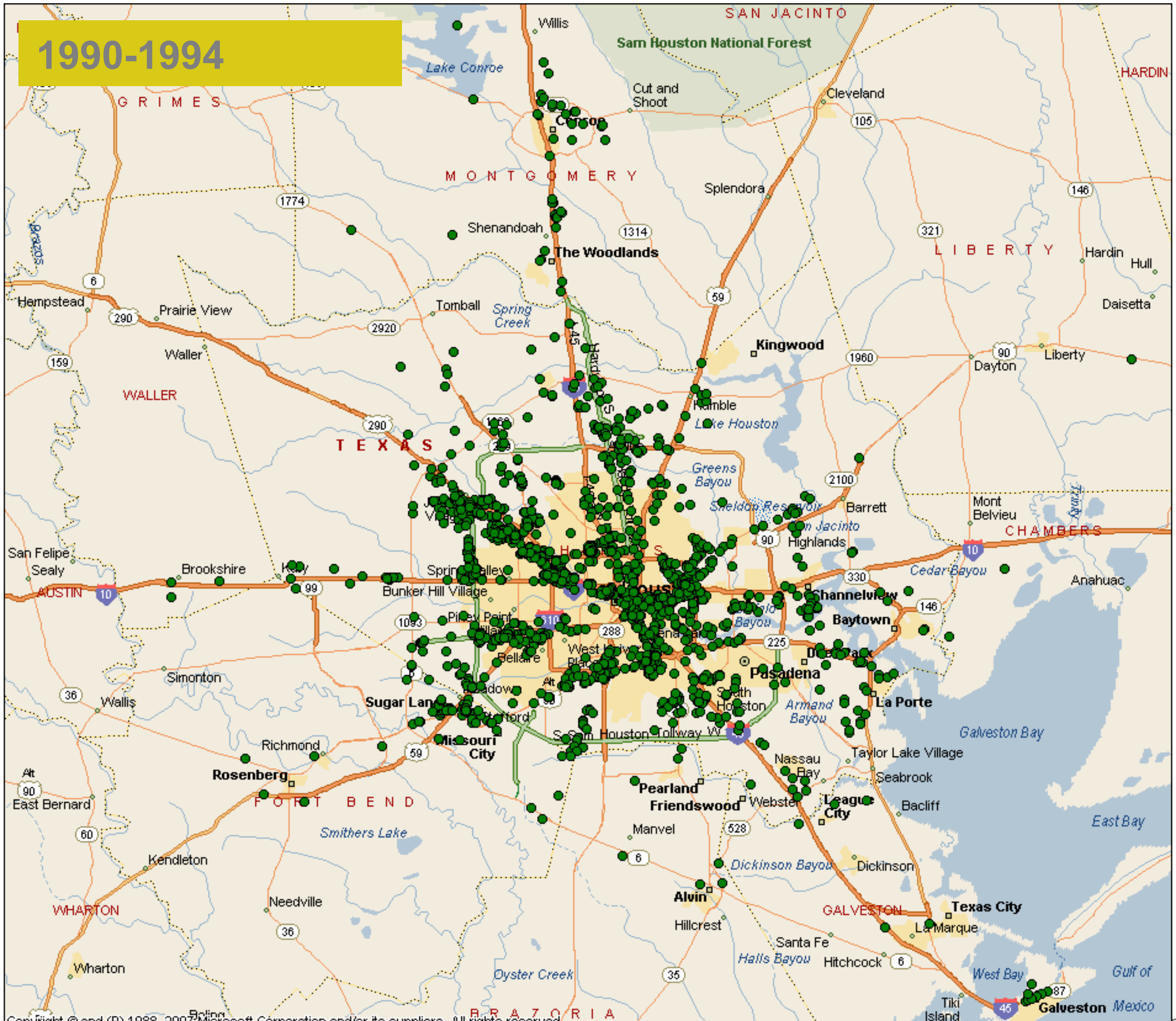
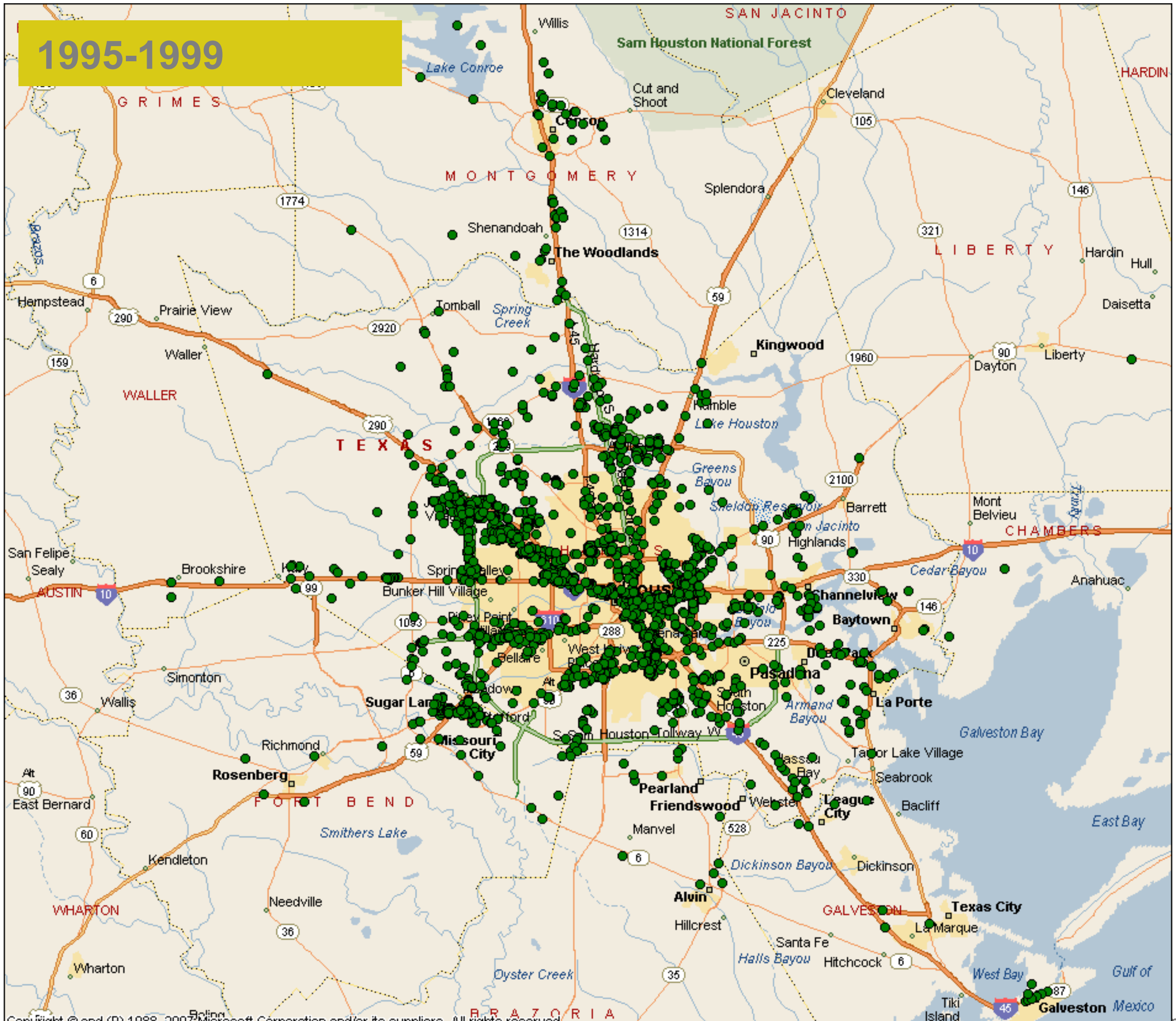
INDUSTRIAL DEVELOPMENT – 50,000SF+
CONTINUED DEVELOPMENT OUTSIDE BELTWAY



INDUSTRIAL DEVELOPMENT – 50,000SF+
OUTSIDE BELTWAY NORTH, SOUTHWEST, SOUTHEAST



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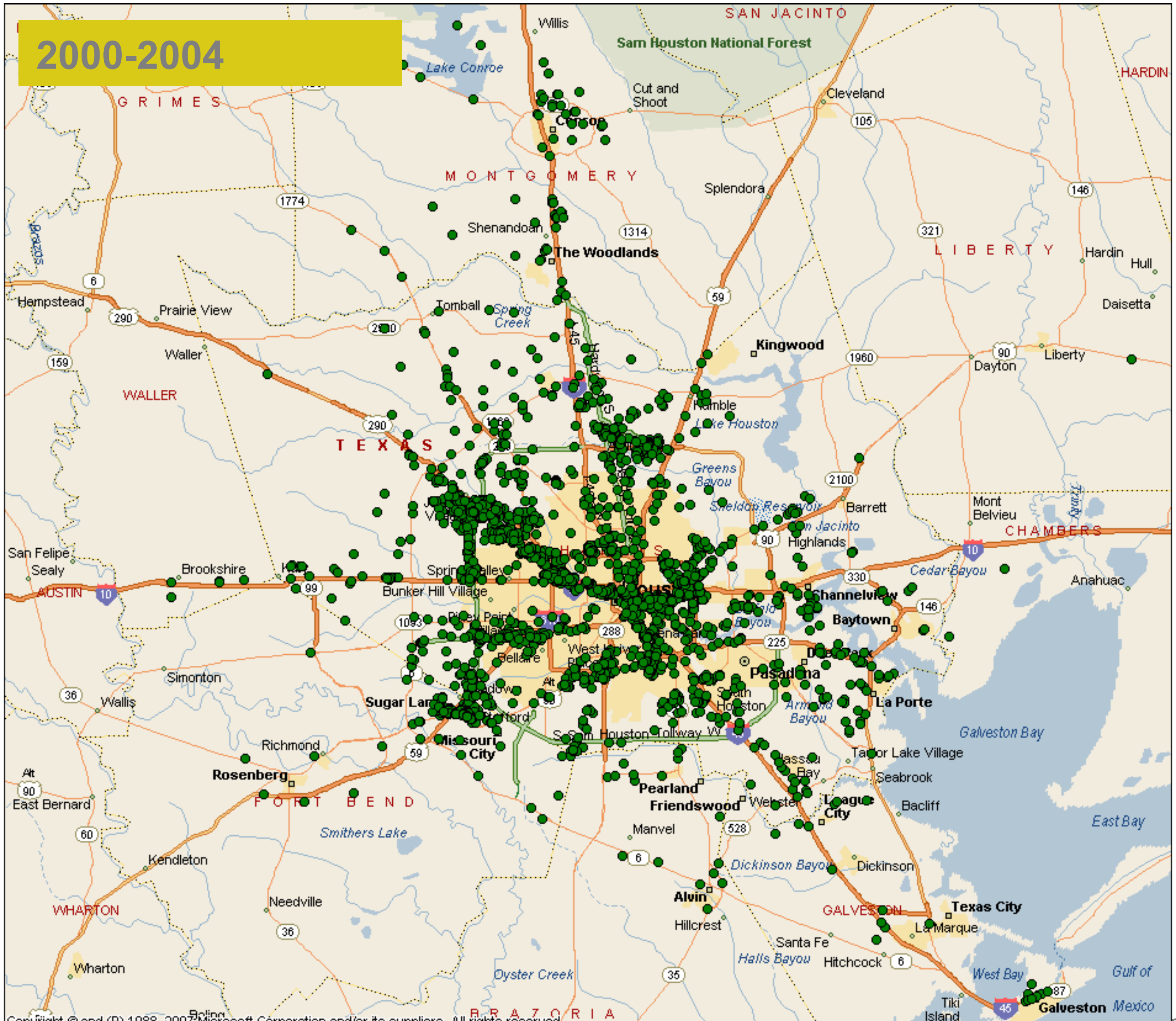
INDUSTRIAL DEVELOPMENT – 50,000SF+
NEW INDUSTRIAL BETWEEN HWY 290 AND I-45



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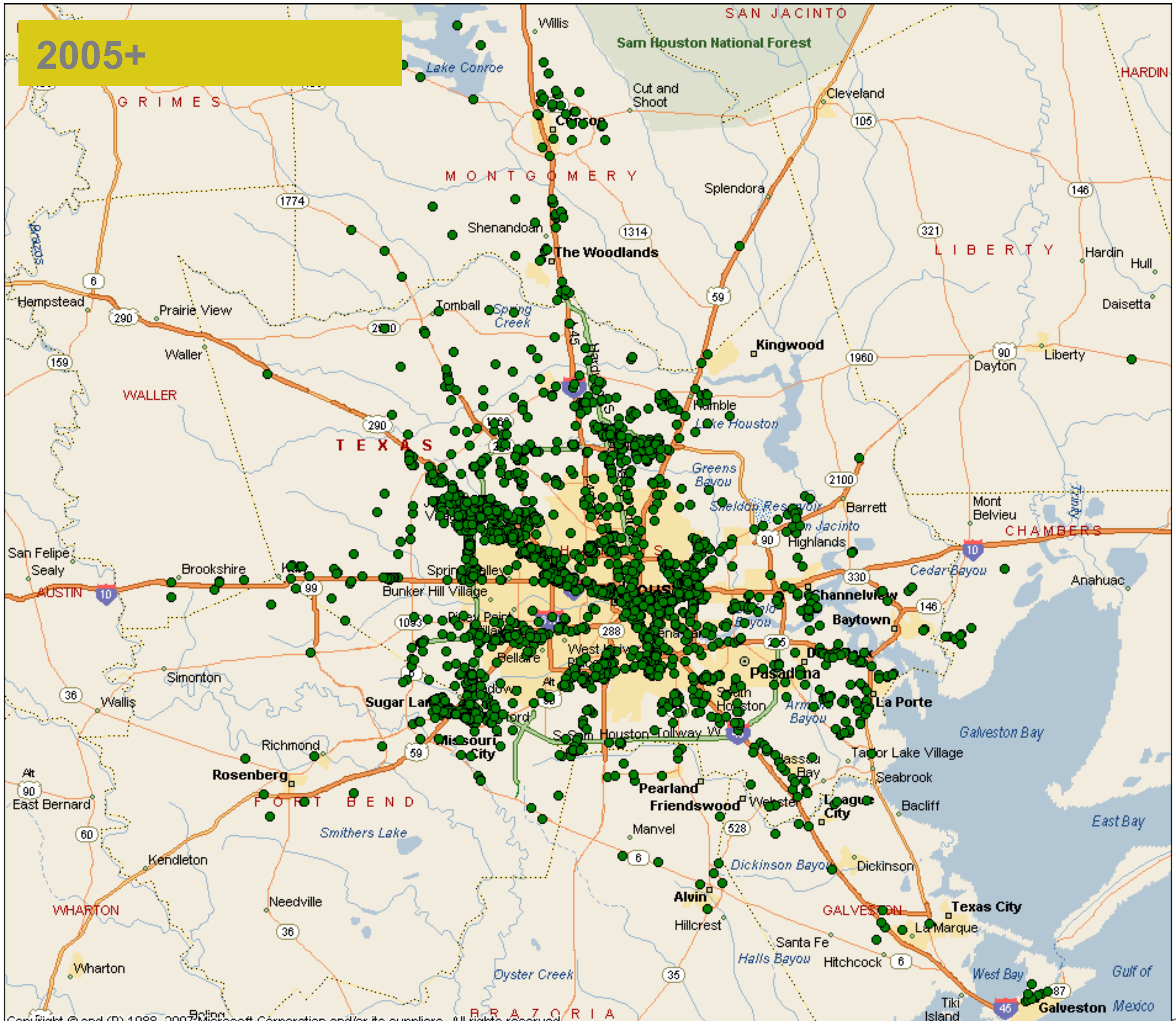
INDUSTRIAL DEVELOPMENT
ALONG HWY 6 OUTSIDE THE BELTWAY



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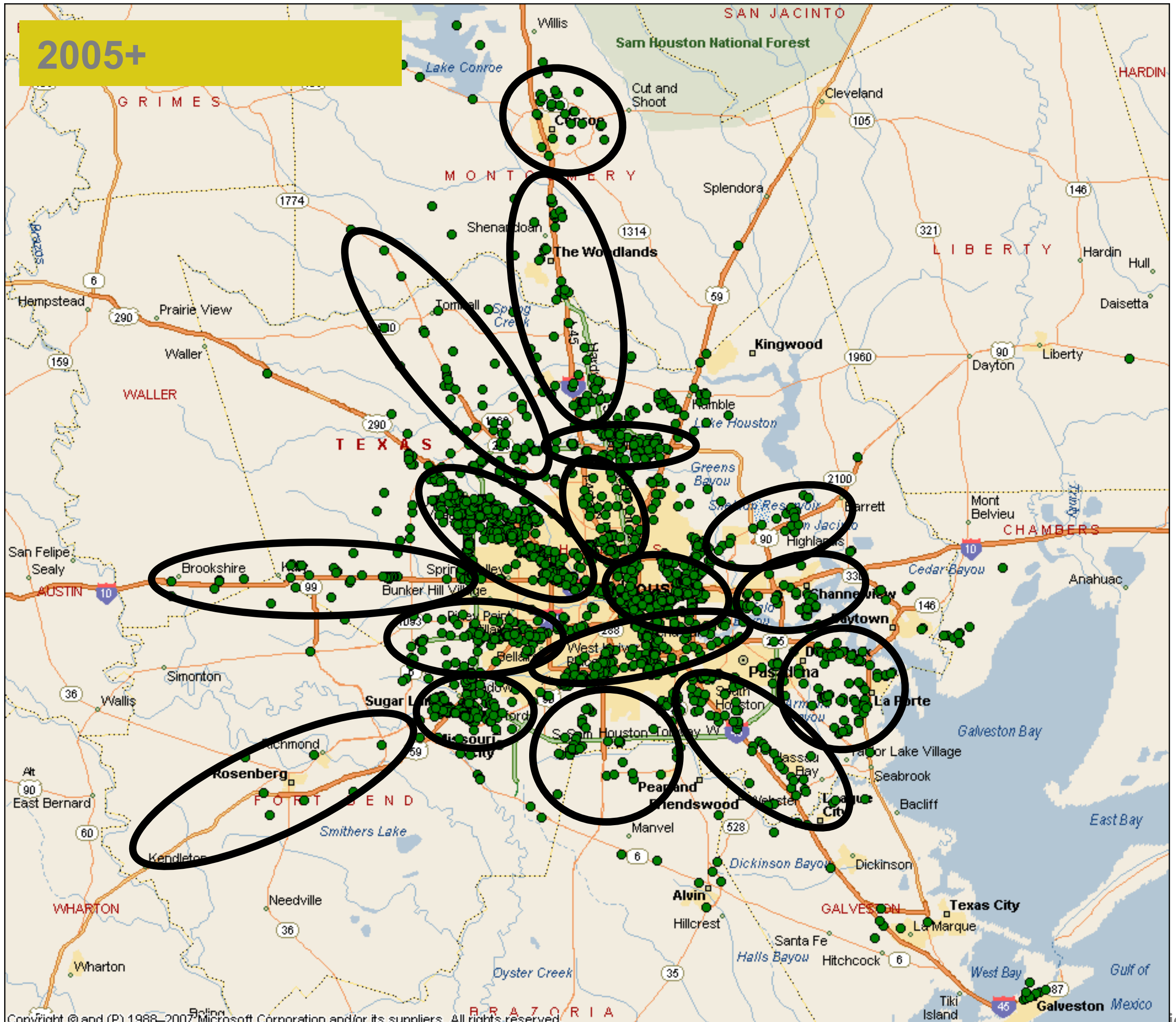
INDUSTRIAL DEVELOPMENT
INFLUENCE OF TRANSPORTATION INVESTMENTS

Virtually all located around major freeways, rail lines, airports, channels and seaports



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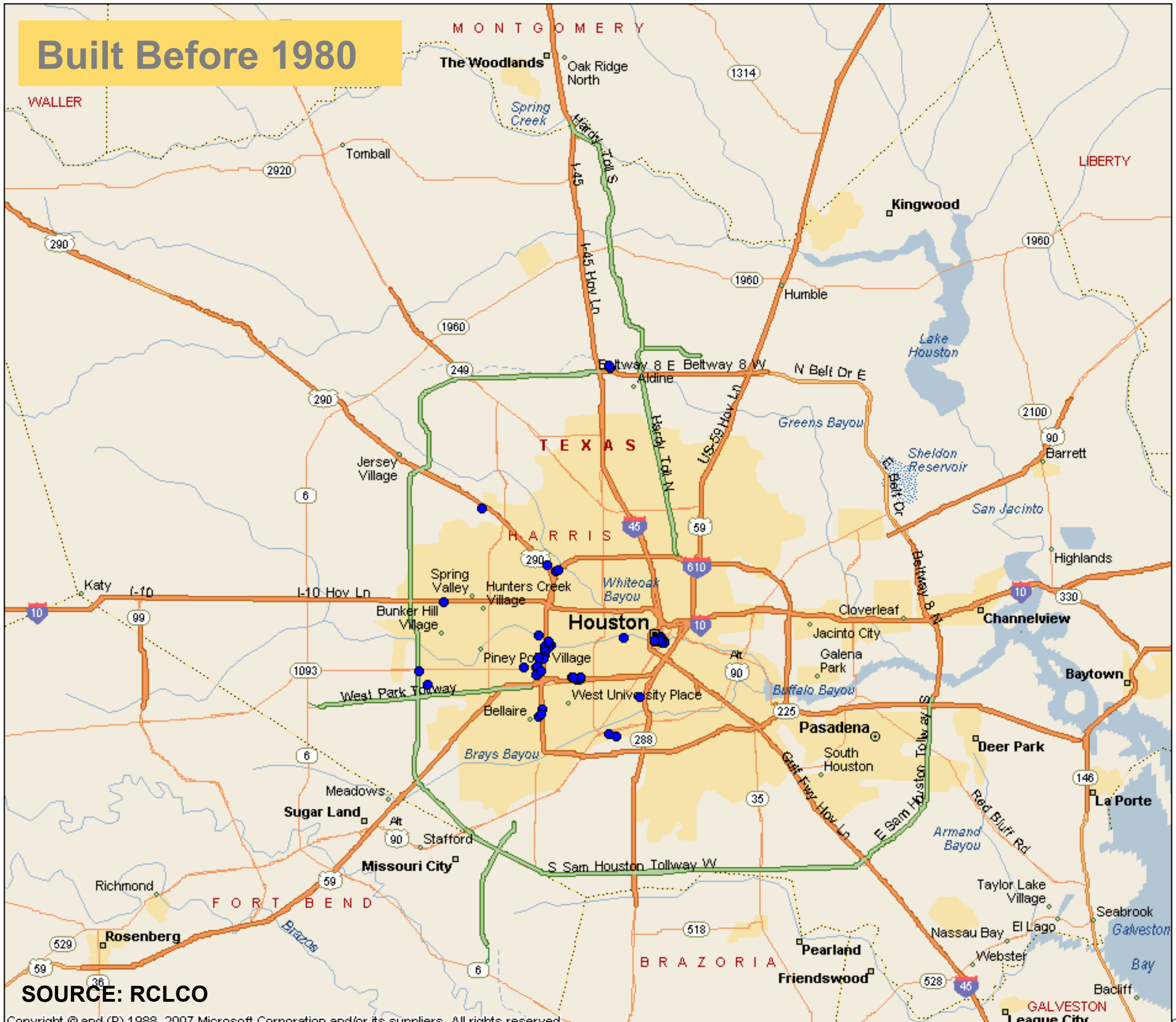
CLASS A OFFICE DEVELOPMENT

PRIMARILY CONCENTRATED IN THE CBD AND GALLERIA



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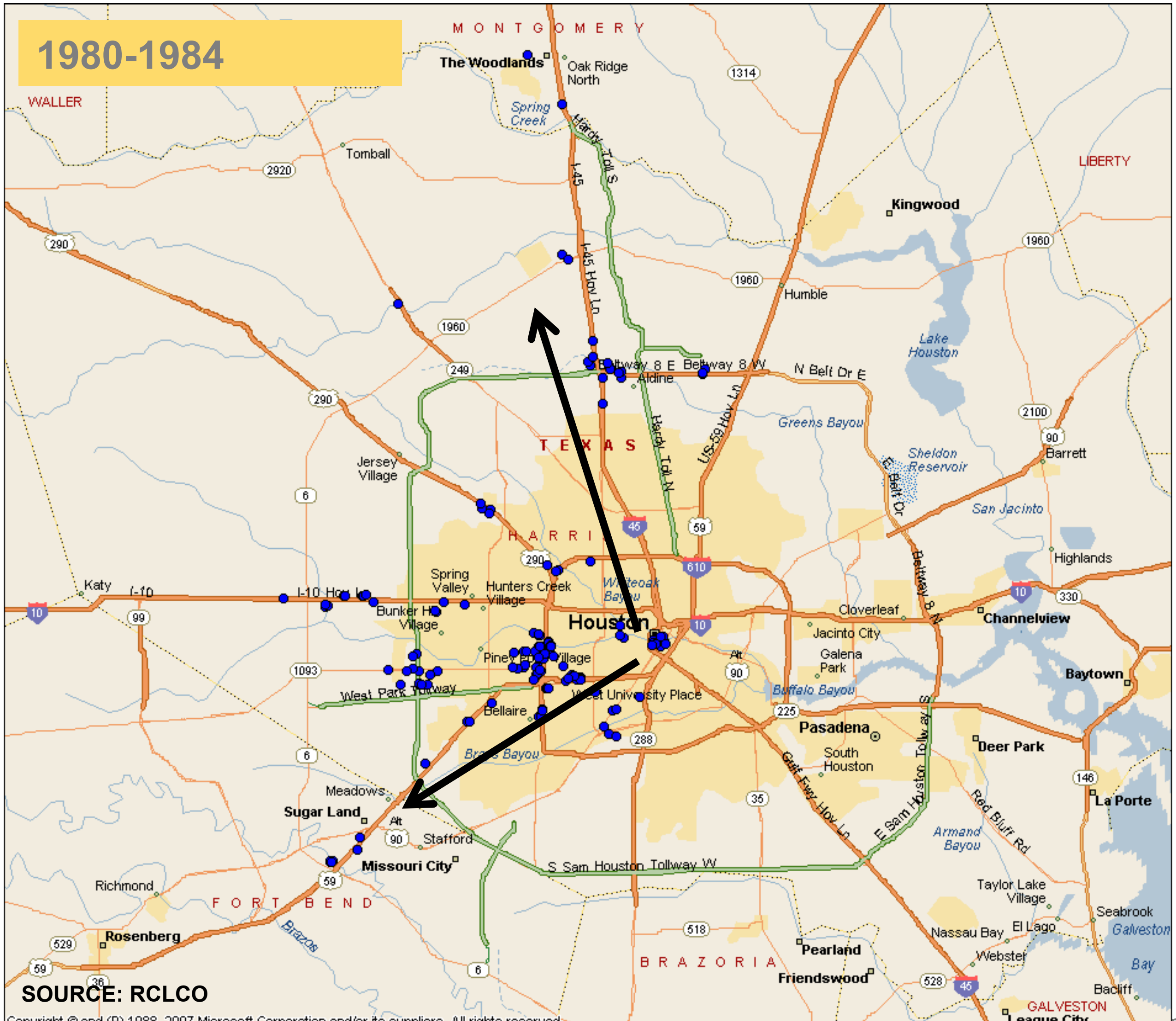
CLASS A OFFICE DEVELOPMENT
MOVING WEST AND NORTH



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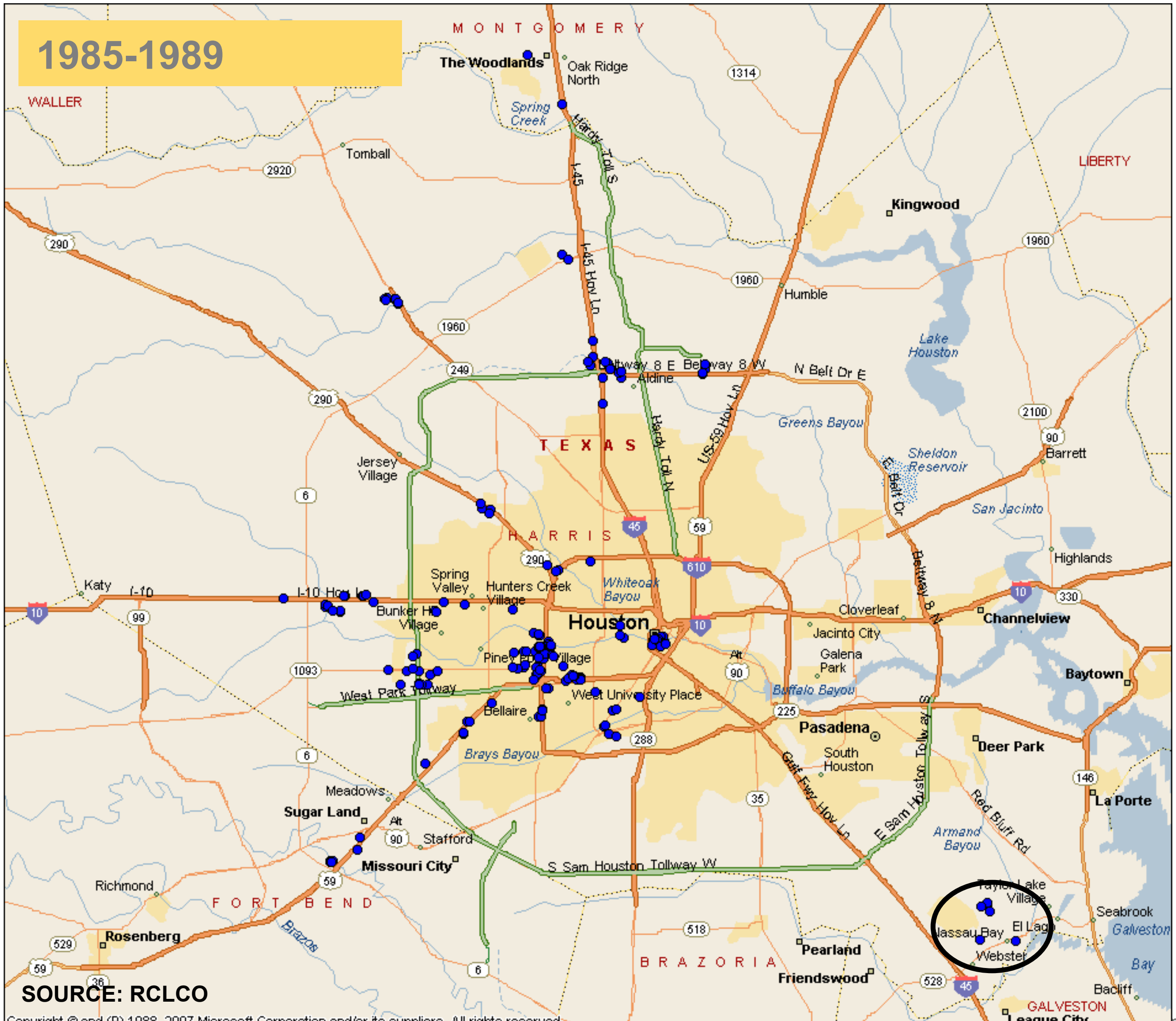
CLASS A OFFICE DEVELOPMENT
CONTINUING WEST AND EMERGENCE OF NASA TO SE



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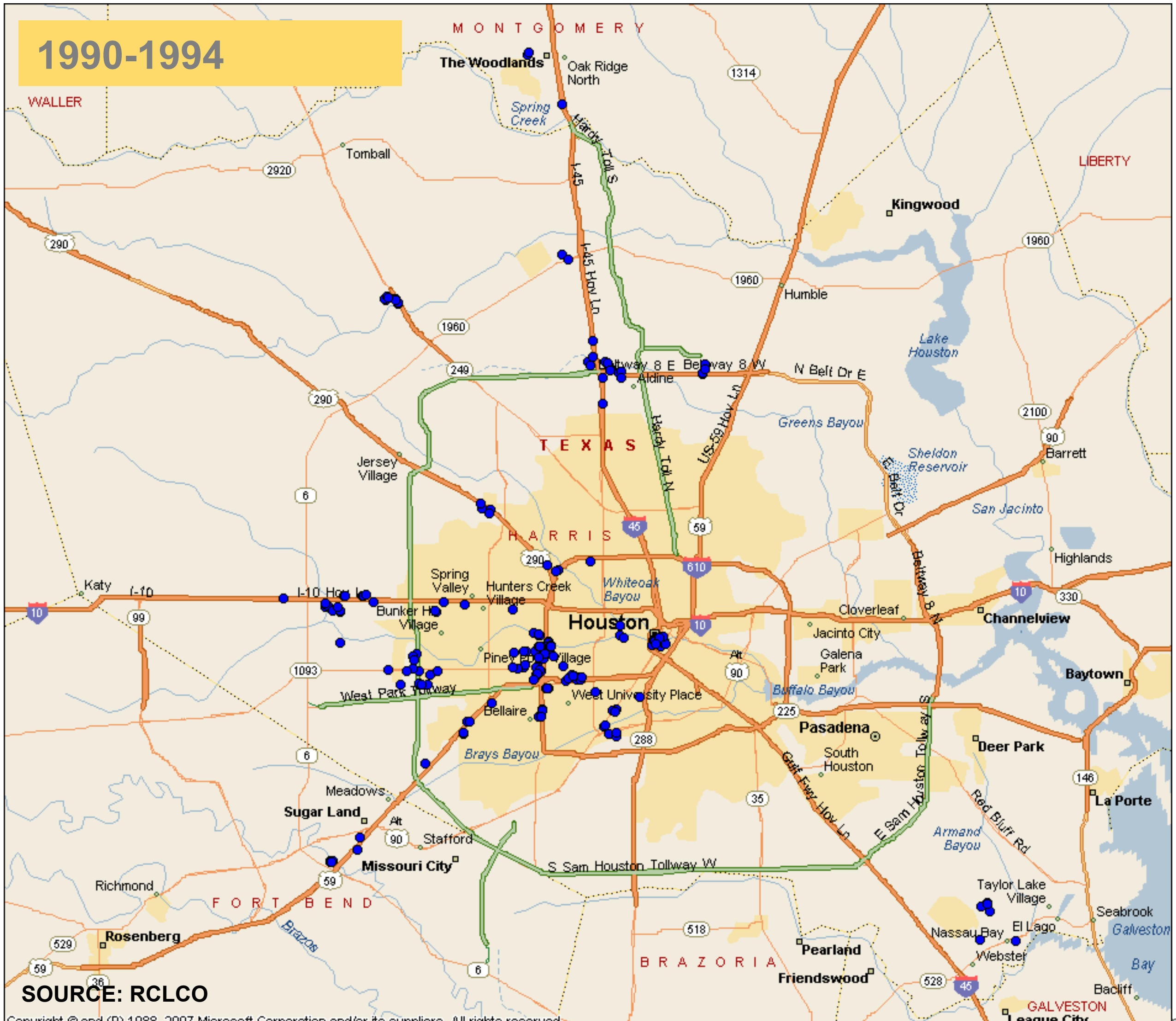
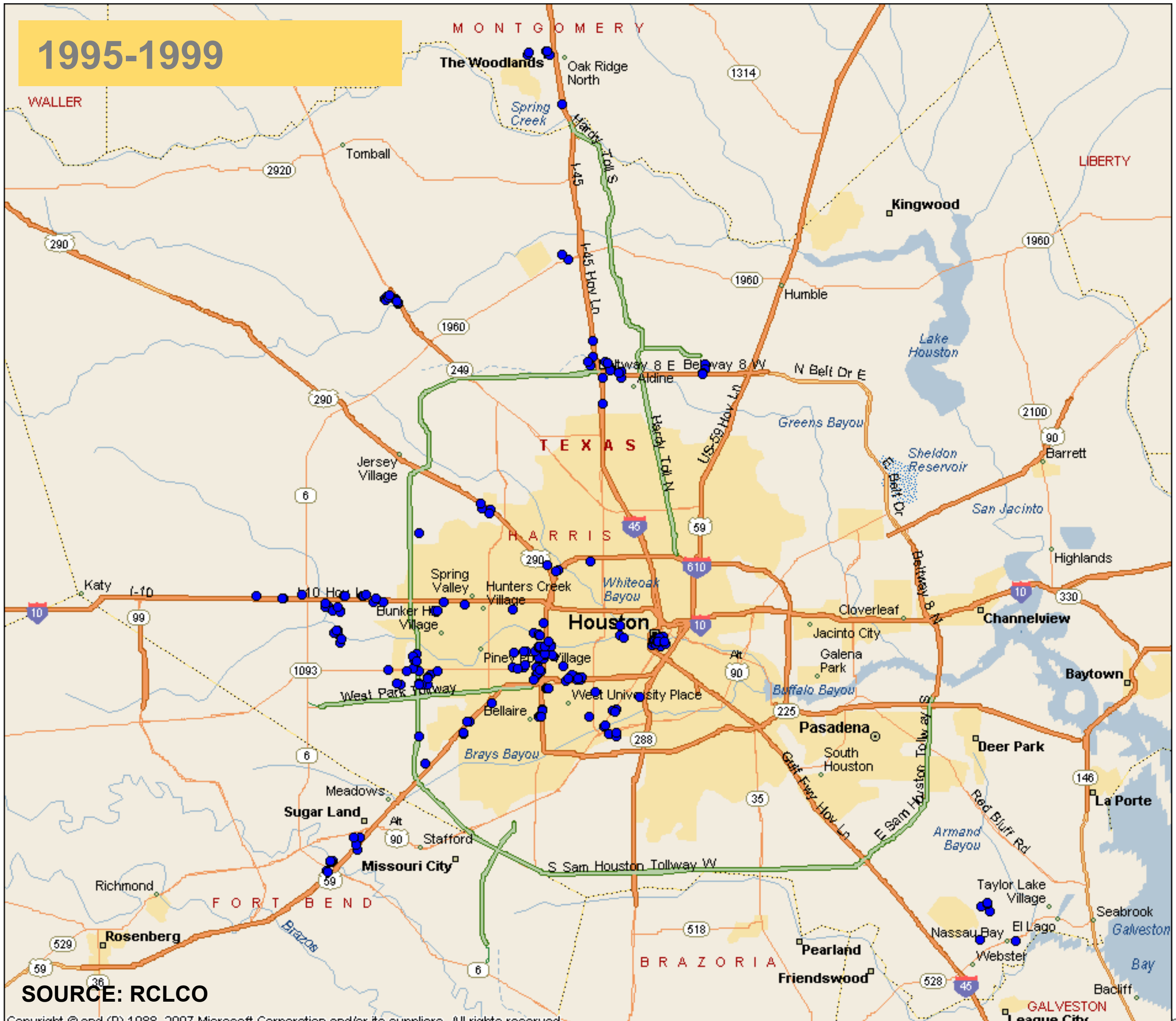
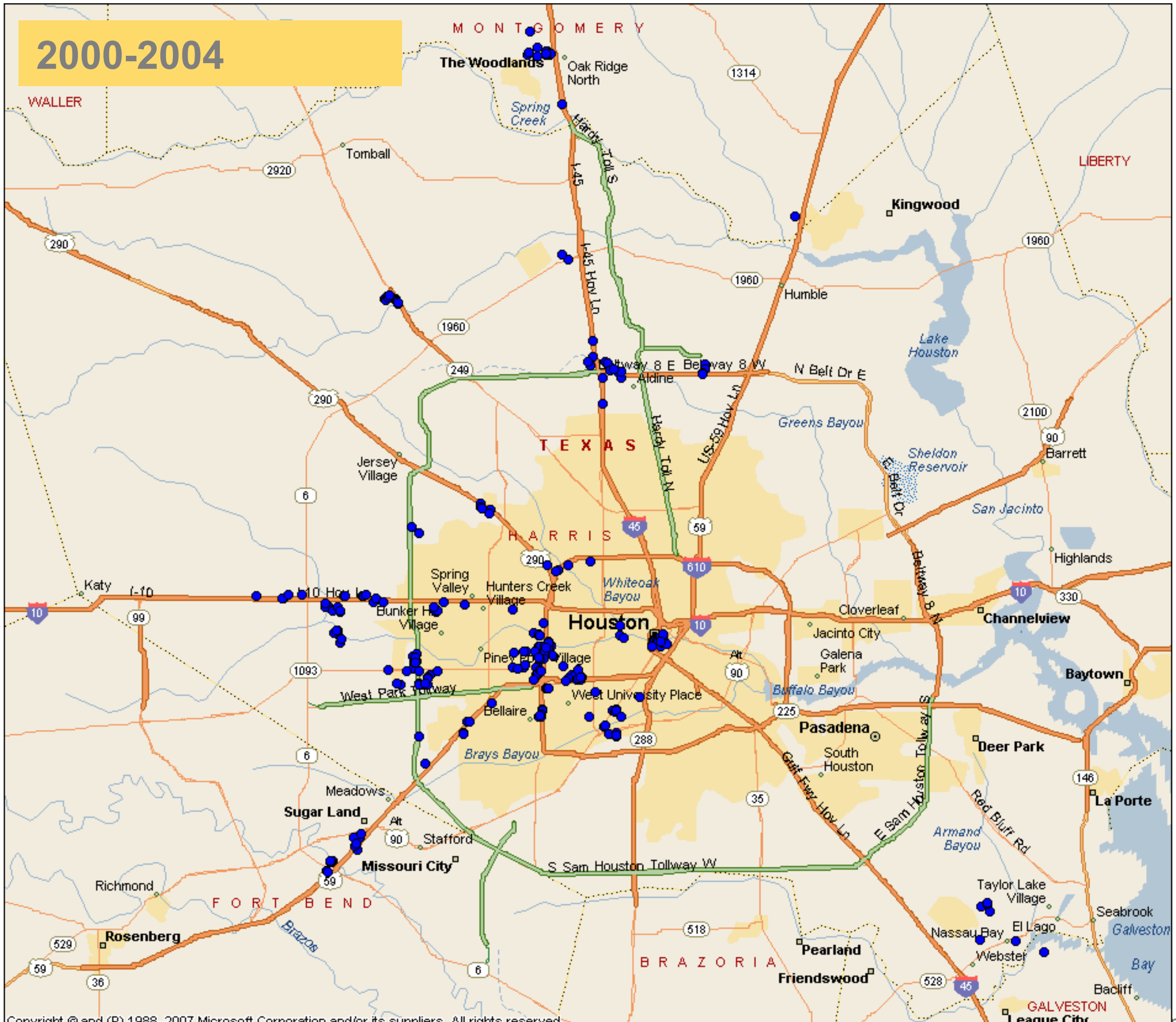
CLASS A OFFICE DEVELOPMENT
LIMITED DEVELOPMENT TO WEST



CLASS A OFFICE DEVELOPMENT
ADDITIONAL SPACE ADDED TO ENERGY CORRIDOR



CLASS A OFFICE DEVELOPMENT
CONTINUING WEST



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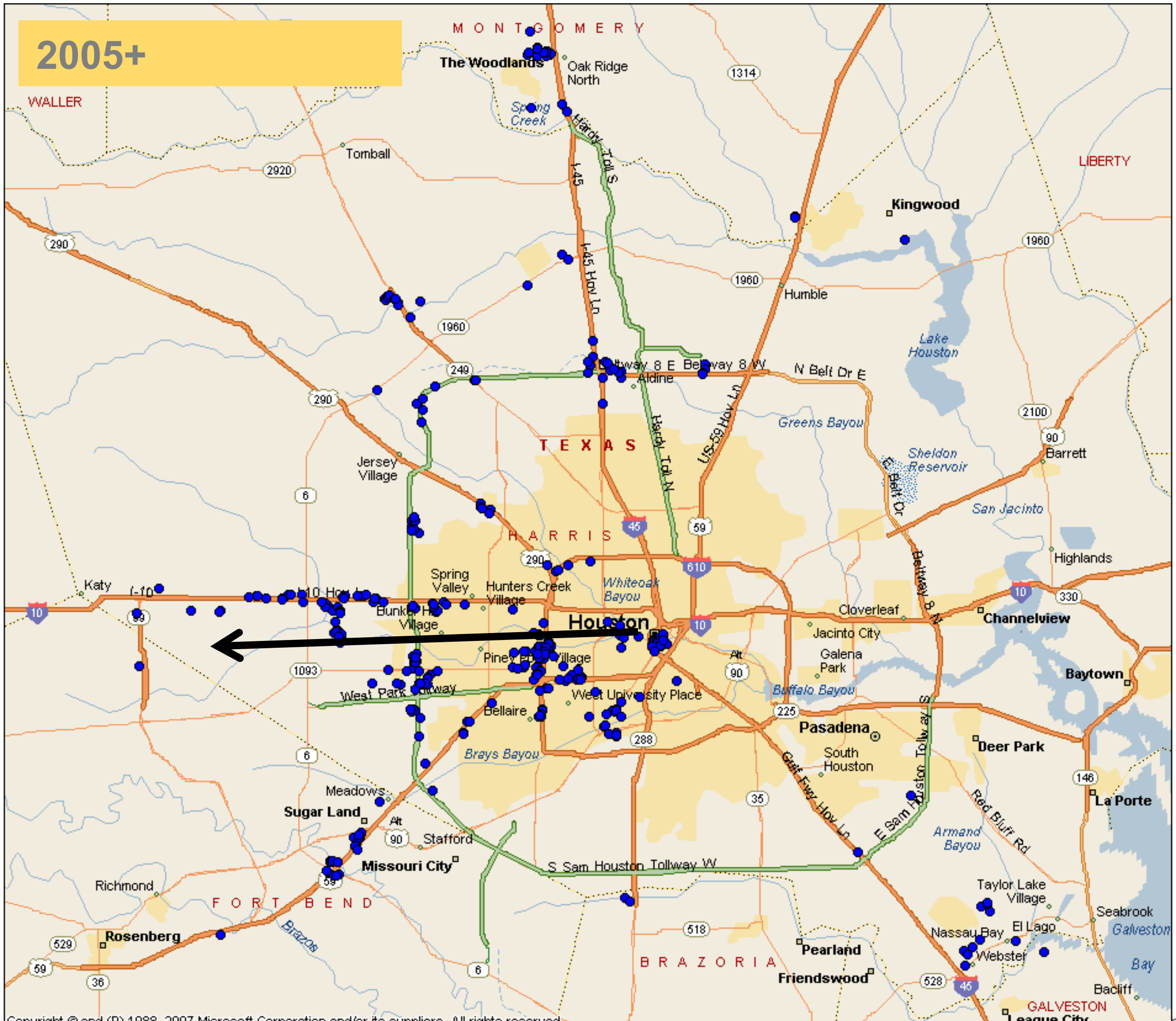
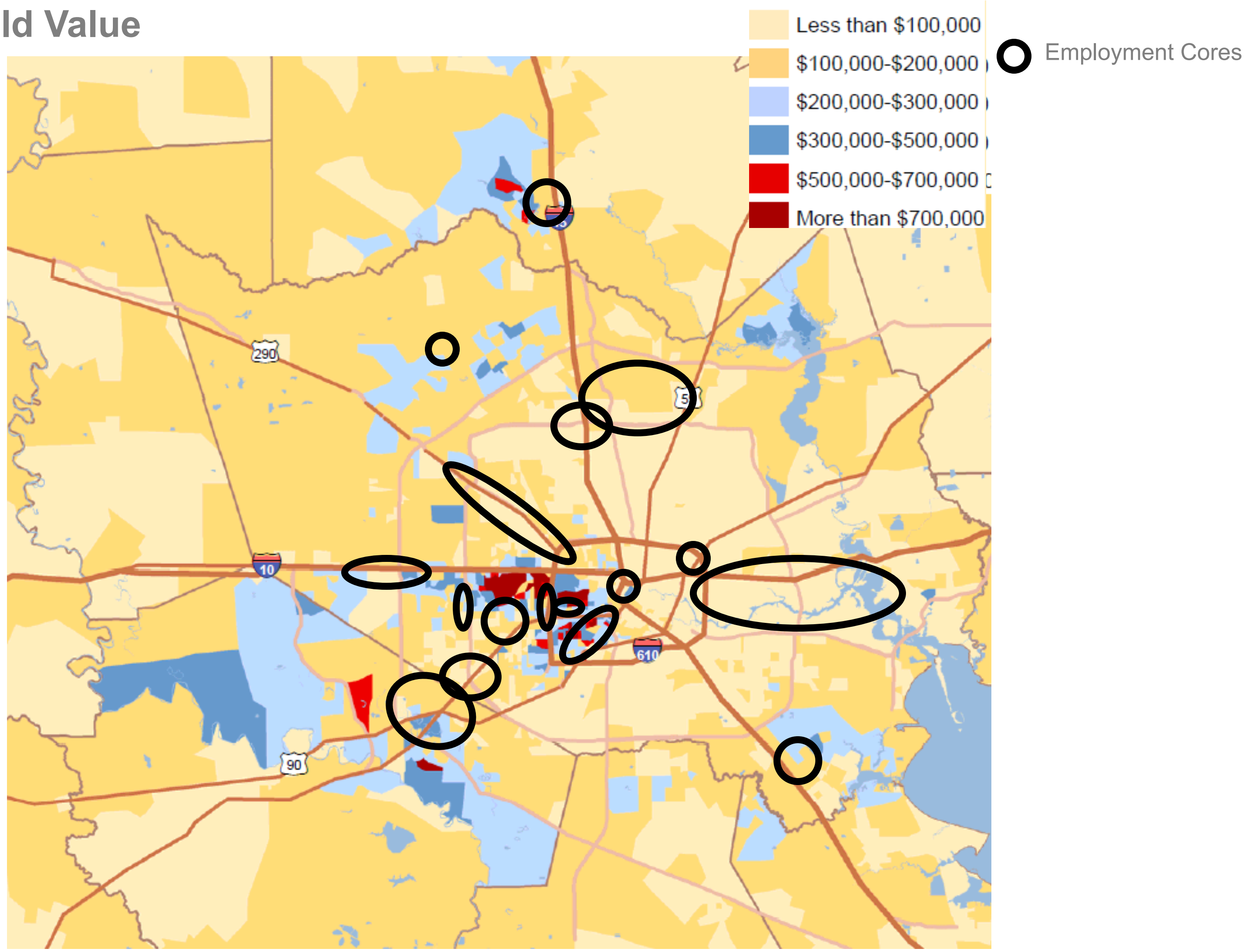
CLASS A OFFICE DEVELOPMENT
MOVING WEST OUT TO GRAND PARKWAY



MANY OF THE EMPLOYMENT CENTERS ARE LOCATED NEAR THE LARGEST CONCENTRATIONS OF EXECUTIVE HOUSING

Median Household Value
Houston Region
2010



SOURCE: ESRI

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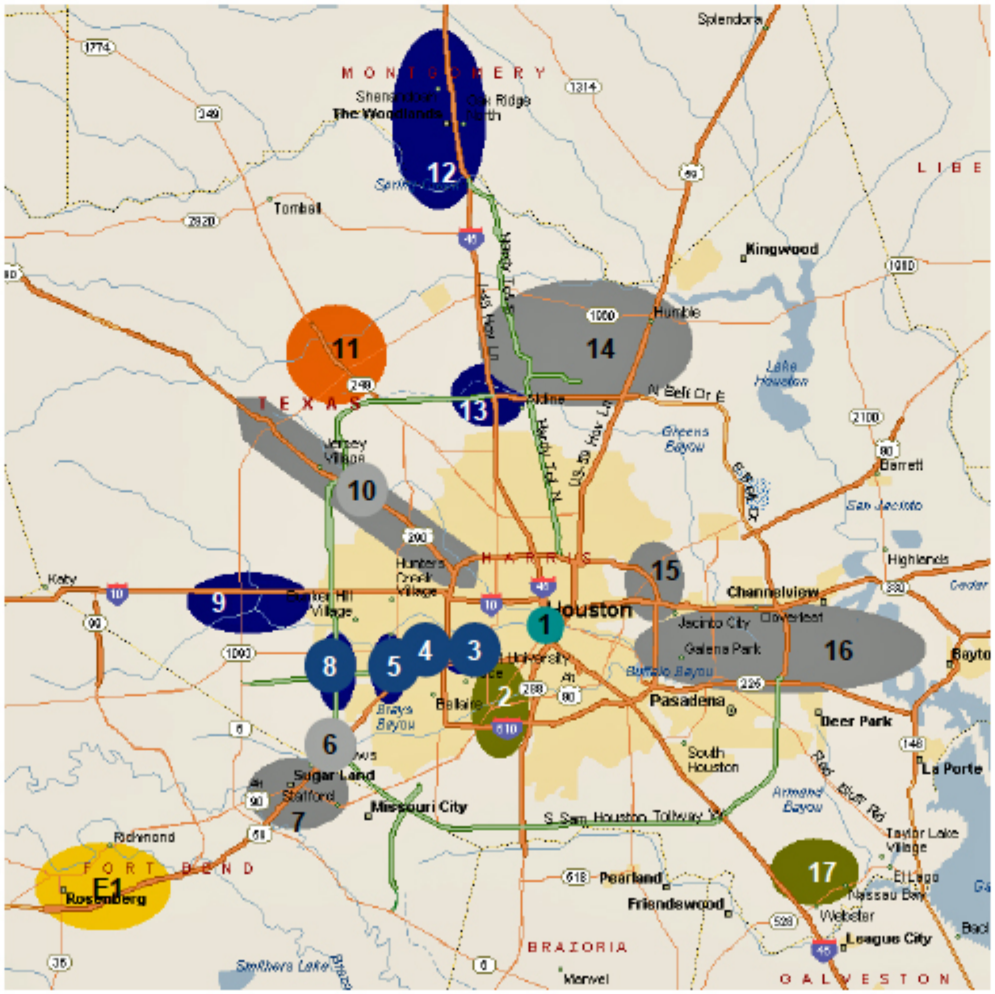
LARGEST CONCENTRATION OF HOUSTON'S EMPLOYMENT CORES TO THE SOUTHWEST OF DOWNTOWN



MAP KEY	CORE	CORE TYPE	2009 TOTAL JOBS	2040 TOTAL JOBS
1	Downtown	Urban	145,417	156,569
2	Texas Medical Center/Rice	Catalytic	98,989	127,190
3	Greenway Plaza	Office	71,084	99,473
4	Galleria	Office	82,050	84,791
5	SW/West Park Toll	Office	72,360	80,901
6	Beltway & SW Freeway	Industrial	20,684	26,298
7	Sugarland/Stafford	Industrial/ Emerging Office	50,649	70,711
8	Westchase	Office	59,275	66,261
9	Katy Freeway/Energy Corridor	Office	57,941	66,136
10	Northwest Freeway Corridor	Industrial	174,916	244,374
11	FM 1960 Tomball	Retail	23,037	38,501
12	The Woodlands	Office	36,153	54,838
13	Greenspoint	Office	59,515	86,928
14	IAH	Industrial	56,439	87,746
15	Northeast Loop Core	Industrial	17,623	30,149
16	Pasadena/Shipping Channels	Industrial	43,439	66,706
17	NASA	Catalytic	35,824	41,646
E1	Richmond/Rosenberg	Emerging	21,640	46,351

#	Urban Cores
#	Office Cores
#	Industrial Cores
#	Catalytic Cores
#	Retail Core
#	Emerging Cores

Employment Changes 1990 -2009

Industry	US	Research Tri.	Greenville	Boston	Seattle	Houston	Baltimore	San Fran	Pittsburgh
Manufacturing	**-34%**	**-19%**	**-41%**	**-55%**	**-24%**	**10%**	**-54%**	**-33%**	**-35%**
Trade, Transportation, and Utilities	10%	32%	20%	-11%	18%	27%	-3%	-14%	-5%
Information	1%	41%	43%	10%	157%	-10%	-1%	4%	-11%
Financial Activities	15%	94%	21%	0%	4%	20%	-7%	-20%	13%
Professional and Business Services	57%	95%	60%	31%	62%	68%	55%	23%	23%
Education and Health Services	**81%**	**130%**	**96%**	**42%**	**86%**	**92%**	**68%**	**36%**	**50%**
Leisure and Hospitality	41%	66%	90%	38%	41%	71%	37%	32%	19%
Other Services	27%	97%	20%	25%	27%	46%	13%	9%	12%
Government	23%	59%	52%	-4%	38%	53%	7%	-2%	2%

Total 2009 Core Jobs: 1,127,035 (41% of Region)
Total 2040 Core Jobs: 1,475,569 (34% of Region)
Total Job Growth: 348,534 (In existing and emerging cores)

Houston Total:
2009: 2,757,548
2040: 4,369,623
Growth: 1,612,075

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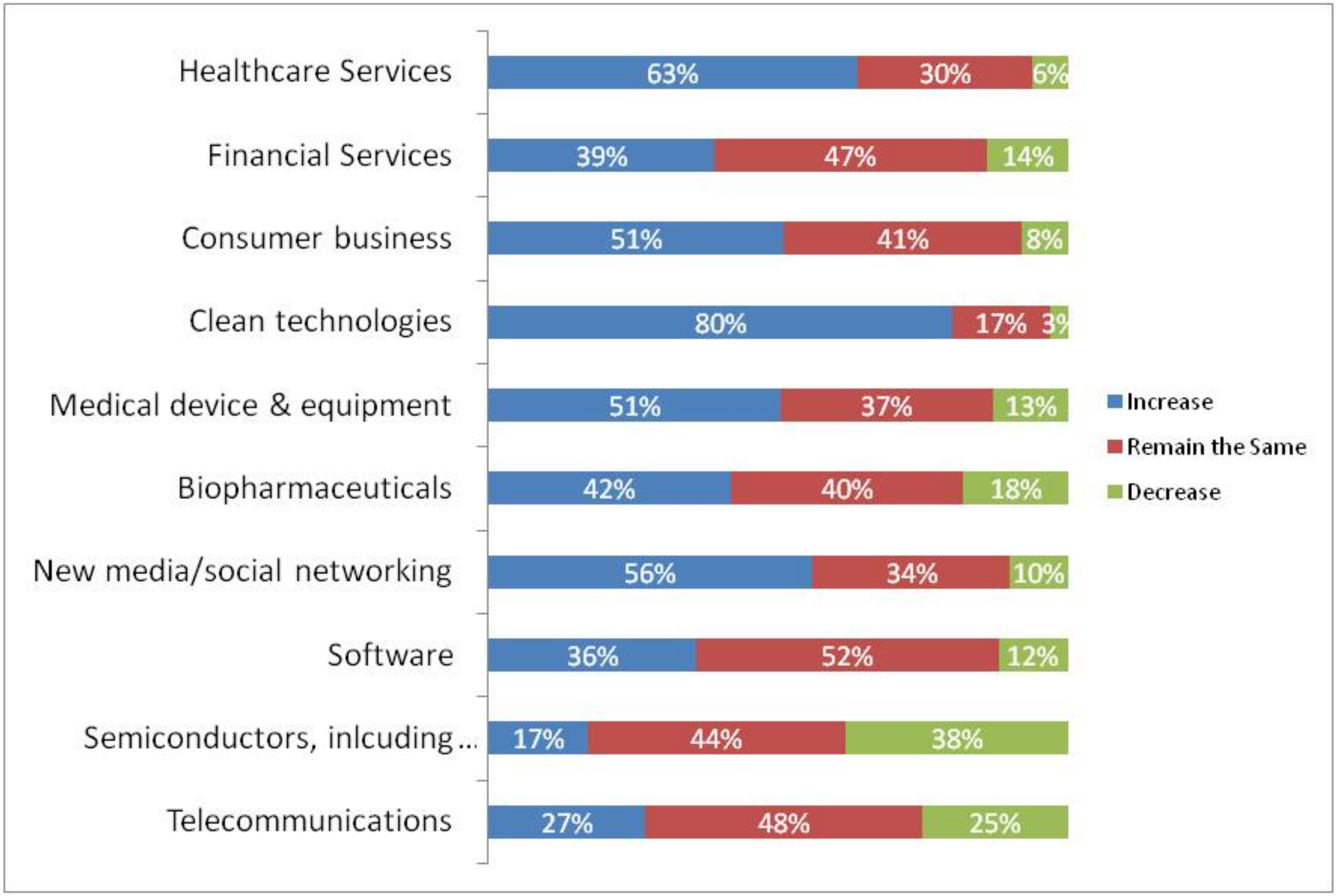
Source: Bureau of Labor Statistics, Occupational Employment Statistics (OES)

Looking Ahead:
Projected Investment, by Sector, in the Next 5 Years



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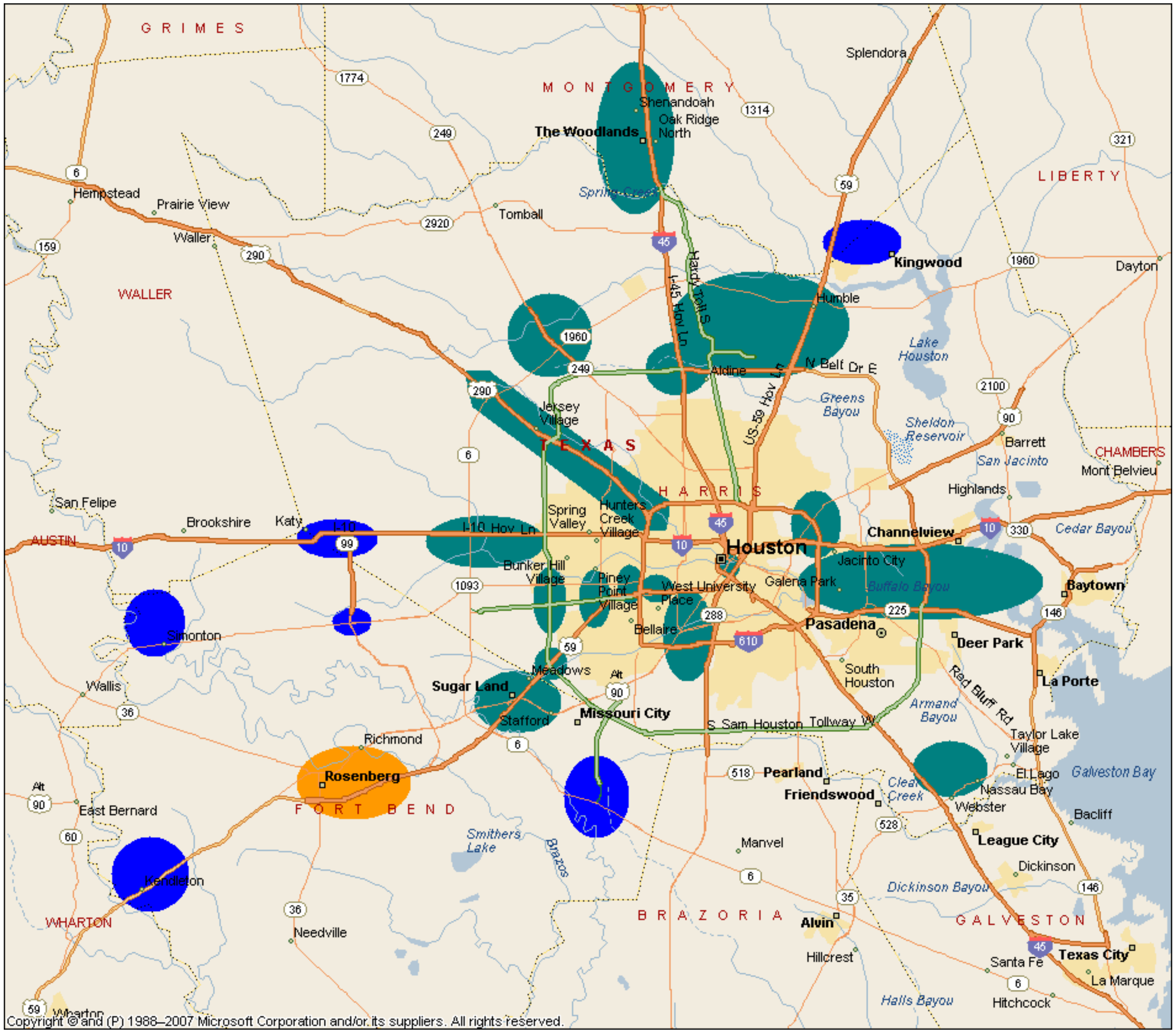
Source: 2010 Global Venture Capital Survey, National Venture Capital Association, Deloitte Development LLC

JOB FORECASTS

REGION NEEDS FOUR TO FIVE NEW JOB CENTERS NEXT 30 YEARS



Strengthening existing job centers by adding transportation options and housing allows them to capture greater share of future jobs

Also a need to add new centers and plan them with housing and transportation.

Existing Employment Cores

Emerging Employment Cores

Potential New Employment Core Locations

SOURCE: RCLCO

STRENGTHENING EXISTING CENTERS; PLANNING FOR NEW CENTERS

- **Infill or Greenfield? Need both.**
  - **Infill often more attractive to communities**
    - More efficient use of transportation investments, infrastructure
    - Reduce driving, environmental impacts, sometimes less costly to provide services
    - Placemaking, walkability, as catalyst
    - Infill in existing centers, not just Downtown
  - **Greenfield less costly to the developer**
    - Lower land costs
    - Can have fewer financing barriers
    - Often less expensive infrastructure (e.g. less transit, open parking)
    - Long term growth limitations due to infrastructure
  - **So…Infill and Better Greenfield**
    - More compact, walkable, centers and corridors, connected

WHATS OUR ECONOMIC DEVELOPMENT MODEL?

Elephant hunting or Farming

- Farming - creating the great places,investments in infrastructure, policies
- Supporting catalysts – what's the next Texas Medical? Nasa?
- Fostering a catalytic environment (venture capital, etc.)
- Supporting existing and related major industries
  - Oil and Gas Center, or Energy Center?
- Investments in education and research
- Quality of life, including developing urban/ walkable places and green/healthful living
- Arts and culture (a potential economic driver)
- Centers-based growth policies

METROLOGIC
CREATING AND SUSTAINING THE PLACES WHERE JOBS GROW

Gregg Logan, Managing Director, May 4, 2011