



Tools to Build a Better Corridor

SCAG – Toolbox Tuesday | January 26, 2010

Colin Drukker, The Planning Center | **Steve Gunnells**, The Planning Center | **Brian Welch**, Fehr & Peers

“An overnight success 20 years in the making.”

- Long-time Little Rock business leader commenting on the transformation of East Markham Street to President Clinton Avenue.

President Clinton Avenue



CLASS AGENDA

- | | |
|----------------|---|
| 10:00 -- 10:15 | Introductions |
| 10:15 -- 10:45 | Primer: history, issues, anatomy, and process |
| 10:45 -- 11:00 | Workshop: baseline conditions checklist |
| 11:00 -- 11:50 | Workshop: retail analysis |
| 11:50 -- 12:00 | Break |
| 12:00 -- 12:30 | Workshop: corridor field survey |
| 12:30 -- 1:00 | LOS and Q&A |

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CORRIDOR EVOLUTION

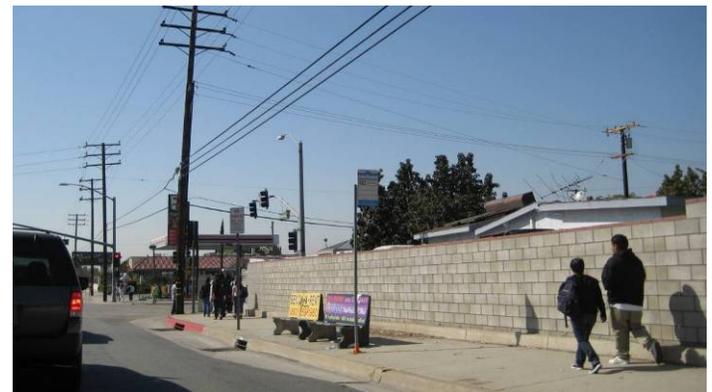
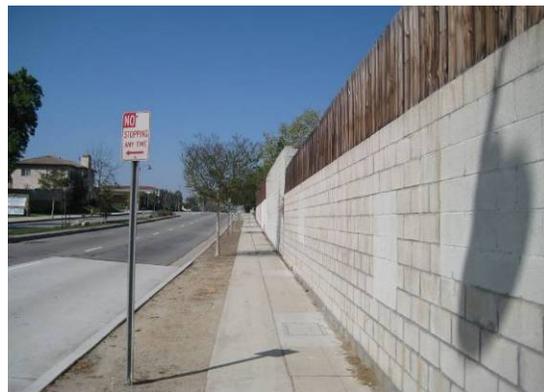


CORRIDOR EVOLUTION



CORRIDORS ARE VISUAL INDICATORS

Corridor conditions strongly linked to people's image of the City as whole



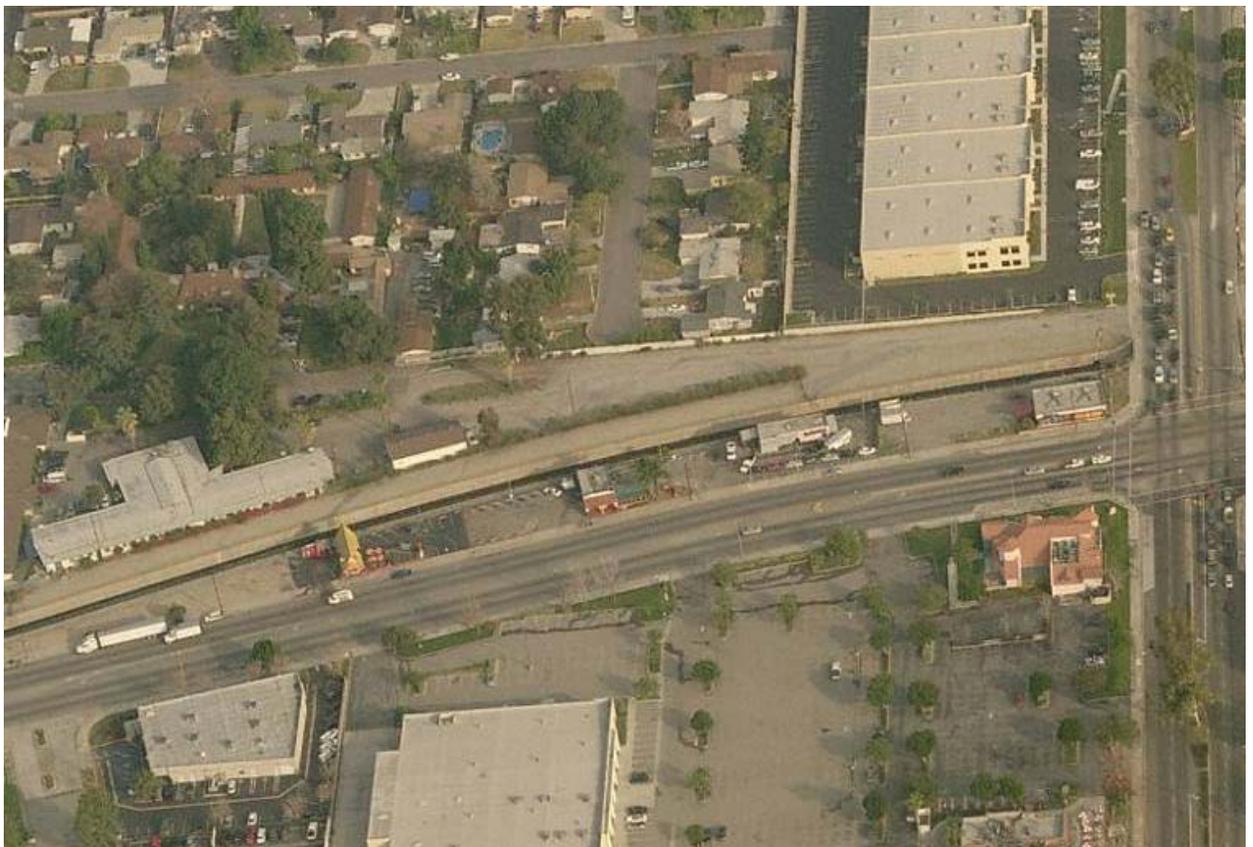
CORRIDORS ARE VISUAL INDICATORS

Corridors reflect the care and attention of neighborhoods, support for local businesses, and civic pride



CORRIDOR CHALLENGES

- Overabundance of land zoned for retail
- Poor connectivity with adjacent residential
- “Dead zones”
- Lack of comfort, convenience, and security for pedestrians
- Disorganized land use patterns
- Ownership and lot configurations



CORRIDOR CHALLENGES

- Overabundance of land zoned for retail
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- Ownership and lot configurations



CORRIDOR CHALLENGES

- Multiple agency responsibility
- One size fits all standards
- Designed for worst 2 hours of the day
- Increasing distances between destinations
- General commercial zoning
- Current network design relies on high capacity arterials



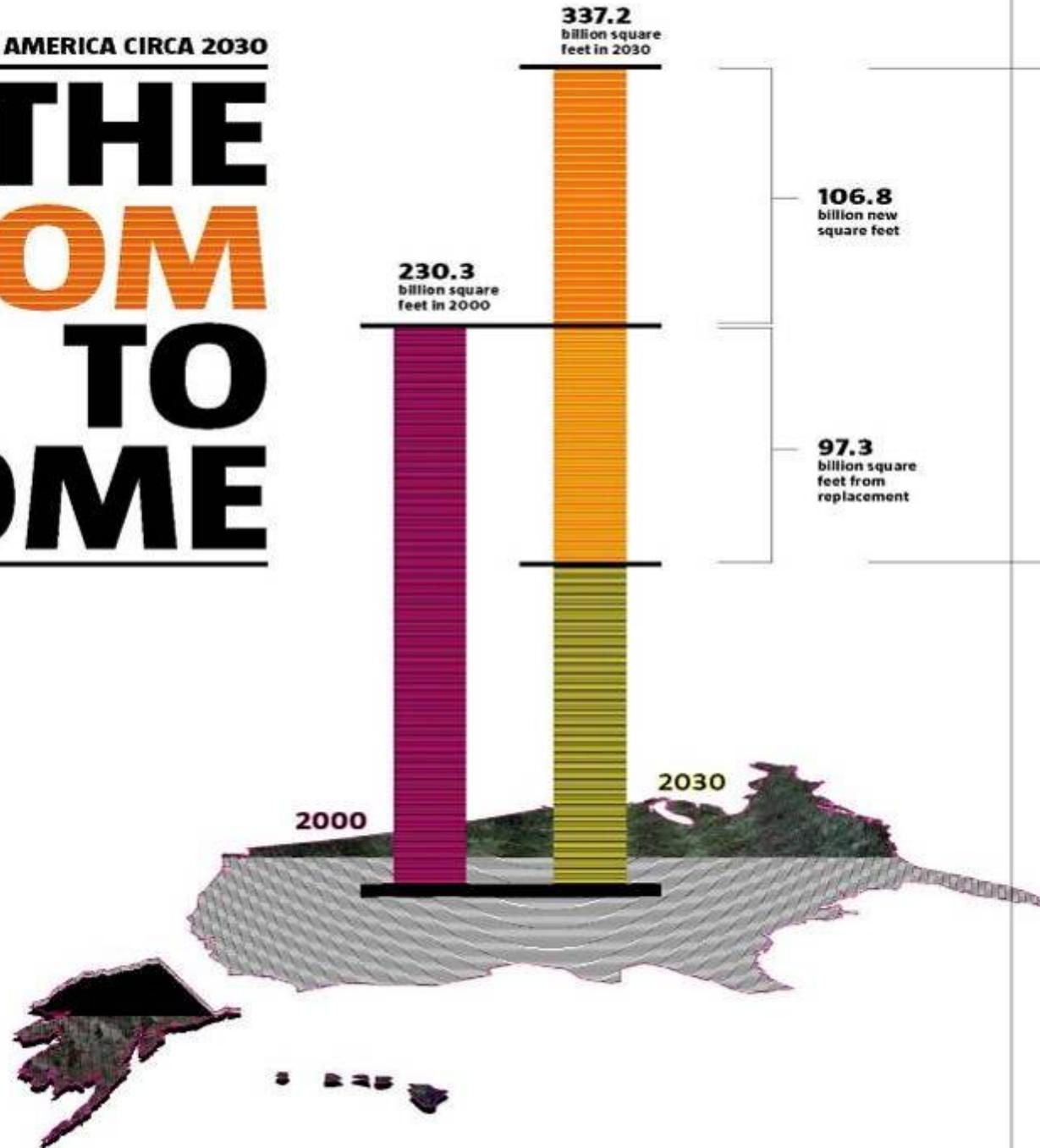
A NEW FOCUS ON CORRIDORS

- SCAG's Compass Blueprint 2% Solution
- SB 375: Reducing VMT through transportation efficient land use patterns, public transportation improvements, and non-motorized strategies



AMERICA CIRCA 2030

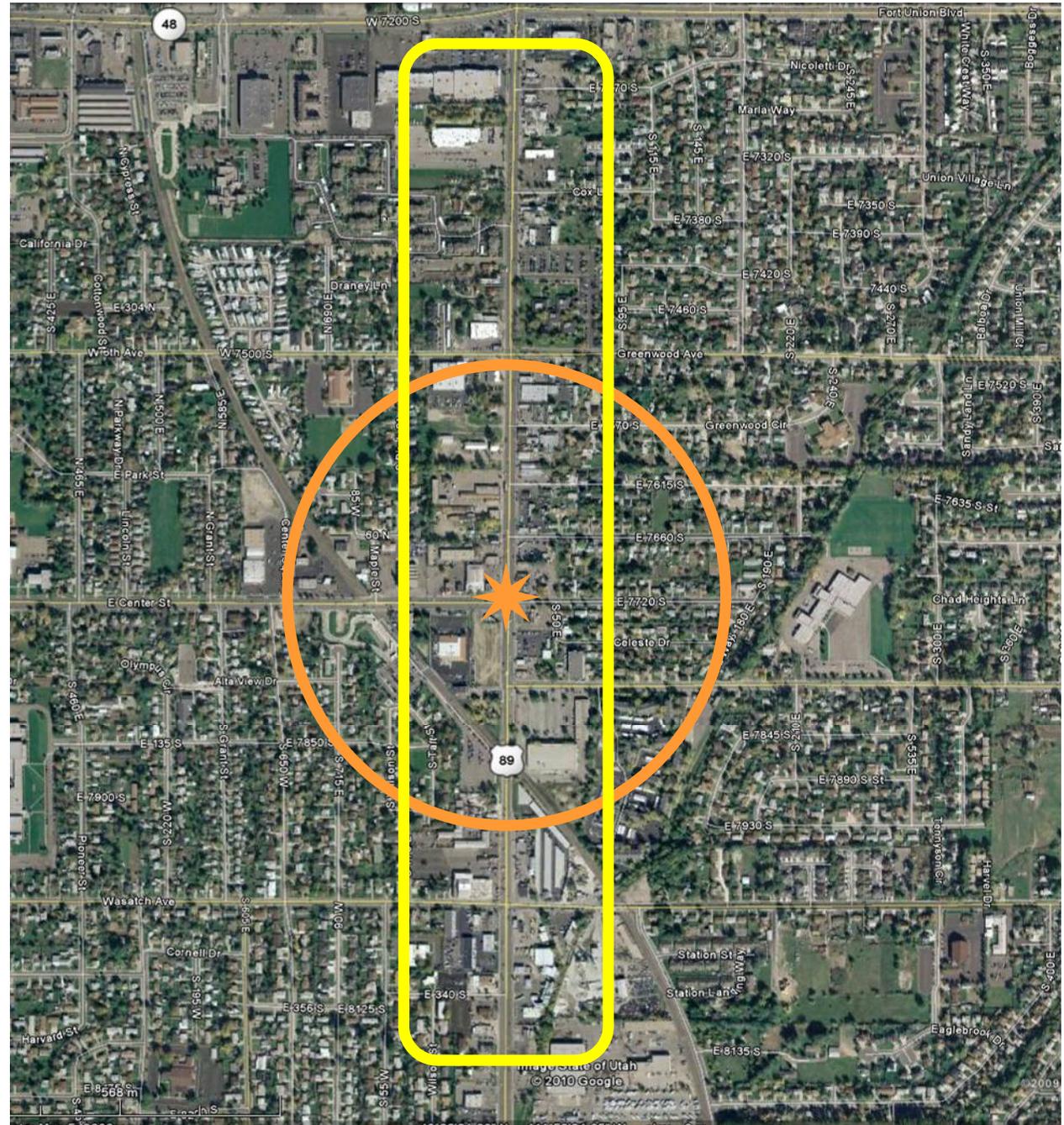
THE BOOM TO COME



WHY IT MATTERS

Focused attention can achieve major public benefits

- Improved economic vitality
- Improved mobility
- Expanded housing options for under-served groups
- Corridors that better serve community needs
- Corridors that help long-term stability of nearby SF neighborhoods
- Growth with less NIMBYism
- Improved third places



CORRIDOR ANATOMY

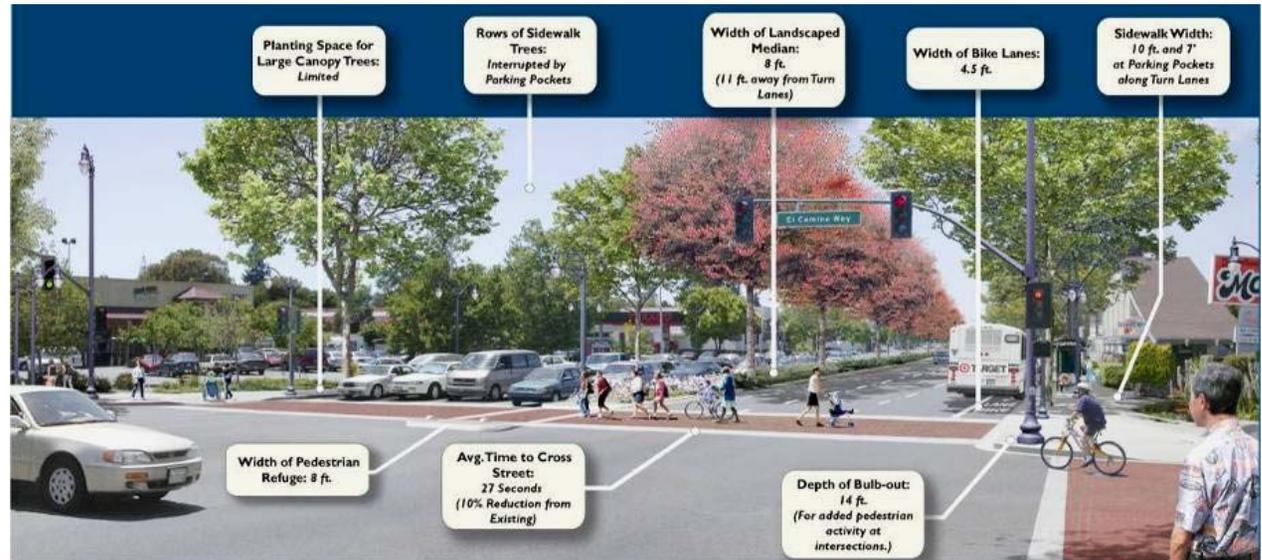
Three levels

1: Street

- Travel lanes
- Median/turning lanes
- Parkway

2: Complete Street

- Bike lanes/paths
- Transit stops
- Sidewalk
- Street trees
- Building frontage



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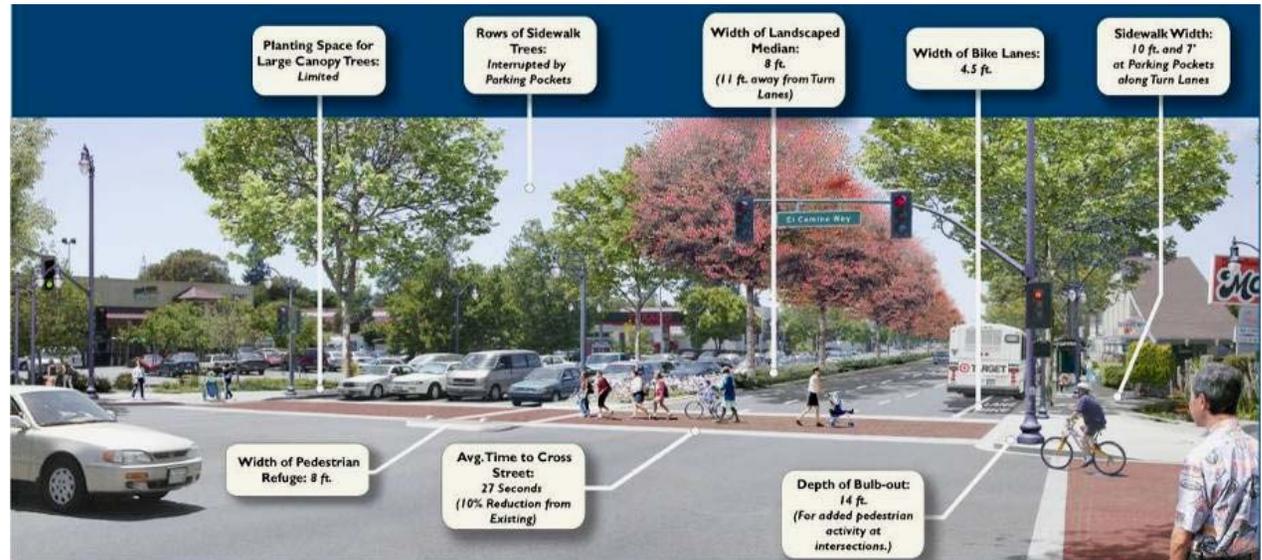
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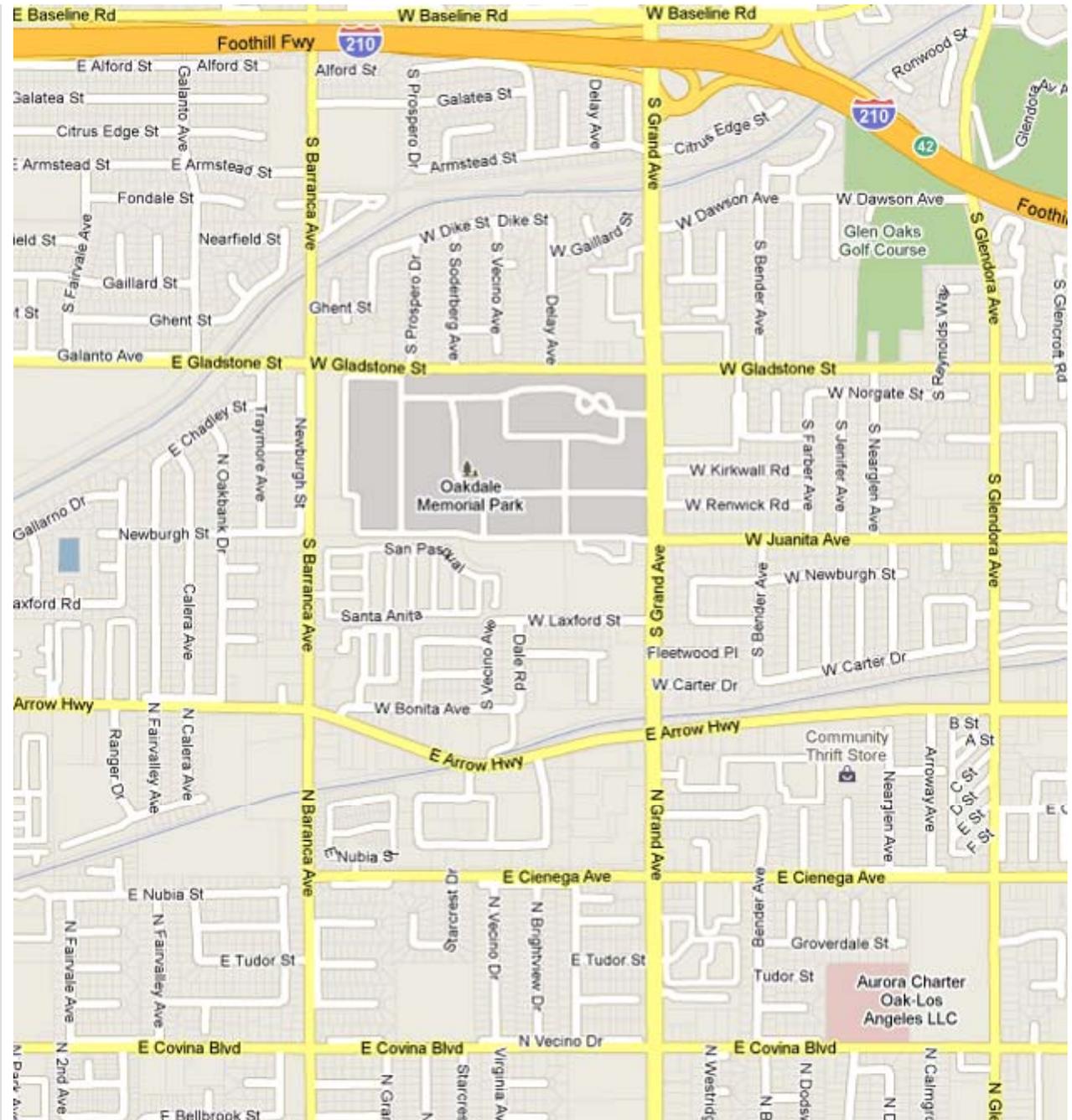
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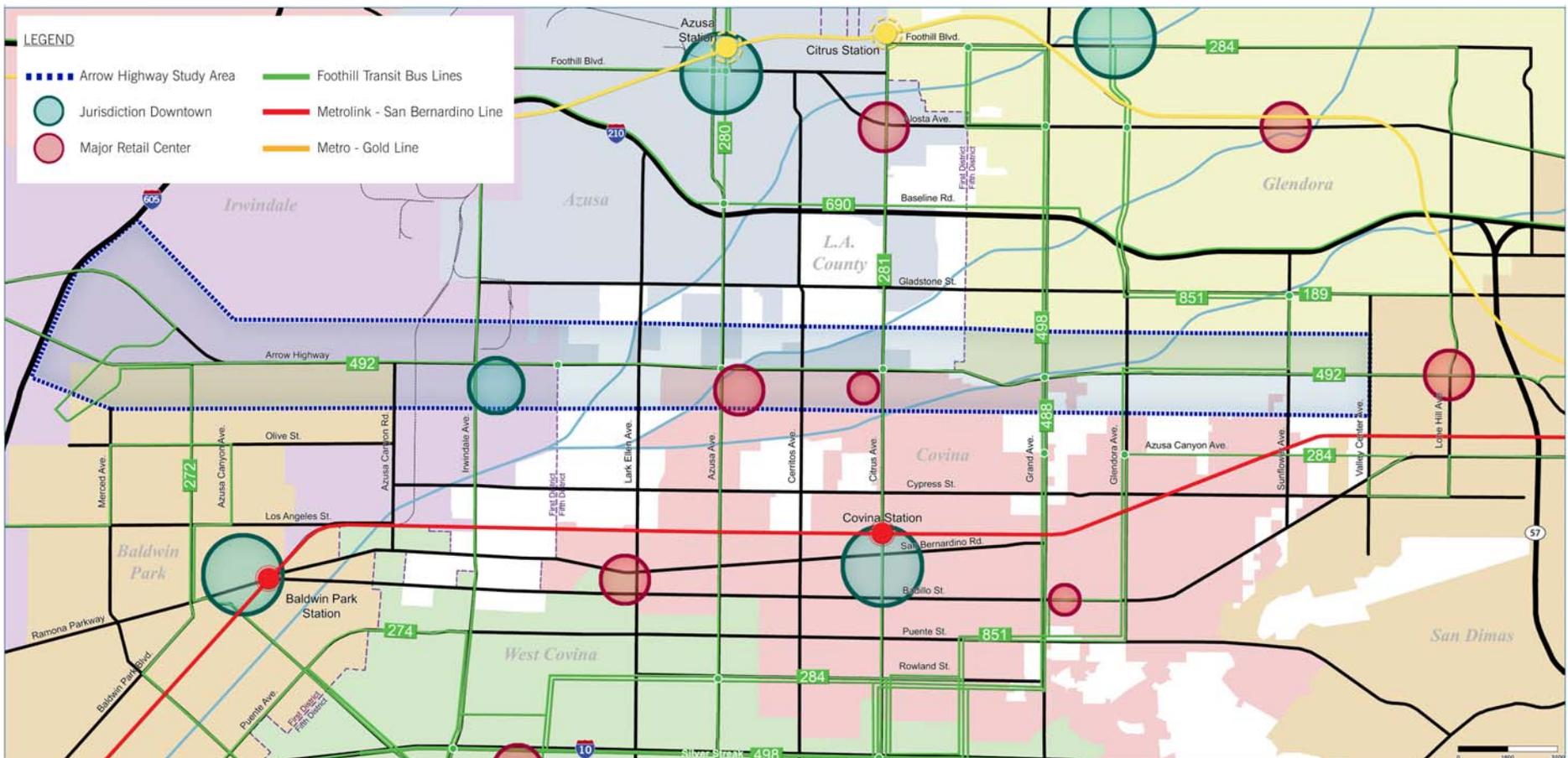
3: Corridor

- Cross streets
- Major nodes (in/out)
- Transportation systems (auto/truck/transit)
- Connect to neighborhood and community



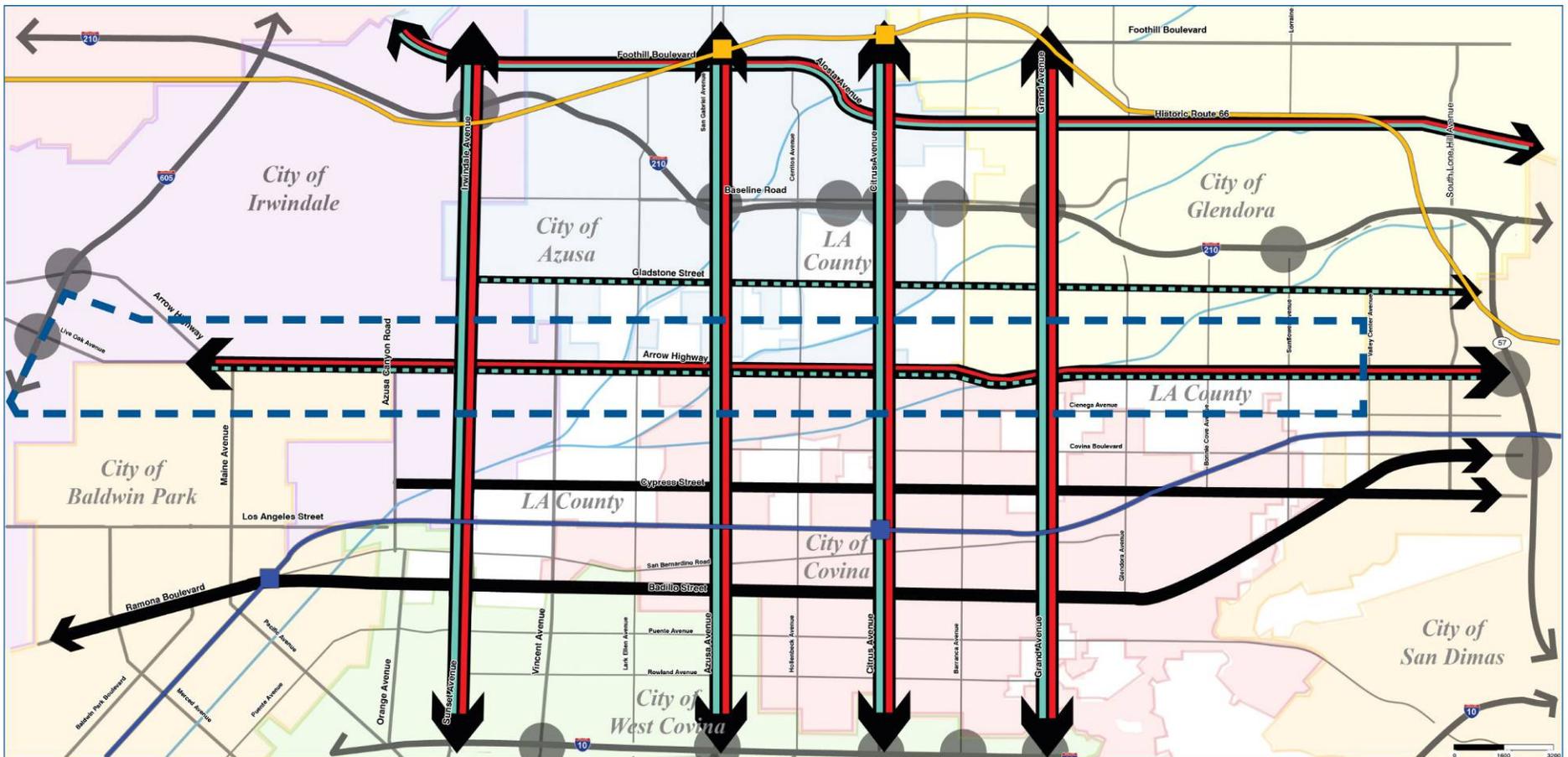
CORRIDOR ANATOMY

- 3: Corridor
- Cross streets
 - Major nodes
 - Outside corridor
 - Within corridor
 - Transportation systems (auto/truck/transit)
 - Connection to surrounding neighborhood and community



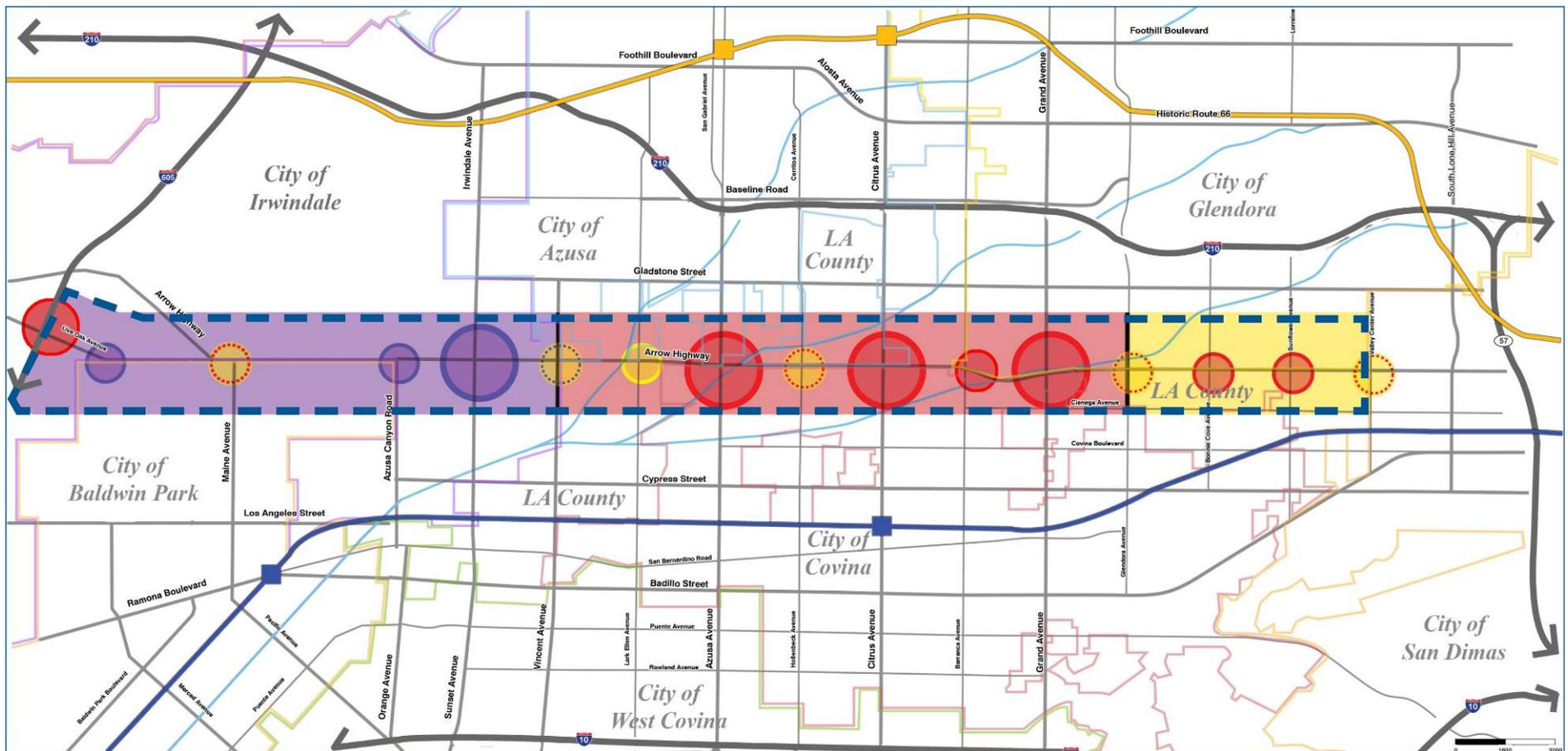
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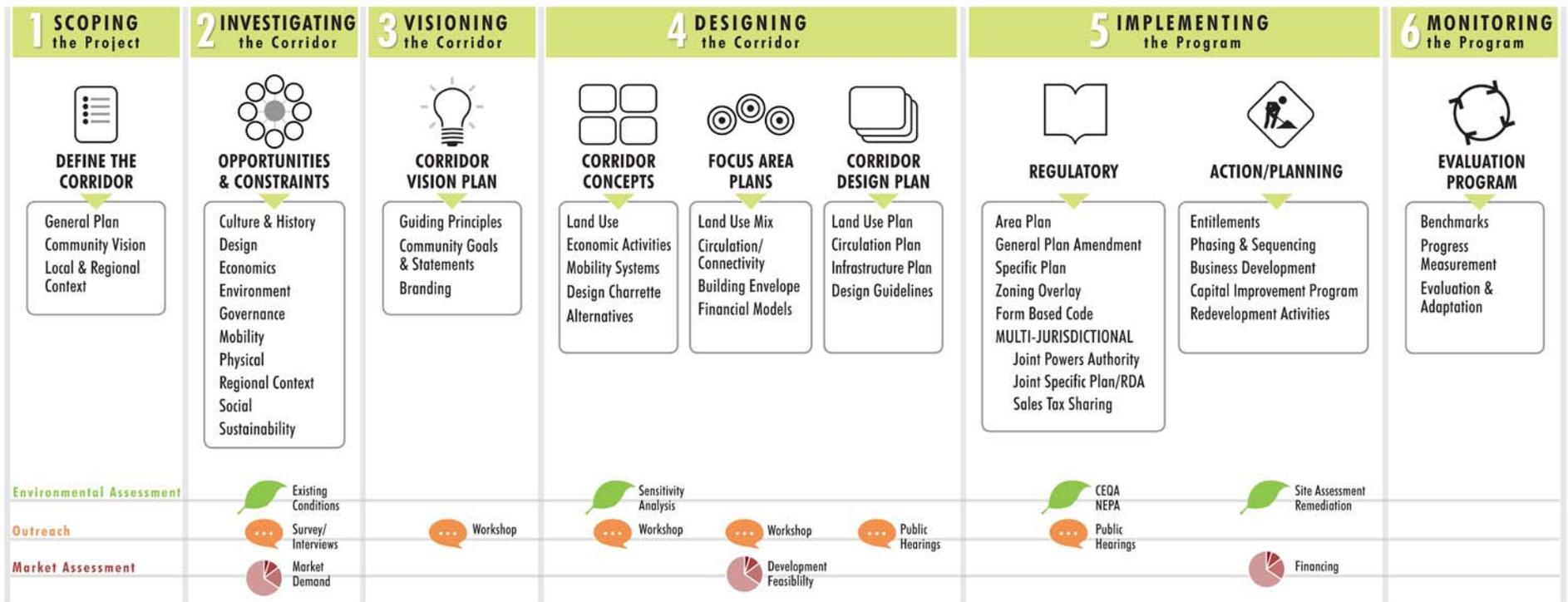


CORRIDOR ANATOMY

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- Cross streets
 - Major nodes
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CORRIDOR PLANNING PROCESS



1 SCOPING the Project



DEFINE THE CORRIDOR

General Plan
Community Vision
Local & Regional
Context

1 SCOPING
the Project

2 INVESTIGATING
the Corridor

3 VISIONING
the Corridor

4 DESIGNING
the Corridor

5 IMPLEMENTING
the Program

6 MONITORING
the Program

2 INVESTIGATING the Corridor



OPPORTUNITIES & CONSTRAINTS

Culture & History
Design
Economics
Environment
Governance
Mobility
Physical
Regional Context
Social
Sustainability



Existing Conditions



Survey/Interviews



Market Demand

3 VISIONING the Corridor



CORRIDOR VISION PLAN

Guiding Principles
Community Goals
& Statements
Branding



Workshop

1 SCOPING
the Project

2 INVESTIGATING
the Corridor

3 VISIONING
the Corridor

4 DESIGNING
the Corridor

5 IMPLEMENTING
the Program

6 MONITORING
the Program

4 DESIGNING the Corridor



CORRIDOR CONCEPTS

Land Use
Economic Activities
Mobility Systems
Design Charrette
Alternatives



FOCUS AREA PLANS

Land Use Mix
Circulation/
Connectivity
Building Envelope
Financial Models



CORRIDOR DESIGN PLAN

Land Use Plan
Circulation Plan
Infrastructure Plan
Design Guidelines



Sensitivity Analysis



Workshop



Workshop

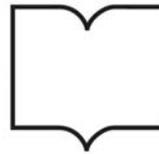


Workshop



Development Feasibility

5 IMPLEMENTING the Program



REGULATORY

Area Plan
General Plan Amendment
Specific Plan
Zoning Overlay
Form Based Code
MULTI-JURISDICTIONAL
Joint Powers Authority
Joint Specific Plan/RDA
Sales Tax Sharing



CEQA/NEPA



Public Hearings



ACTION/PLANNING

Entitlements
Phasing & Sequencing
Business Development
Capital Improvement Program
Redevelopment Activities



Site Assessment
Remediation



Financing

1 SCOPING
the Project

2 INVESTIGATING
the Corridor

3 VISIONING
the Corridor

4 DESIGNING
the Corridor

5 IMPLEMENTING
the Program

6 MONITORING
the Program

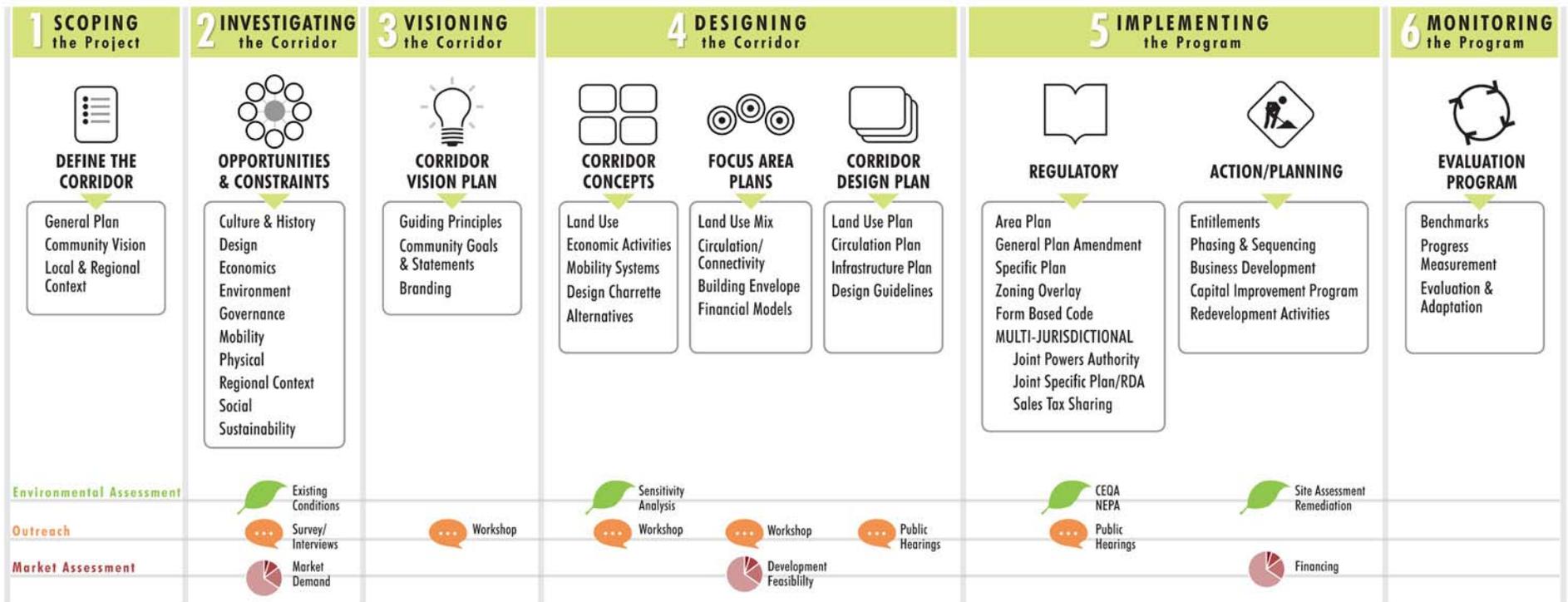
6 MONITORING the Program



EVALUATION PROGRAM

Benchmarks
Progress
Measurement
Evaluation &
Adaptation

CORRIDOR PLANNING PROCESS



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BASELINE CONDITIONS CHECKLIST

Land Use

- Zoning and general plan
- Existing land use

Lots

- Average width and depth
- Average size
- Ownership patterns
- Intensity

Demographics

- General demographics
- Income
- Transit dependency
- Age
- Jobs
- Tenure/vacancy

Access to Corridor

- From residential
- Between uses

Auto

- ROW width
- Curb-to-curb width
- LOS, ADT, AM/PM
- Curb cuts
- Parking demand and supply

Transit

- Service routes
- Headways
- Ridership data

Pedestrians/Bicycle

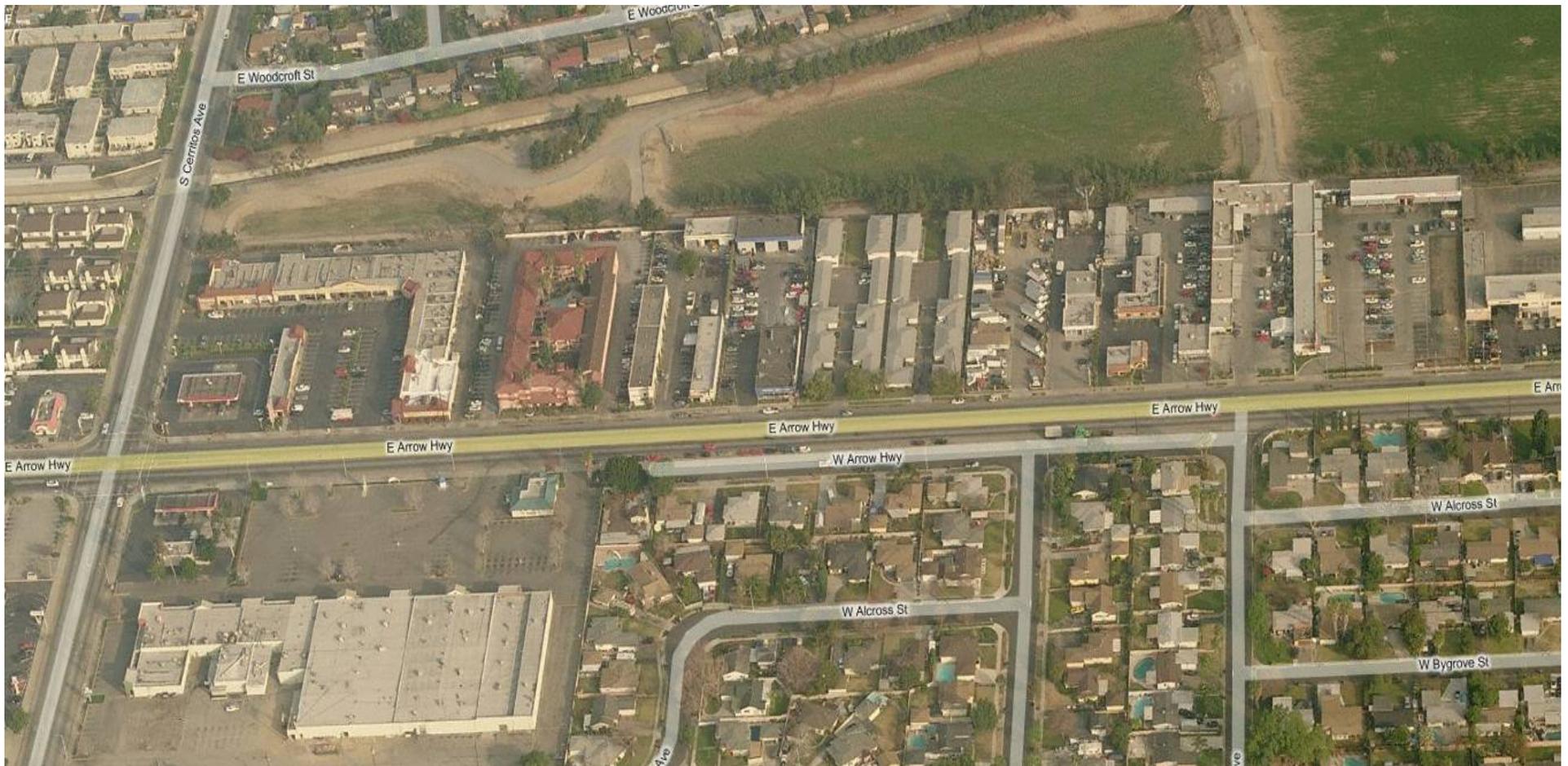
- Sidewalk width
- Bikeways
- Street trees
- Benches/seats
- Street lights

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REDEVELOPMENT POTENTIAL

How can we tell when a site or a segment of a corridor is ripe for redevelopment?



REDEVELOPMENT POTENTIAL

Think like a developer:

Development Costs

- Site acquisition
- Demolition
- Construction

Development Revenues

- Residential rents
- Retail rents
- Office rents
- Sale proceeds

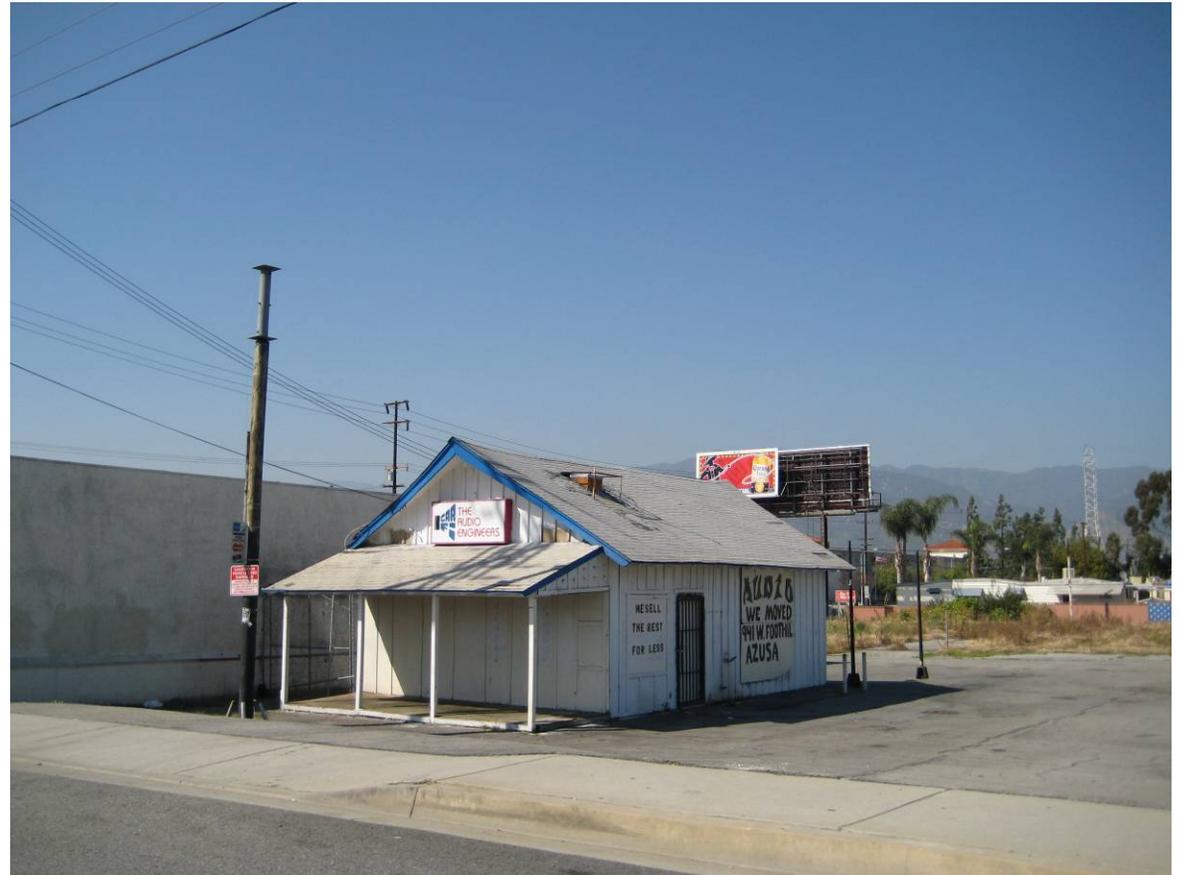


REDEVELOPMENT POTENTIAL

OR...

Alternatives to a site-specific development pro forma:

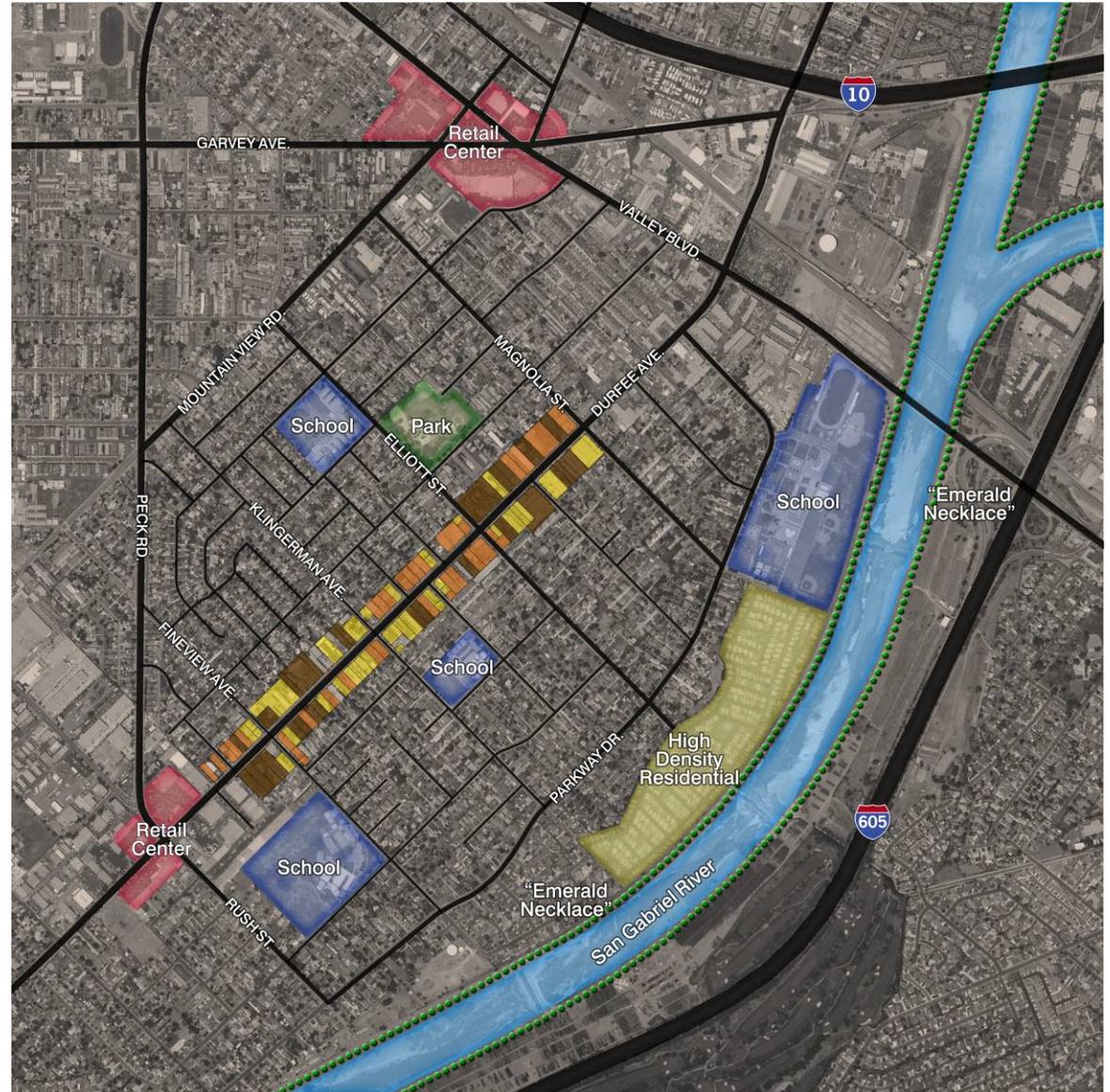
- Lot coverage
- Lot size
- Length of ownership
- Improvement to land value ratio



REDEVELOPMENT POTENTIAL

Durfee Corridor El Monte CA

- Yellow** 1 criteria
- Orange** 2 criteria
- Brown** 3 criteria



CONSEQUENCES OF TOO MUCH RETAIL

Land Owners:

- Lack of reinvestment
- Disinvestment



CONSEQUENCES OF TOO MUCH RETAIL

Business Owners:

- Marginal businesses
- Decreased business returns



CONSEQUENCES OF TOO MUCH RETAIL

New Development:

- Discourages new businesses
- Discourages new development



RETAIL MARKET DEMAND

How can we tell when a corridor segment is over-retailed?



INITIAL RETAIL MARKET DEMAND ANALYSIS

- **Market Potential**
 - How much do corridor residents spend
 - How much building space can that spending support
 - Supportable building square footage
- **Existing Supply**
 - How much retail building space exists in the corridor
 - Existing building square footage
- **Market Demand**
 - Gap or Excess
 - Building square footage and percentage of total

CONVENIENCE GOODS AND SERVICES



COMPARISON GOODS



RESTAURANTS AND BARS



CALCULATE MARKET POTENTIAL

How much retail space can the corridor's households support?

NAICS	Local/Neighborhood Retail	US	Los Angeles- Riverside- Orange County CMSA
445	Food and Beverage Stores		
44511	- Supermarkets, Grocery (Ex Conv) Stores	9.4	8.5
44512	- Convenience Stores	0.7	0.6
4452	- Specialty Food Stores	0.8	0.7
4453	- Beer, Wine and Liquor Stores	0.8	0.7
446	Health and Personal Care Stores	11.6	9.3
447	Gasoline Stations	6.1	4.2
453	Miscellaneous Store Retailers	5.3	4.4
8121	Personal Care Services Facilities	1.2	1.0
81231 & 8123201	Dry Cleaning & Laundry Service Facilities	0.2	0.2
81291 & 81292	Other Personal Services	0.2	0.2
	Subtotal	36.3	29.8

CALCULATE MARKET POTENTIAL

How much retail space can the corridor's households support?

NAICS	Community/Regional Retail	US	Los Angeles- Riverside- Orange County CMSA
442	Furniture and Home Furnishings Stores	5.2	4.9
443	Electronics and Appliance Stores	3.3	2.7
444	Building Material, Garden Equip Stores	13.7	9.0
448	Clothing and Clothing Accessories Stores	8.4	8.2
451	Sporting Goods, Hobby, Book, Music Stores	4.0	3.6
452	General Merchandise Stores	27.8	23.1
Subtotal		62.4	51.5

CALCULATE MARKET POTENTIAL

How much retail space can the corridor’s households support?

NAICS	Restaurants and Bars	US	Los Angeles- Riverside- Orange County CMSA
7221	Full-Service Restaurants-7221	5.3	5.2
7222	Limited-Service Eating Places-7222	6.8	7.2
7224	Drinking Places -Alcoholic Beverages-7224	1.2	1.1
Subtotal		13.3	13.4
TOTAL		111.9	94.8

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CALCULATE MARKET POTENTIAL

Corridor Retail Worksheet #1

Type of Retail	(A) Number of Households	x	(B) Average Support (sq. ft.)	x	(C) Capture	=	Total Supportable Space (sq. ft.)
Convenience goods and services			29.8		90%		
Comparison goods			51.5		11.5%		
Restaurants & bars			13.4		25%		
						Total:	

CALCULATE MARKET POTENTIAL

Corridor Retail Worksheet #1

Type of Retail	(A) Number of Households	x	(B) Average Support (sq. ft.)	x	(C) Capture	=	Total Supportable Space (sq. ft.)
Convenience goods and services	1,973		29.8		90%		
Comparison goods	1,973		51.5		11.5%		
Restaurants & bars	1,973		13.4		25%		
Total:							

CALCULATE MARKET POTENTIAL

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Type of Retail	(A) Number of Households	x	(B) Average Support (sq. ft.)	x	(C) Capture	=	Total Supportable Space (sq. ft.)
Convenience goods and services	1,973		29.8		90%		52,915
Comparison goods	1,973		51.5		11.5%		11,685
Restaurants & bars	1,973		13.4		25%		6,610
						Total:	

CALCULATE MARKET POTENTIAL

Corridor Retail Worksheet #1

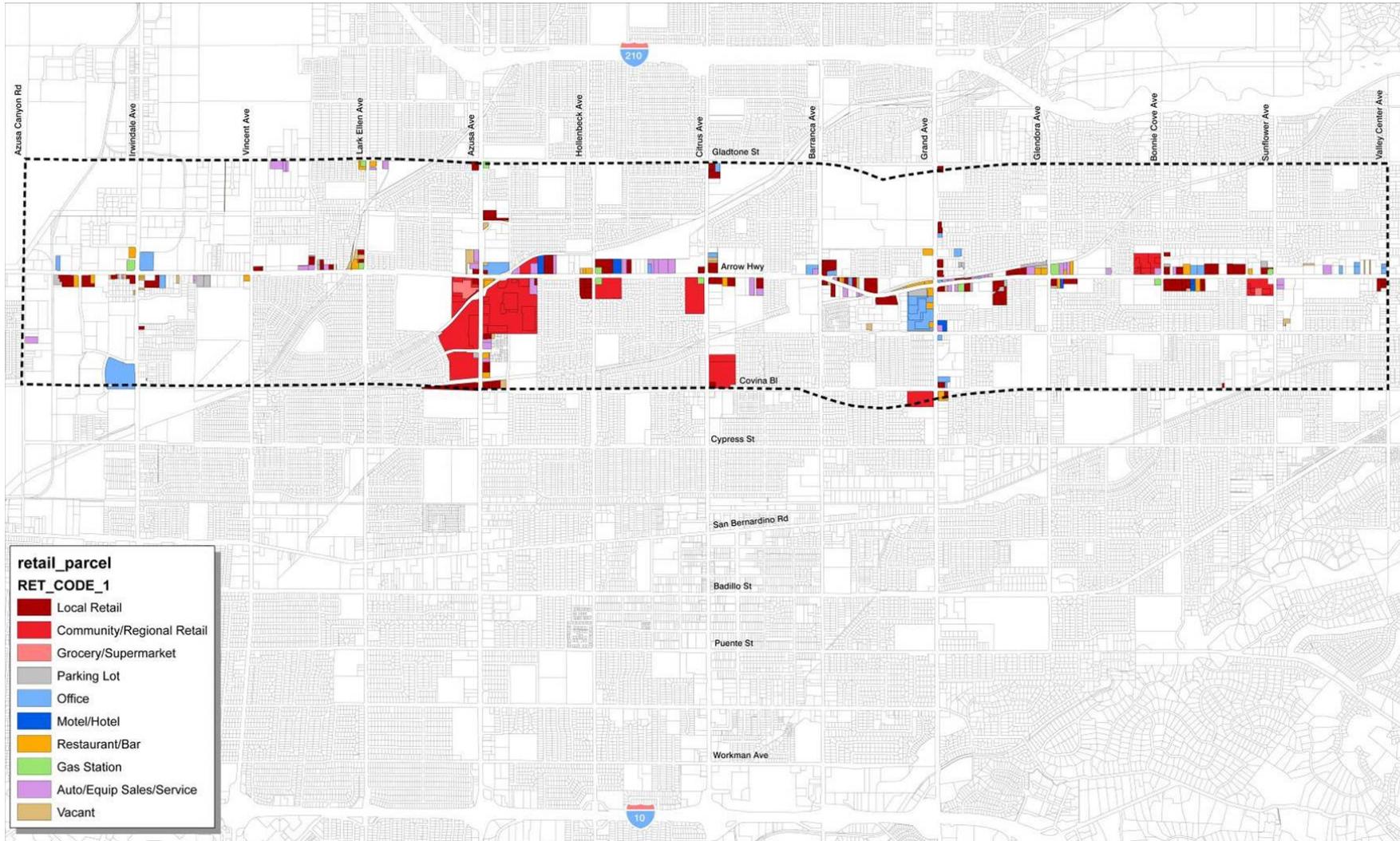
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Comparison goods	1,973		51.5		11.5%		11,685
Restaurants & bars	1,973		13.4		25%		6,610
						Total:	71,210

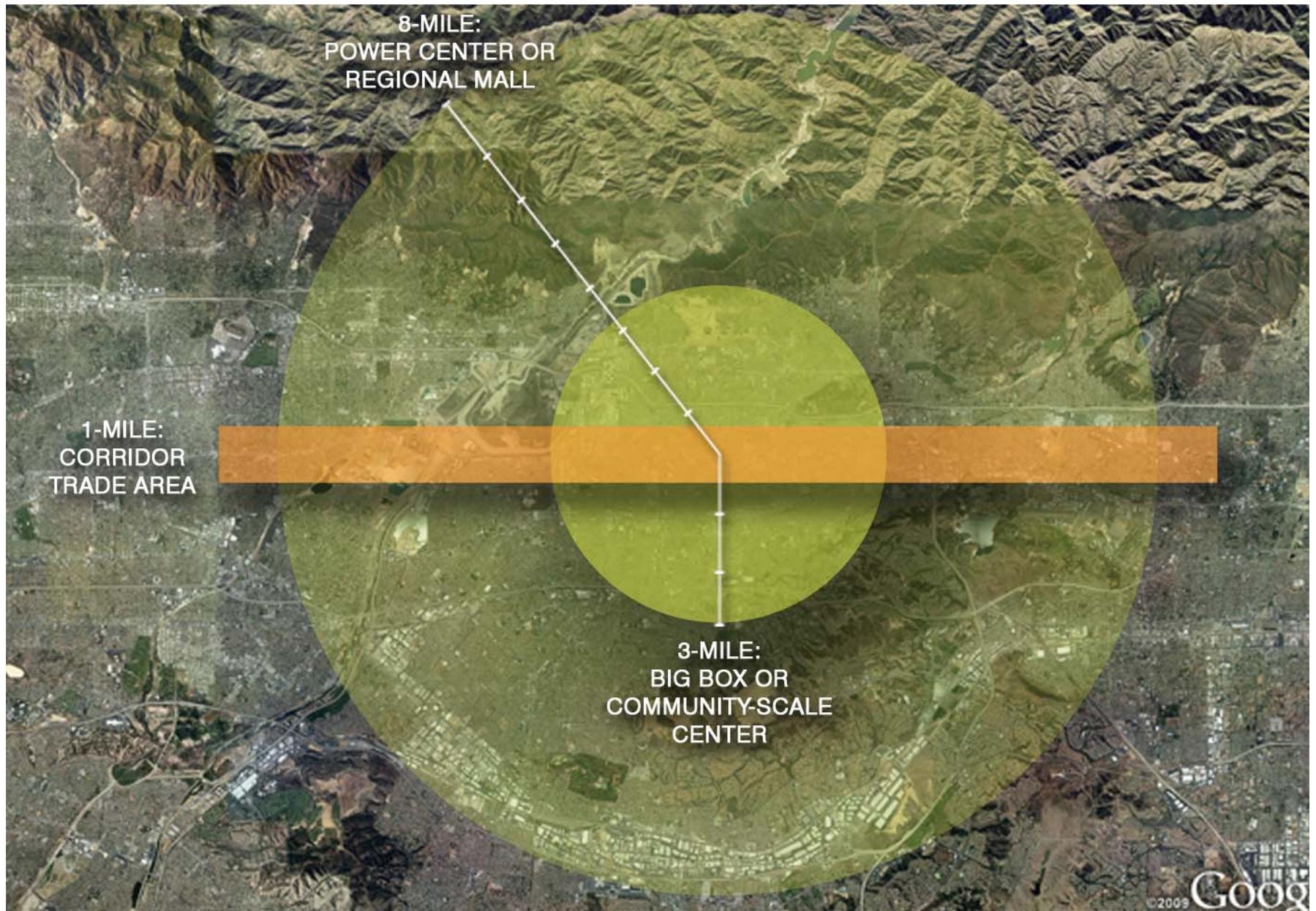
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CALCULATE RETAIL SUPPLY

How much retail space does the corridor have?





CALCULATE RETAIL SUPPLY

How much retail space does the corridor have?

Trade Area Radius	Example	Portion of Building Area for 1-Mile Wide Corridor
1½-Mile	Supermarket / Pharmacy	42%
3-Mile	Big-Box	16%
8-Mile	Shopping Mall / Power Center	6.25%



CALCULATE RETAIL SUPPLY

Corridor Retail Worksheet #2

	(A) Building Square Footage	x	(B) Percentage Supported by Corridor	=	Effective Building Square Footage
Parcel 1					
Parcel 2					
Parcel 3					
Total:			Total:		

CALCULATE RETAIL SUPPLY

Corridor Retail Worksheet #2

	(A) Building Square Footage	x	(B) Percentage Supported by Corridor	=	Effective Building Square Footage
Parcel 1	63,220		42%		26,552
Parcel 2					
Parcel 3					
Total:			Total:		

CALCULATE RETAIL SUPPLY

Corridor Retail Worksheet #2

	(A) Building Square Footage	x	(B) Percentage Supported by Corridor	=	Effective Building Square Footage
Parcel 1	63,220		42%		26,552
Parcel 2	8,600		100%		8,600
Parcel 3					
Total:			Total:		

CALCULATE RETAIL SUPPLY

Corridor Retail Worksheet #2

	(A) Building Square Footage	x	(B) Percentage Supported by Corridor	=	Effective Building Square Footage
Parcel 1	63,220		42%		26,552
Parcel 2	8,600		100%		8,600
Parcel 3-88	100,400				67,058
Total:			Total:		

CALCULATE RETAIL SUPPLY

Corridor Retail Worksheet #2

	(A) Building Square Footage	x	(B) Percentage Supported by Corridor	=	Effective Building Square Footage
Parcel 1	63,220		42%		26,552
Parcel 2	8,600		100%		8,600
Parcel 3-88	100,400				67,058
Total:	172,220		Total:		102,210



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CALCULATE MARKET DEMAND

Corridor Retail Worksheet #3

Corridor Segment	(A) Total Supportable Space (#1)	-	(B) Effective Building Square Footage (#2)	=	Retail Gap / Surplus (sq. ft.)	/	(C) Total Retail Building Space (#2)	=	Retail Gap/ Surplus (%)
Segment 1									
Segment 2									
Segment 3									
			Total:						

CALCULATE MARKET DEMAND

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Segment 1	71,210								
Segment 2									
Segment 3									
		Total:							

CALCULATE MARKET DEMAND

Corridor Retail Worksheet #3

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Segment 1	71,210		102,210						
Segment 2									
Segment 3									
			Total:						

CALCULATE MARKET DEMAND

Corridor Retail Worksheet #3

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Segment 1	71,210		102,210		30,000				
Segment 2									
Segment 3									
			Total:						

CALCULATE MARKET DEMAND

Corridor Retail Worksheet #3

Corridor Segment	(A) Total Supportable Space (#1)	-	(B) Effective Building Square Footage (#2)	=	Retail Gap / Surplus (sq. ft.)	/	(C) Total Retail Building Space (#2)	=	Retail Gap/ Surplus (%)
Segment 1	71,210		102,210		30,000		172,220		17.4%
Segment 2									
Segment 3									
			Total:						

LIFE ON STATE – INITIAL MARKET DEMAND FINDINGS

Corridor Segment	Total Supportable Space (#1)	Effective Building Square Footage (#2)	Retail Gap / Surplus	Total Retail Building Space (#2)	Retail Gap
1	92,024	210,903	-118,879	748,666	-15.9%
2	120,801	192,266	-71,465	379,544	-18.8%
3	176,913	251,707	-74,794	587,088	-12.7%
4	67,812	102,914	-35,102	519,861	-6.8%
5	72,343	89,297	-16,954	231,927	-7.3%
6	55,819	146,139	-90,321	465,909	-19.4%
7	64,686	91,888	-27,201	391,504	-6.9%
8	85,950	223,508	-137,558	524,272	-26.2%
9	73,918	156,533	-82,615	462,622	-17.9%
10	57,337	43,780	13,557	51,433	26.4%
			-641,331	4,362,826	-14.7%

SO WHAT?

- Phase out excess retail
- Build more housing
- Re-position as a destination

- Nodes and districts
- Financial feasibility of redevelopment
- Vertical versus horizontal mixed use

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Safety Considerations

- Personal safety is highest priority today.
- Watch for traffic first, the ped safety issues will wait.
- Don't just "follow" the group

5 CONSIDERATIONS

- **Security:**
 - Would you walk here alone, at night?
 - Are there “eyes on the street”?
- **Convenience:**
 - Are direct routes available?
- **Efficiency:**
 - The best communities are designed around the human foot
- **Comfort:**
 - How does the environment “compete” with a car: places to sit, shade?
- **Welcome**
 - Do you enjoy the walking experience here?



Pedestrian-Friendly Cities

What makes a place walkable?



- Good Streets
- Good Intersections
- Good Crossings
- Great Places

Good Streets

Ingredients

Great sidewalk environments

Narrow lanes

Medians whenever practical

Minimum number of lanes

Bike accommodations



Good Streets

Great sidewalk environments

Continuous and wide enough for couples



Good Streets

Great sidewalk environments
Appropriate buffering from traffic



Good Streets

Great sidewalk environments
Landscape Strips



Good Streets

Great sidewalk environments

Street Trees



Good Streets

Narrow Lanes



Tennis court paint
(lanes 10 feet)

Boca Raton, Florida

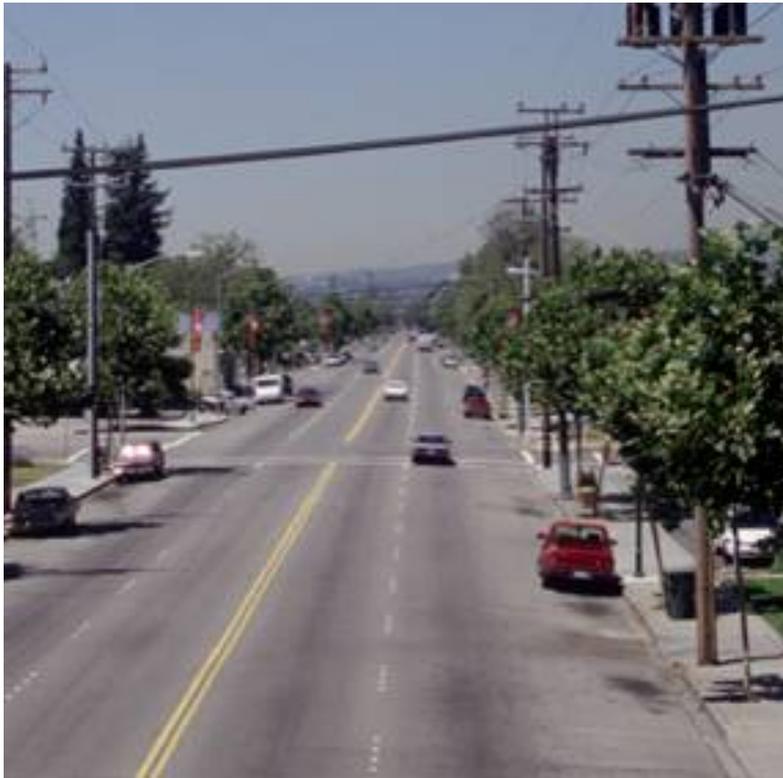
Good Streets

Medians whenever practical



Good Streets

Minimum number of lanes



Good Streets

Bike accommodations



Good Intersections

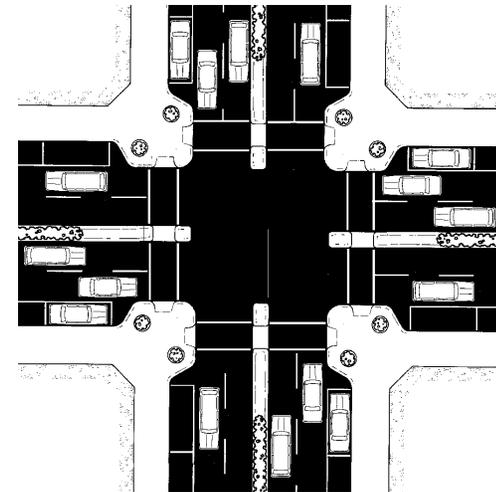
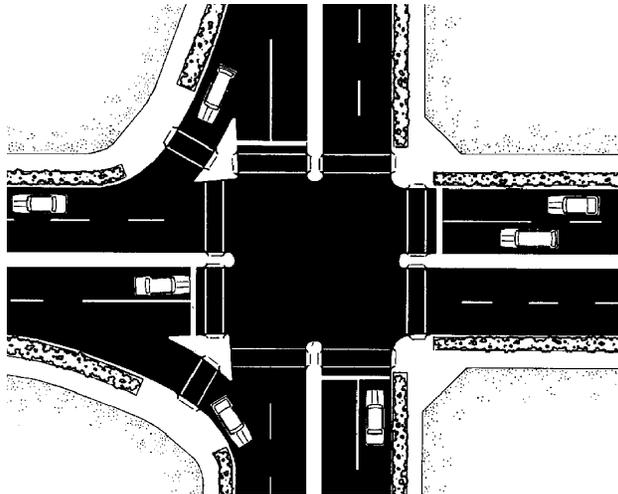
Ingredients

Compact

Curb extensions

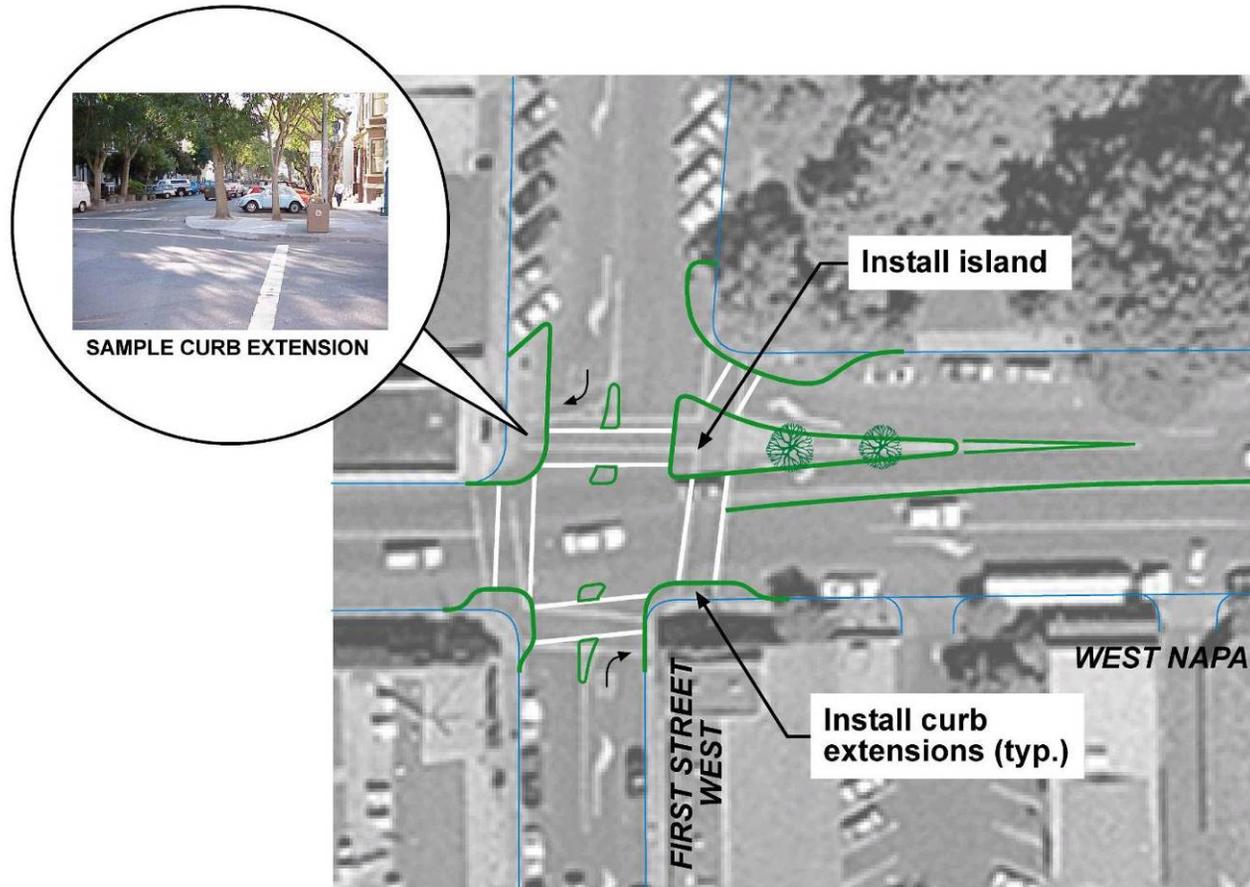
Crosswalks on all approaches

Short pedestrian crossings



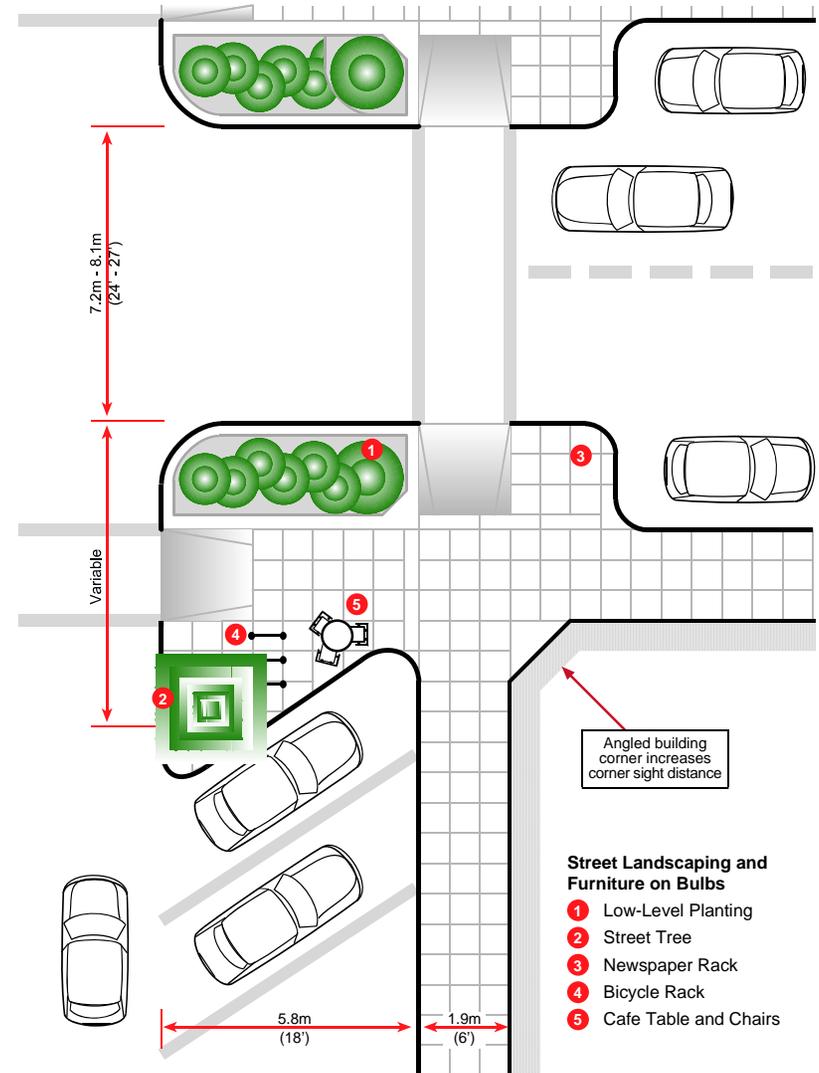
Good Intersections

Compact



Good Intersections

Curb Extensions



Good Intersections

Crosswalks on all approaches



Good Intersections

Considerations at signals

- Pedestrian Priority
- Limit conflicts with crosswalks
 - Protected left turns
 - Prohibited right turns on red
- Advanced Limit Lines
- Countdown Signals
- Longer crossing times



Good Crossings

Ingredients

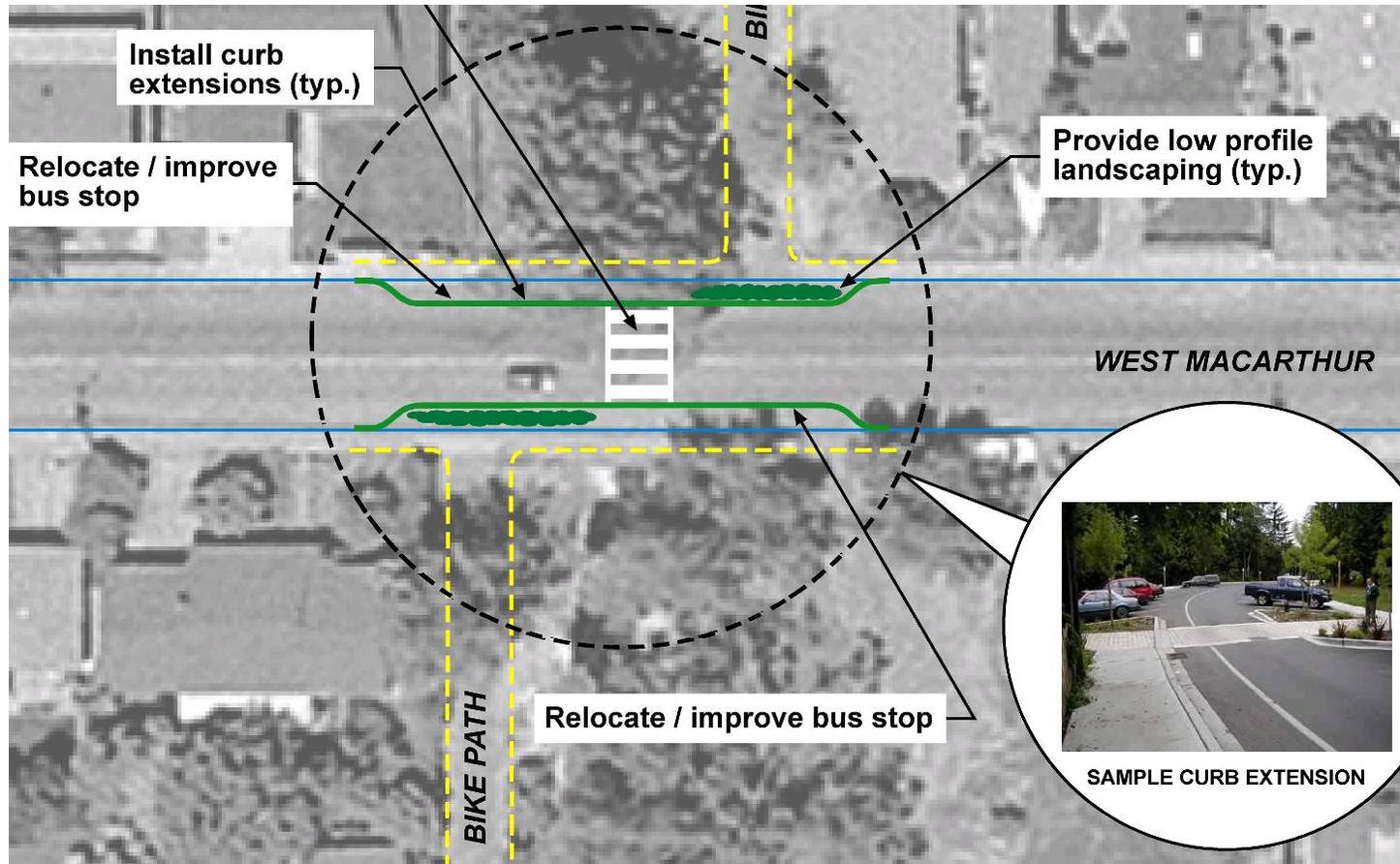
Highly Visible

Marked and Signed

Quasi-signals, where appropriate



Good Crossings Highly Visible



Good Crossings Marked and Signed



R1-6

Good Crossings

Quasi-signals, where appropriate



Great Places Ingredients



Street Activity
Organization
Calmed Traffic
Links to Transit



Medium to High Density Land Use
Grid-like Street Networks
Two to Four Lane Streets
Public Art

Great Places Street Activity



Great Places Organized



Great Places

Calmed Traffic



Great Places Links to Transit



Great Places

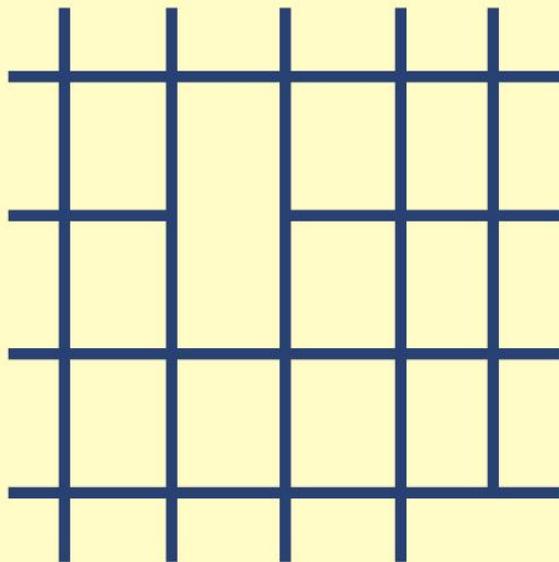
Medium to High Density Land Use



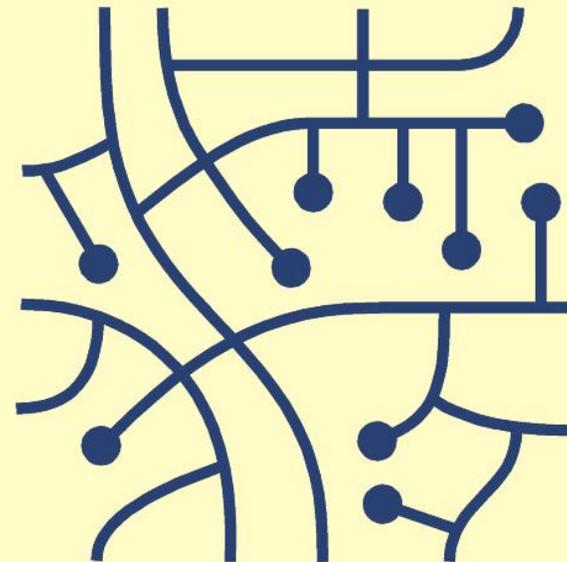
Great Places

Grid-Like Street Networks

Traditional Grid



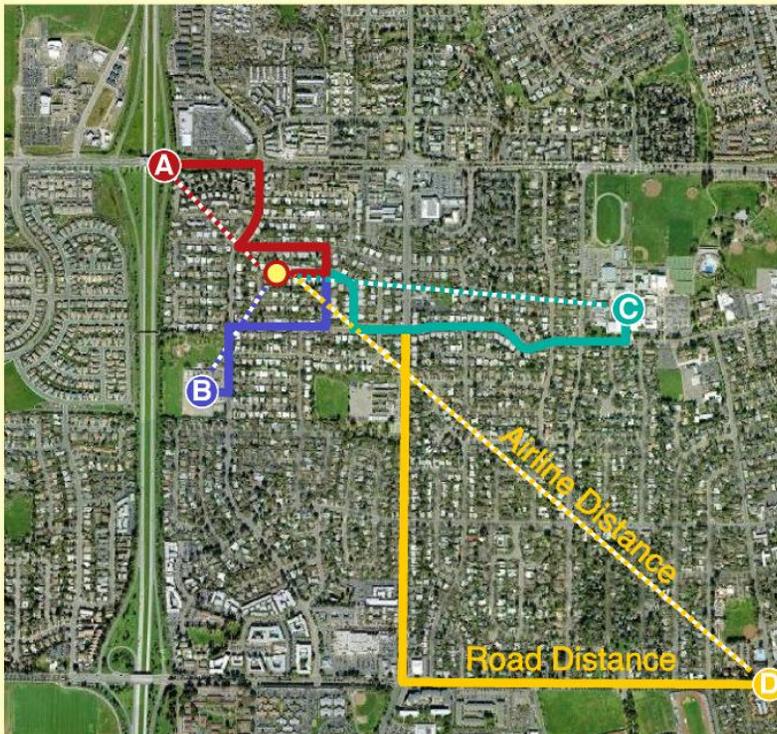
Typical Cul-de-sac



Great Places

Grid-Like Street Networks

Route Directness

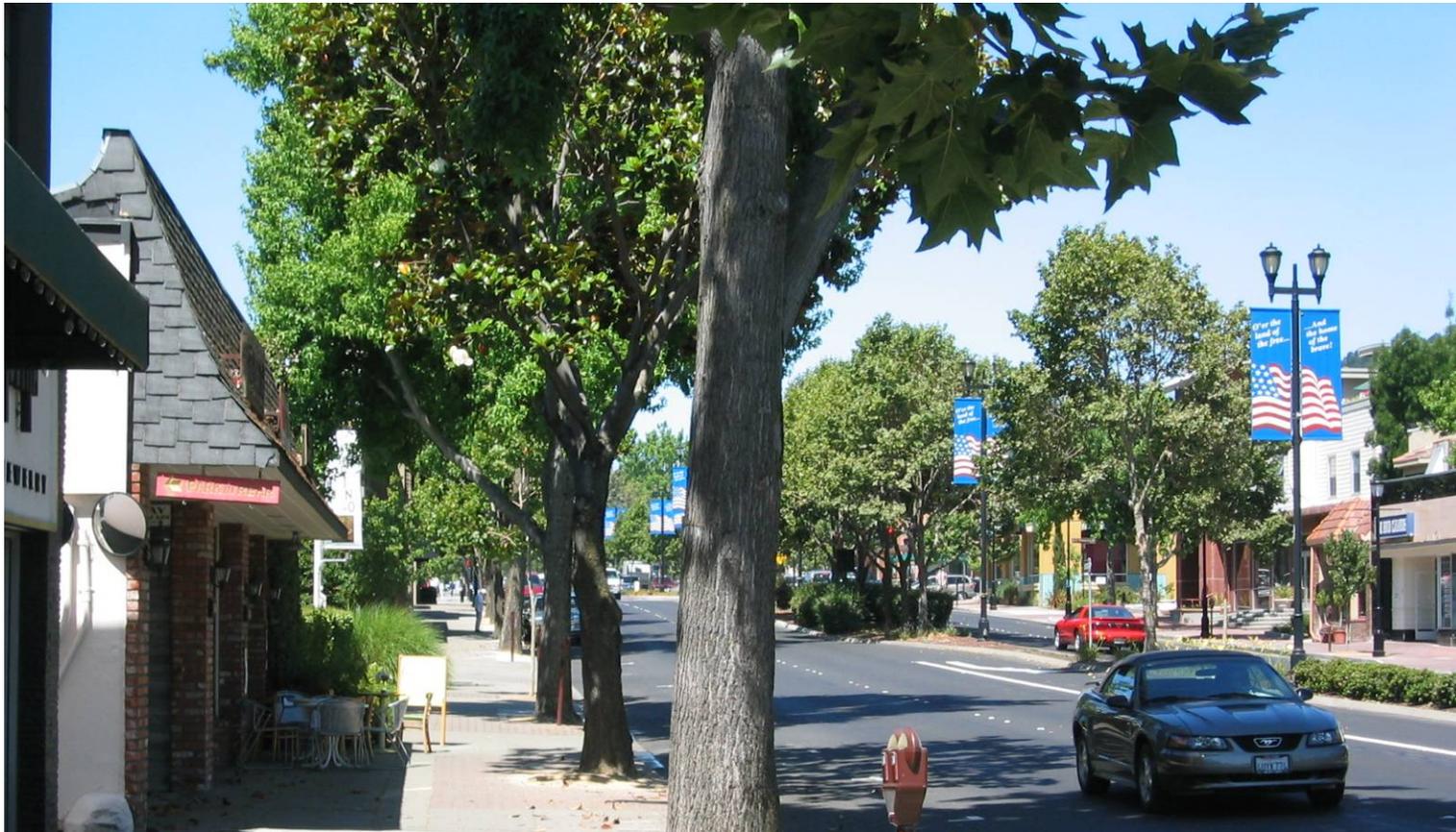


Route Directness is:

$$\frac{\text{Airline Distance}}{\text{Road Distance}}$$

Great Places

Two to Four Lane Streets



Great Places

Public Art



CLASS AGENDA

10:00 -- 10:15	Introductions
10:15 -- 10:45	Primer: history, issues, anatomy, and process
10:45 -- 11:00	Workshop: baseline conditions checklist
11:00 -- 11:50	Workshop: retail analysis
11:50 -- 12:00	Break
12:00 -- 12:30	Workshop: corridor field survey
12:30 -- 1:00	LOS and Q&A

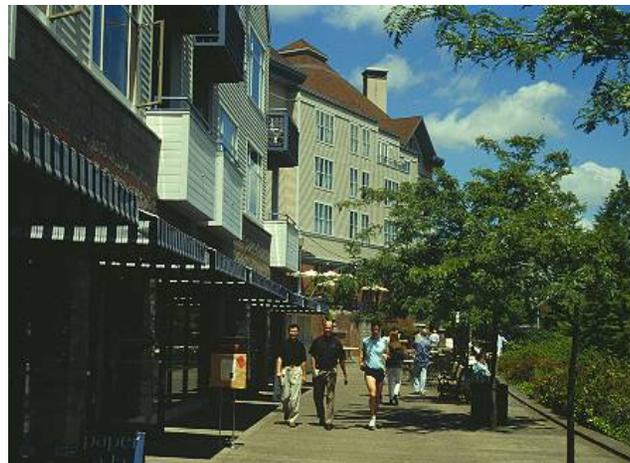
EMERGING FINDINGS ON *SMART GROWTH* *TRIP GENERATION*

- National studies of Mixed Use, TOD and Infill development
- Statistical analysis, empirical validation

	MXD	TOD	Infill
Trip Discount	30%	44%	36%

Examples: San Diego, Seattle, Portland, Sacramento, Houston, Atlanta, Boston

Sources: EPA MXD, SANDAG SG TG, TCRP H-27A, Caltrans 1221



CORRIDOR LEVEL OF SERVICE POLICIES

All Have Inherent Bias

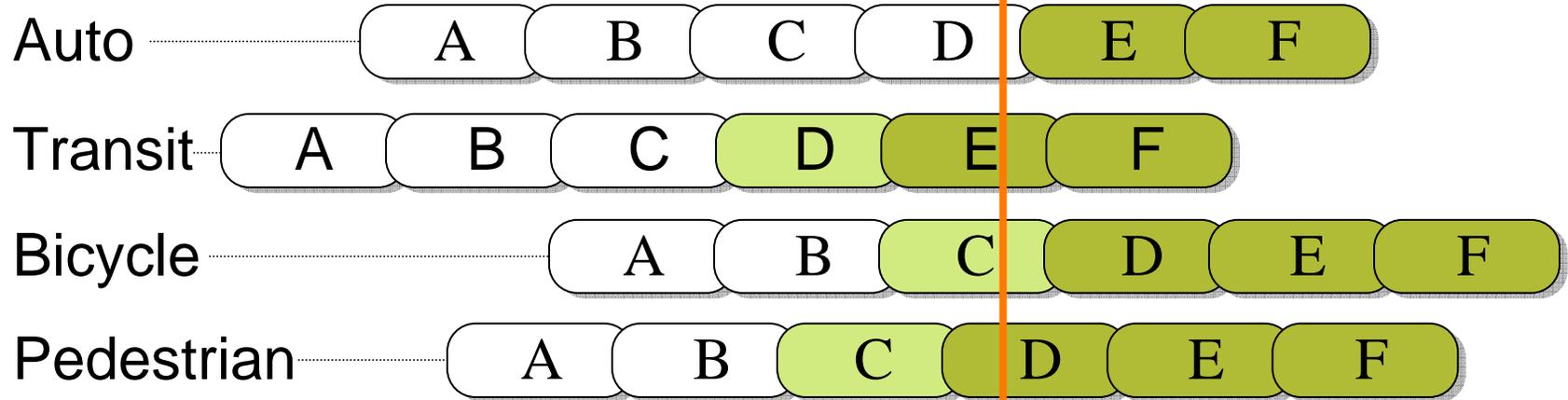
- Identify and value tradeoffs
- LOS policies for all modes
- Tiered LOS policies



HCM-BASED MULTIMODAL LOS

Consider All Modes In Your Corridor Analysis

ACTUAL Level of Service



WHAT IS LOS?

To a driver: LOS A

To an economist: LOS F



To a driver: LOS F

To an economist: LOS A



CONSEQUENCES OF CURRENT PRACTICE

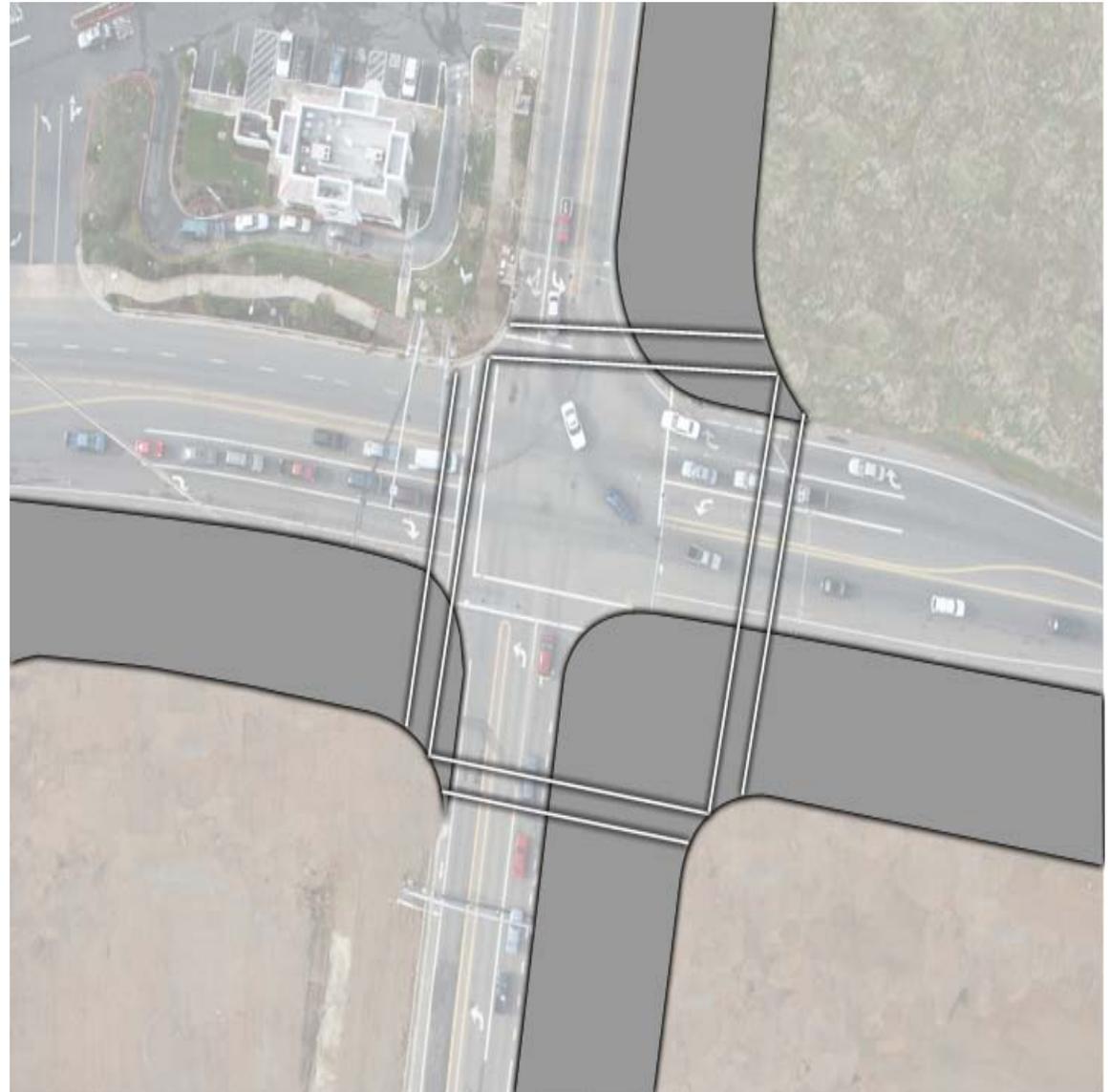
- Existing Conditions:
LOS E



CONSEQUENCES OF CURRENT PRACTICE

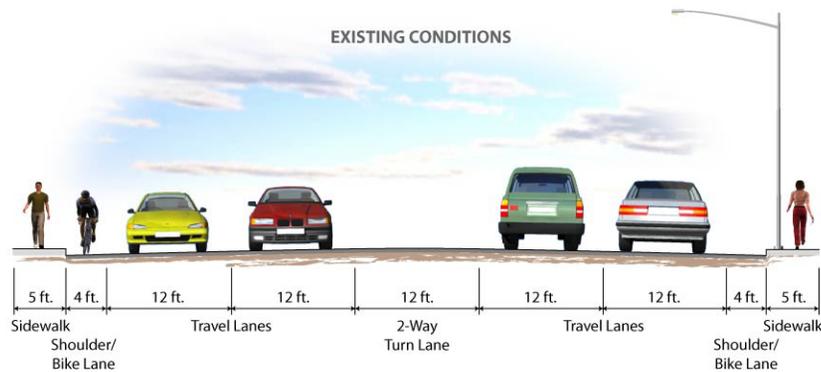
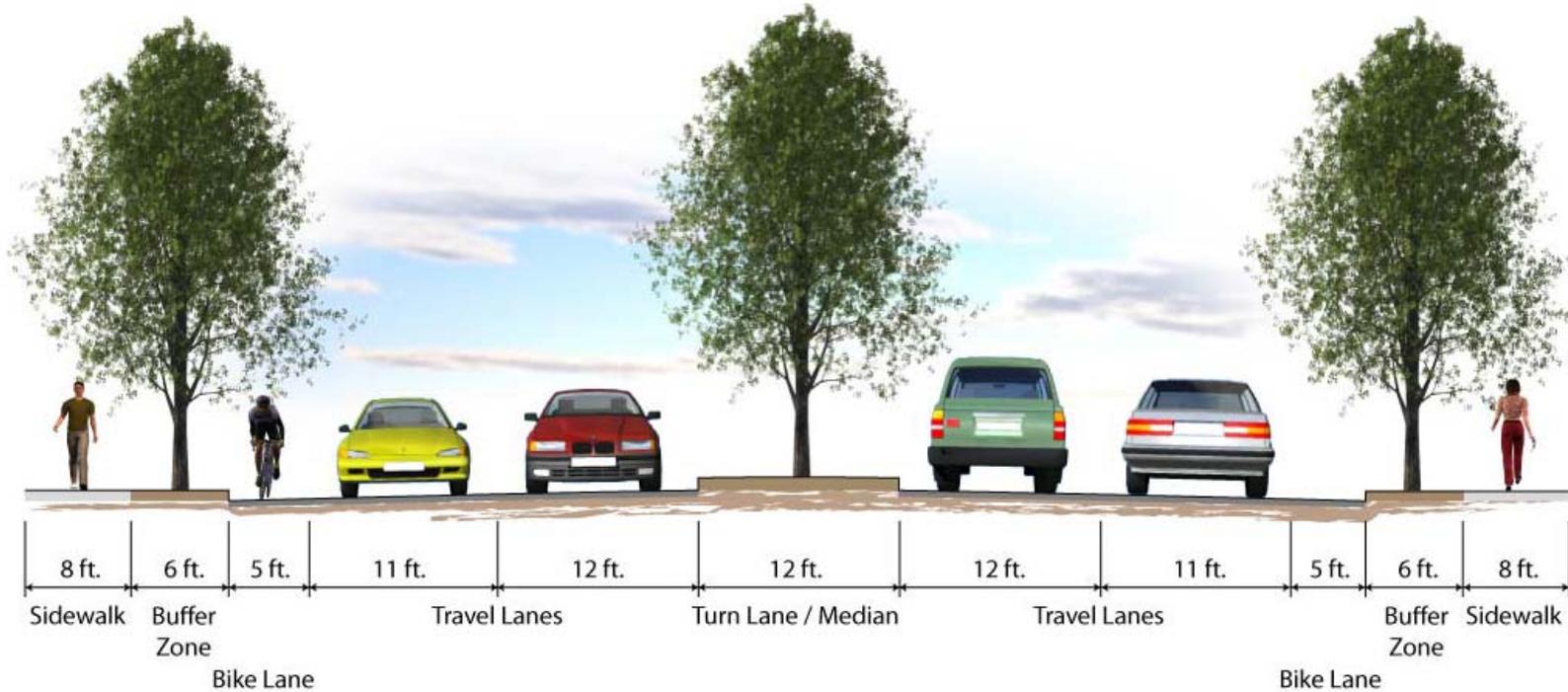
Widening for LOS C

- Longer crosswalks
- Lost riparian habitat
- Increased impervious surface
- Higher Speeds
- Higher Costs
- More land consumed for roads



PROPOSED 4-LANE SECTION APPROVED BY STATE DOT

Based Upon Negotiations on Speed, Width, But Maintains Safety Standards





Tools to Build a Better Corridor

SCAG – Toolbox Tuesday | January 26, 2010

Colin Drukker, The Planning Center | **Steve Gunnells**, The Planning Center | **Brian Welch**, Fehr & Peers