

# RIO GRANDE BOULEVARD CORRIDOR MASTER PLAN

Dover, Kohl & Partners  
town planning

# tonight's agenda

- introductions
- the schedule this week
- food for thought

welcome

Dover, Kohl & Partners  
town planning

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Hall Planning & Engineering  
transportation planning

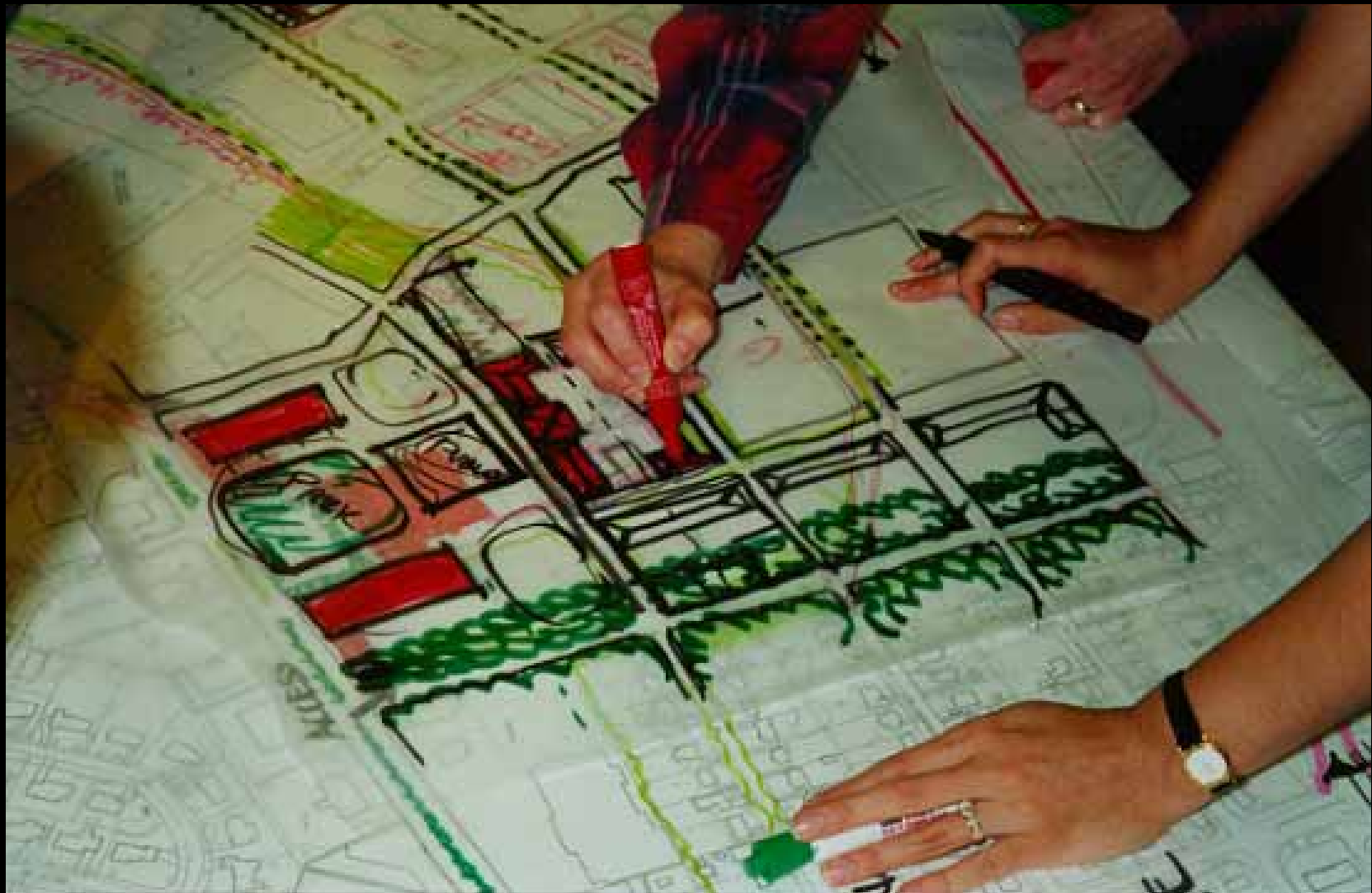
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Wilson & Company  
traffic analysis

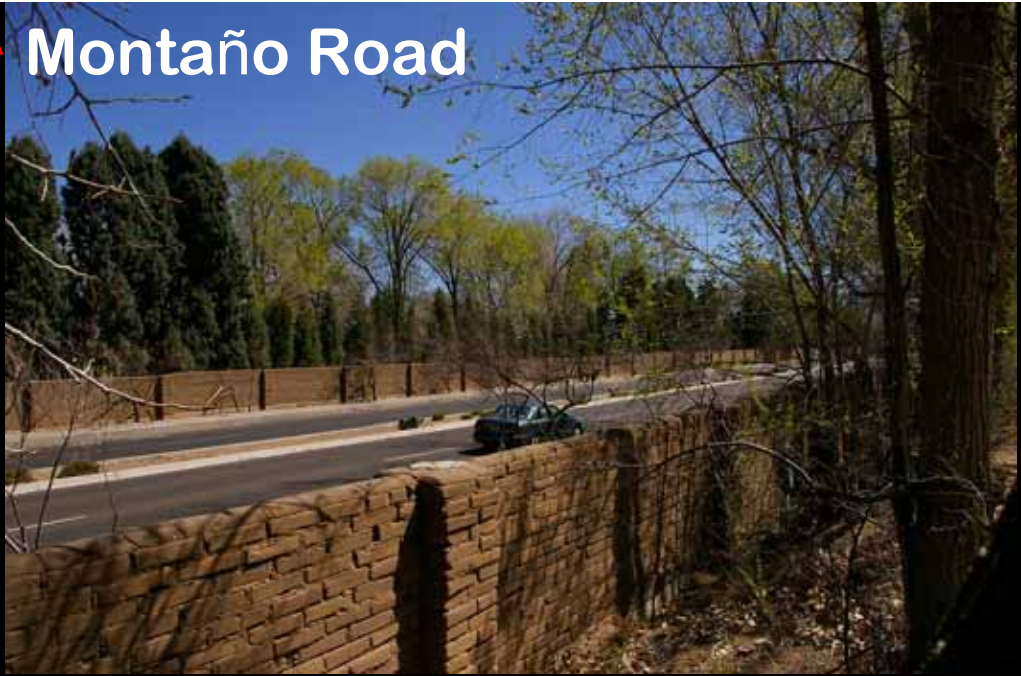
# tonight's agenda

- introductions
- the schedule this week
- food for thought

# why we are here



**Montaño Road**



**Rio Grande Blvd (yellow) 3miles**



**Mountain Road**

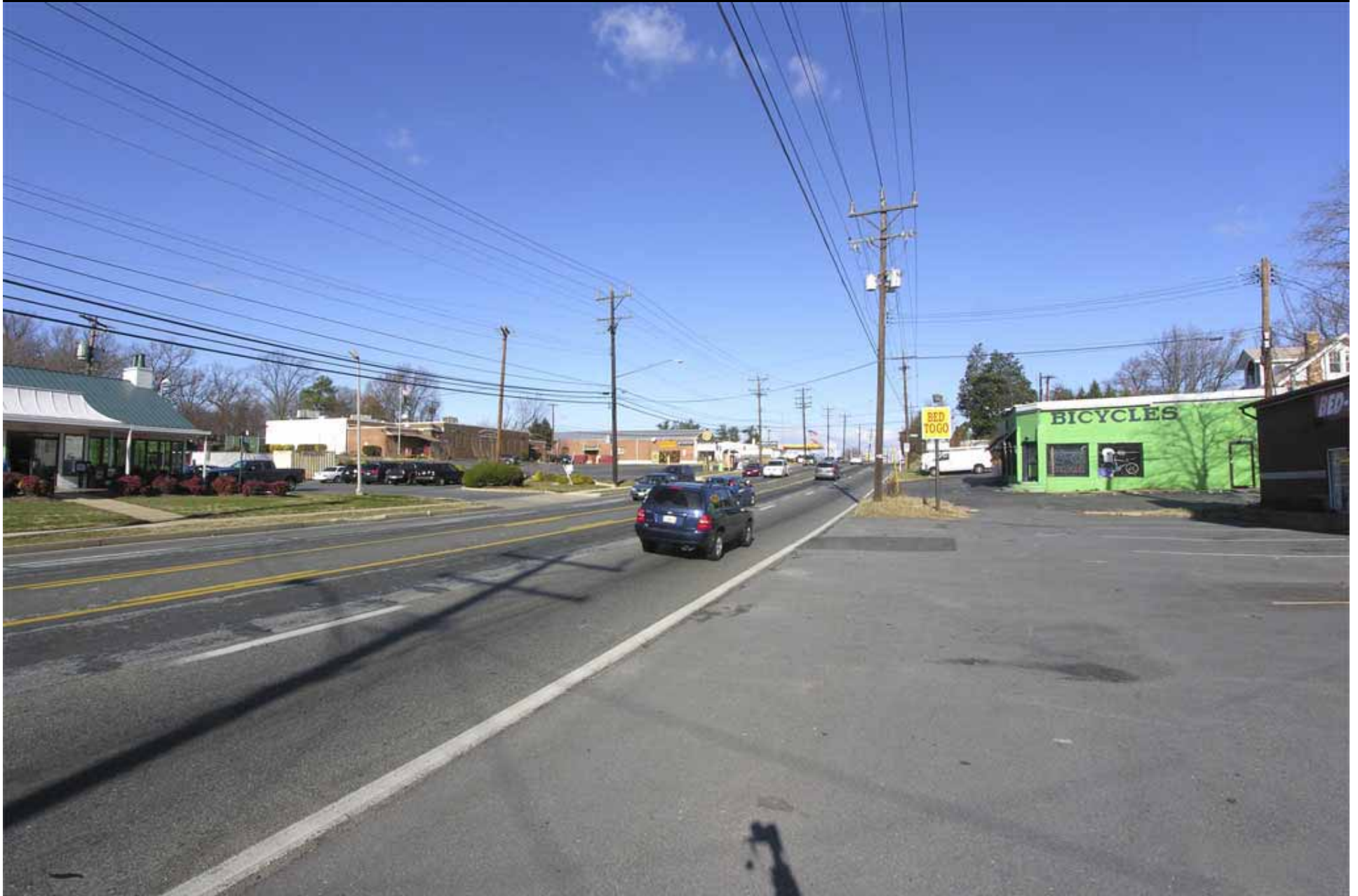


# Rio Grande Boulevard





# looking to the future

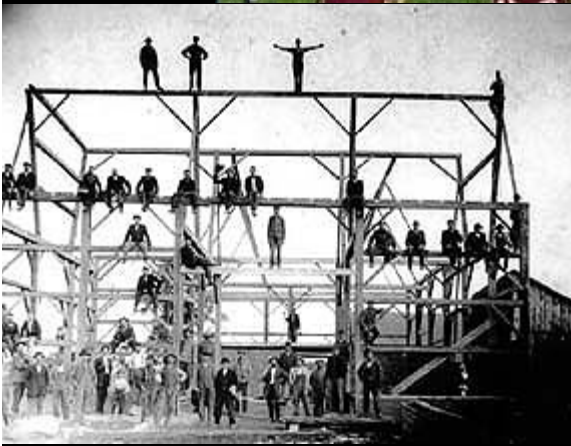
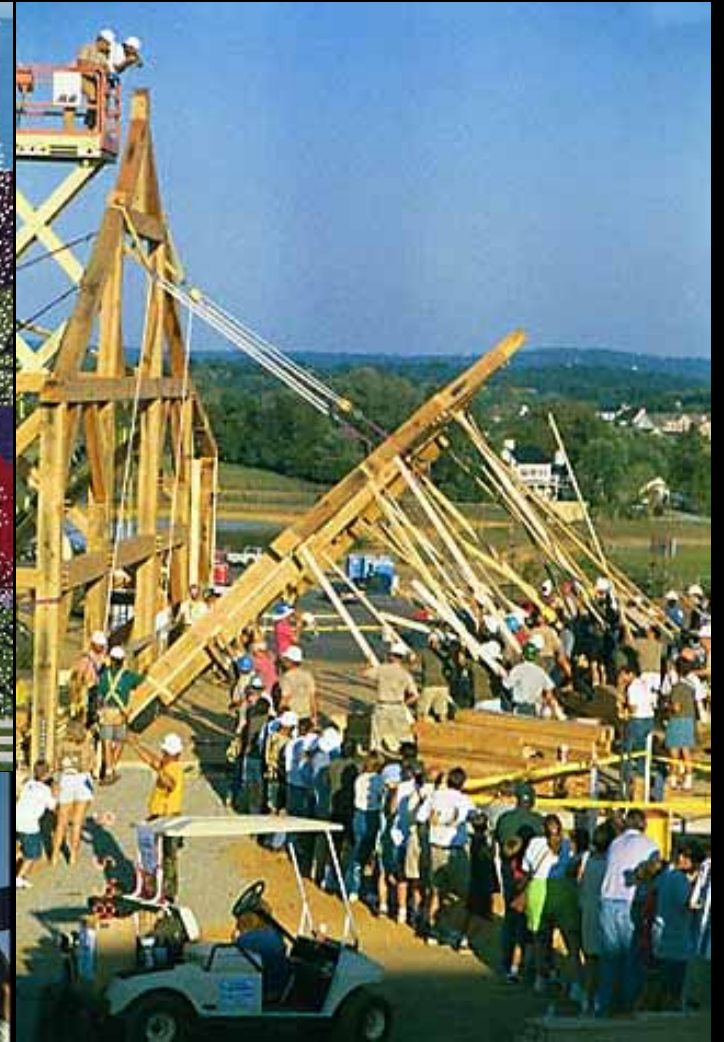


# looking to the future



how this  
plan will be  
created

# barn-raising: neighbors help each other





**HELP PLAN** RIO GRANDE BOULEVARD  
JULY 9 - 14, 2010  
WWW.CRBG.GOV/COUICIL

**Justin Falango**



**Amy Groves**

**Andrew Georgiadis**



**Pam Stacy**



**Kenneth Garcia**

**Rick Hall**



**Tracy Hegler**



1

## **Kick-Off Presentation**

Friday July 9 6:00pm

Gymnasium - Los Duranes Community Center

2

## **Hands-On Design Session**

Saturday July 10 9:00am – noon

Gymnasium - Los Duranes Community Center

3

## **Open House**

Monday July 12 11:30pm – 1:00pm

Game Room – Los Duranes Community Center

4

## **Work-in-Progress Presentation**

Wednesday July 14 6:00pm

Gymnasium – Los Duranes Community Center

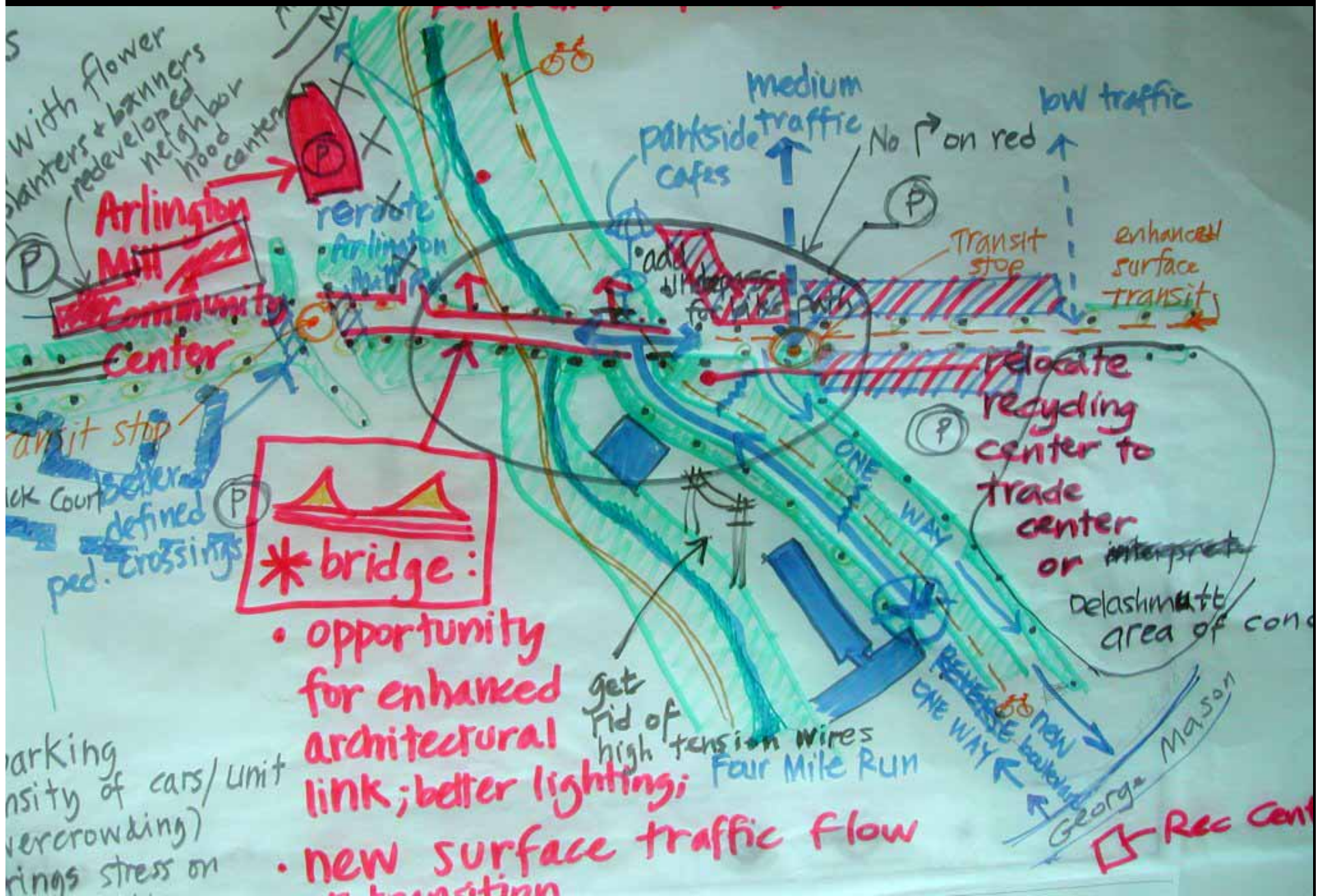
# hands-on design session



# hands-on design session



# hands-on design session



# open design studio & open house



# open design studio



# work-in-progress presentation



## tonight's event

- introductions
- update: the process so far
- draft: plan principles & illustrations
- economics: findings & strategy
- mobility strategy for great streets
- regulatory strategy: initial thoughts
- what happens next

# visualizing change & design



Spring Hill, Mobile, Alabama - today



# visualizing change & design

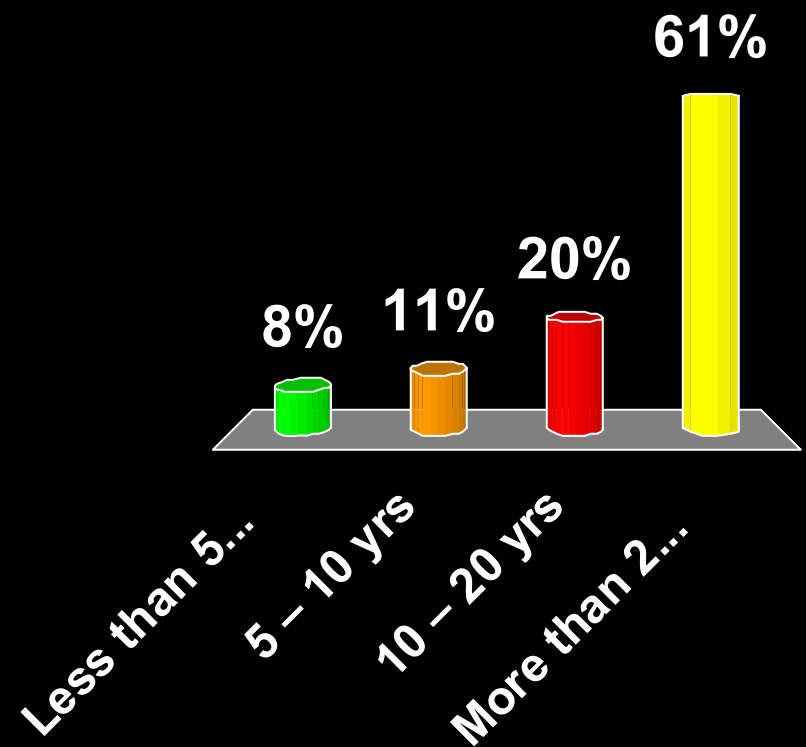


Spring Hill, Mobile, Alabama - tomorrow

quick poll

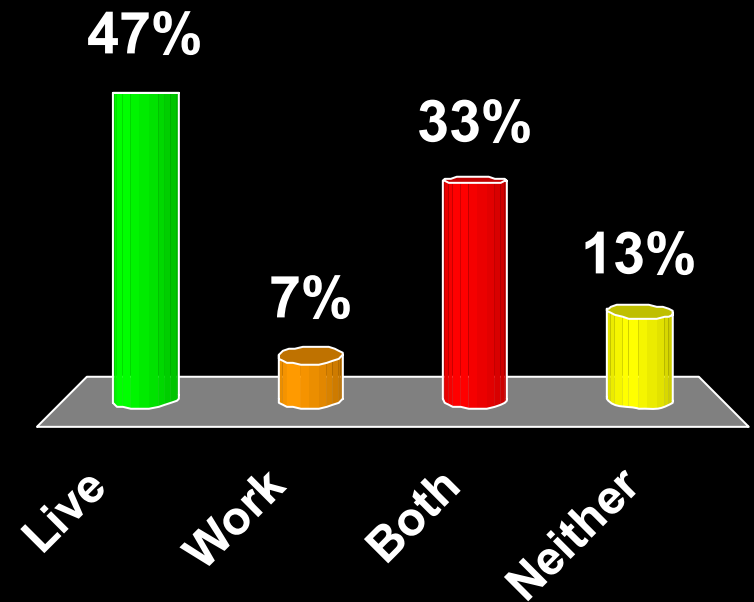
# How long have you lived/worked in Albuquerque?

1. Less than 5 yrs
2. 5 – 10 yrs
3. 10 – 20 yrs
4. More than 20 yrs



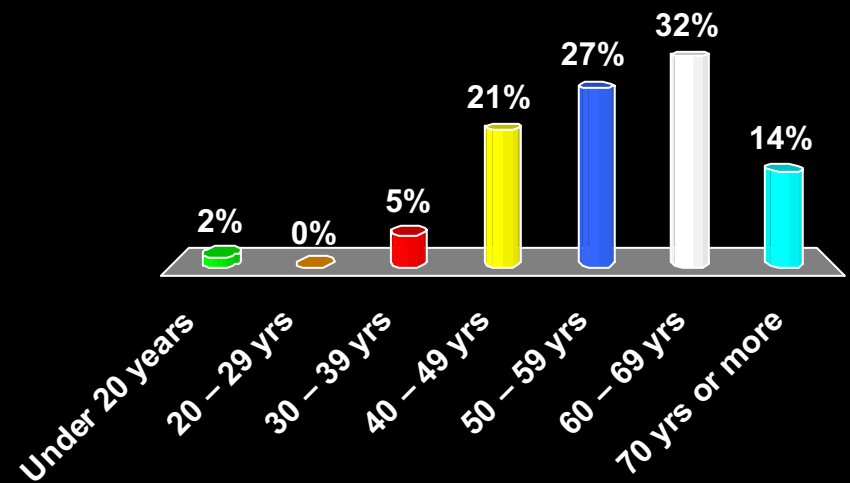
# Do you live or work within a mile of Rio Grande Boulevard?

1. Live
2. Work
3. Both
4. Neither



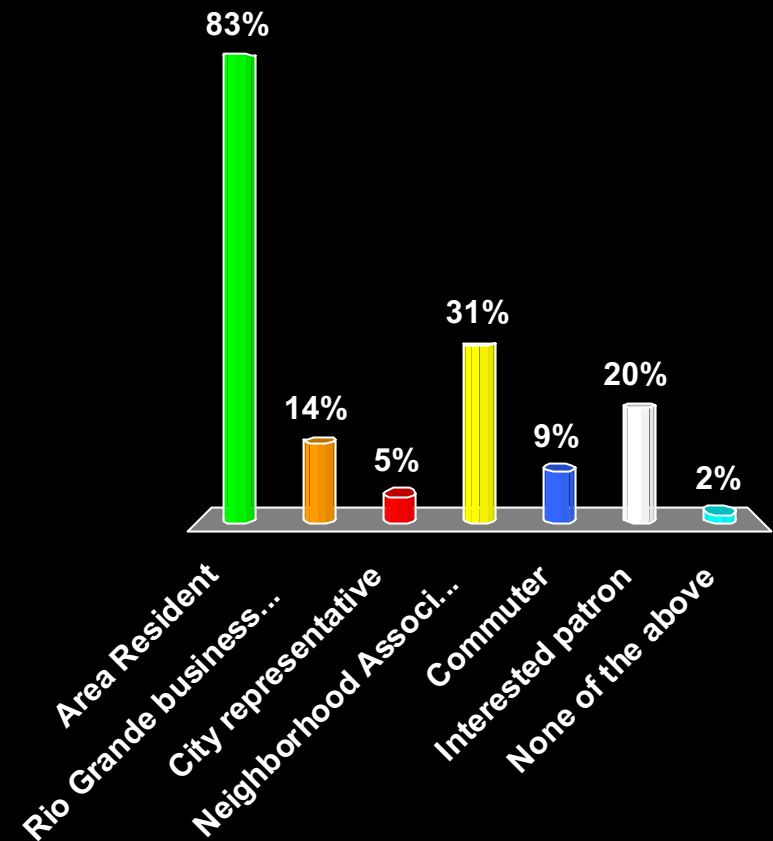
# What is your age?

1. Under 20 years
2. 20 – 29 yrs
3. 30 – 39 yrs
4. 40 – 49 yrs
5. 50 – 59 yrs
6. 60 – 69 yrs
7. 70 yrs or more



# What kind of stakeholder are you? (pick all that apply)

1. Area Resident
2. Rio Grande business owner
3. City representative
4. Neighborhood Association representative
5. Commuter
6. Interested patron
7. None of the above



# getting to know the lay of the land



# Looking at what make the corridor unique





**Montaño Road**

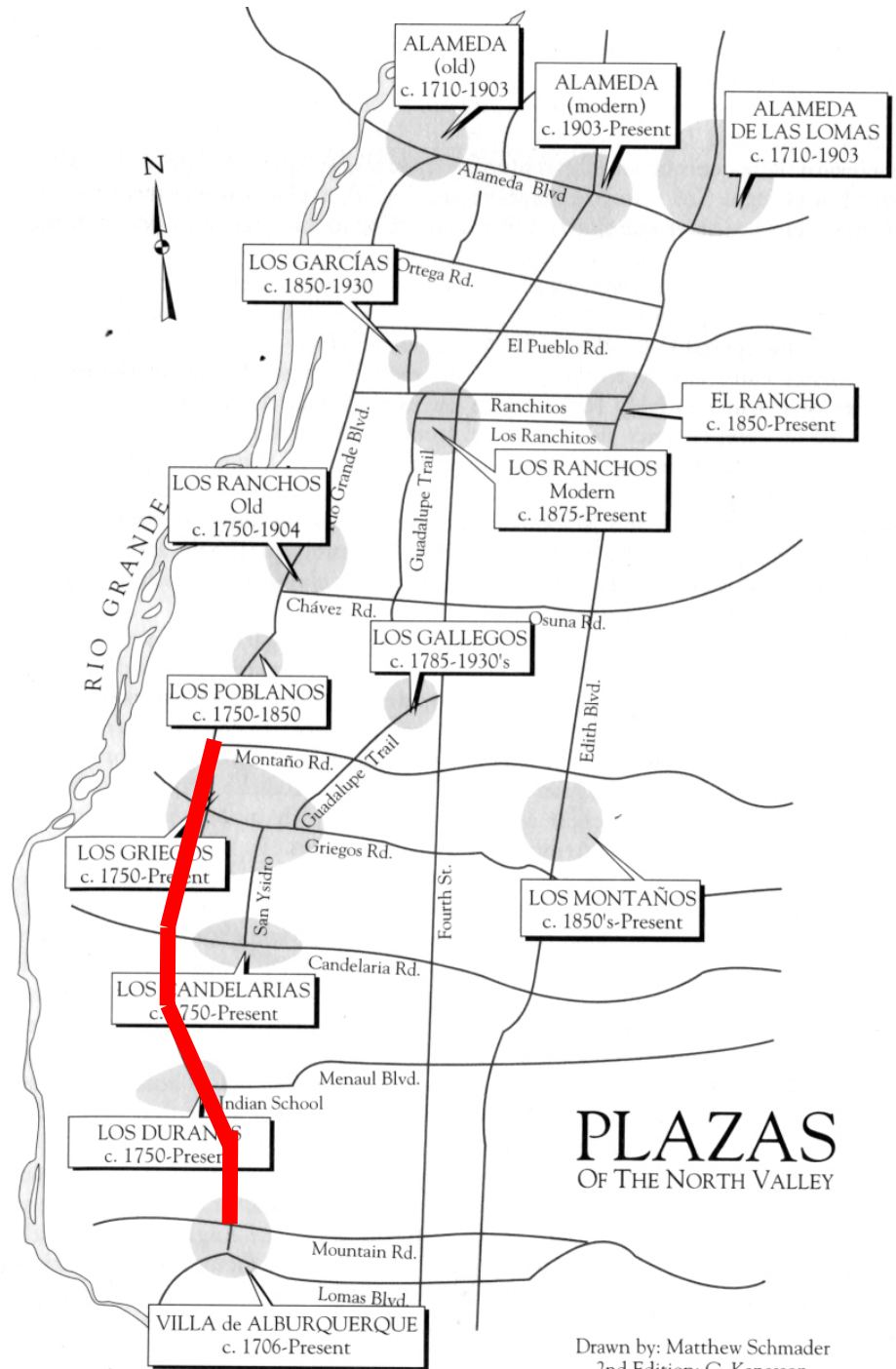


**Rio Grande Blvd (yellow) 3miles**



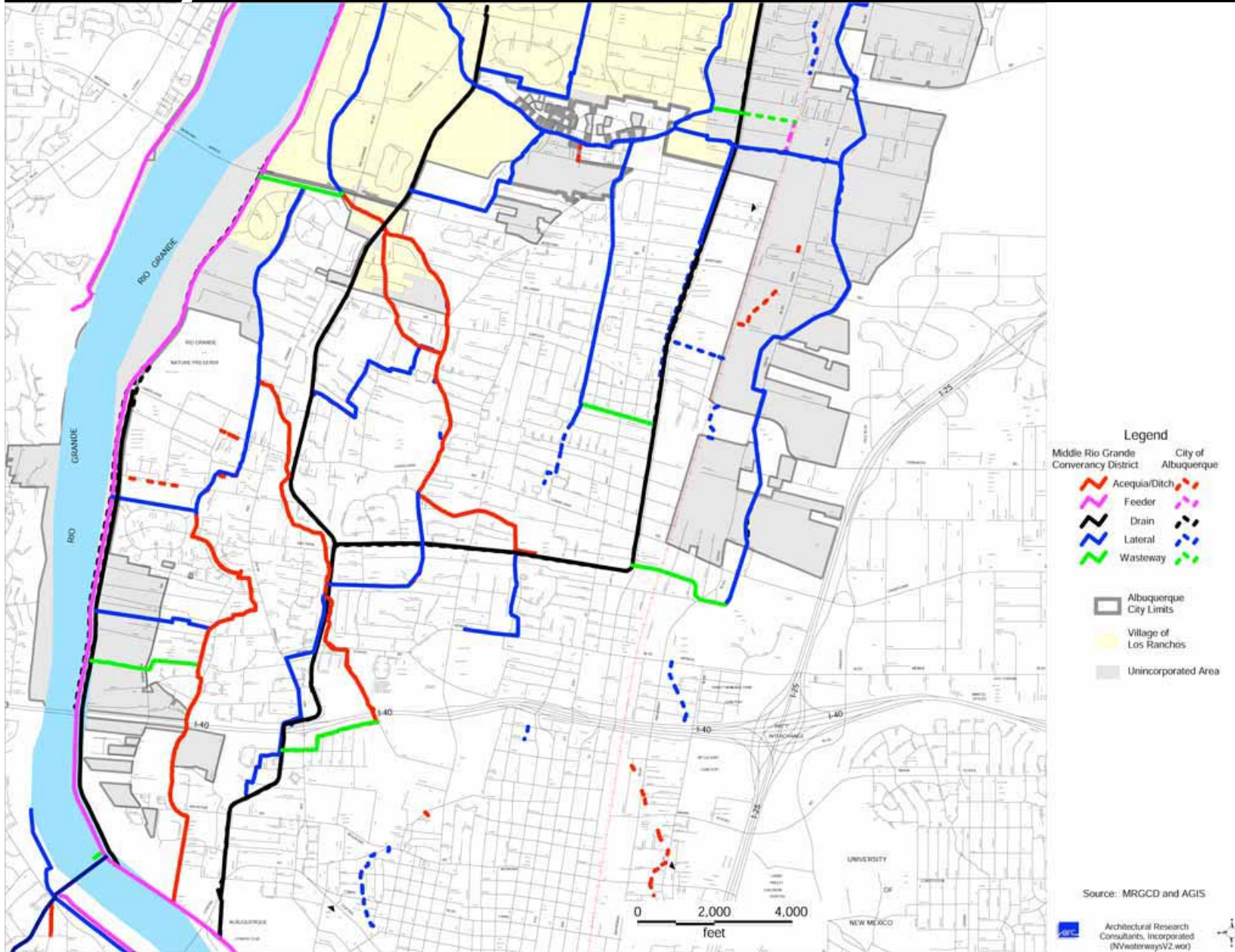
**Mountain Road**



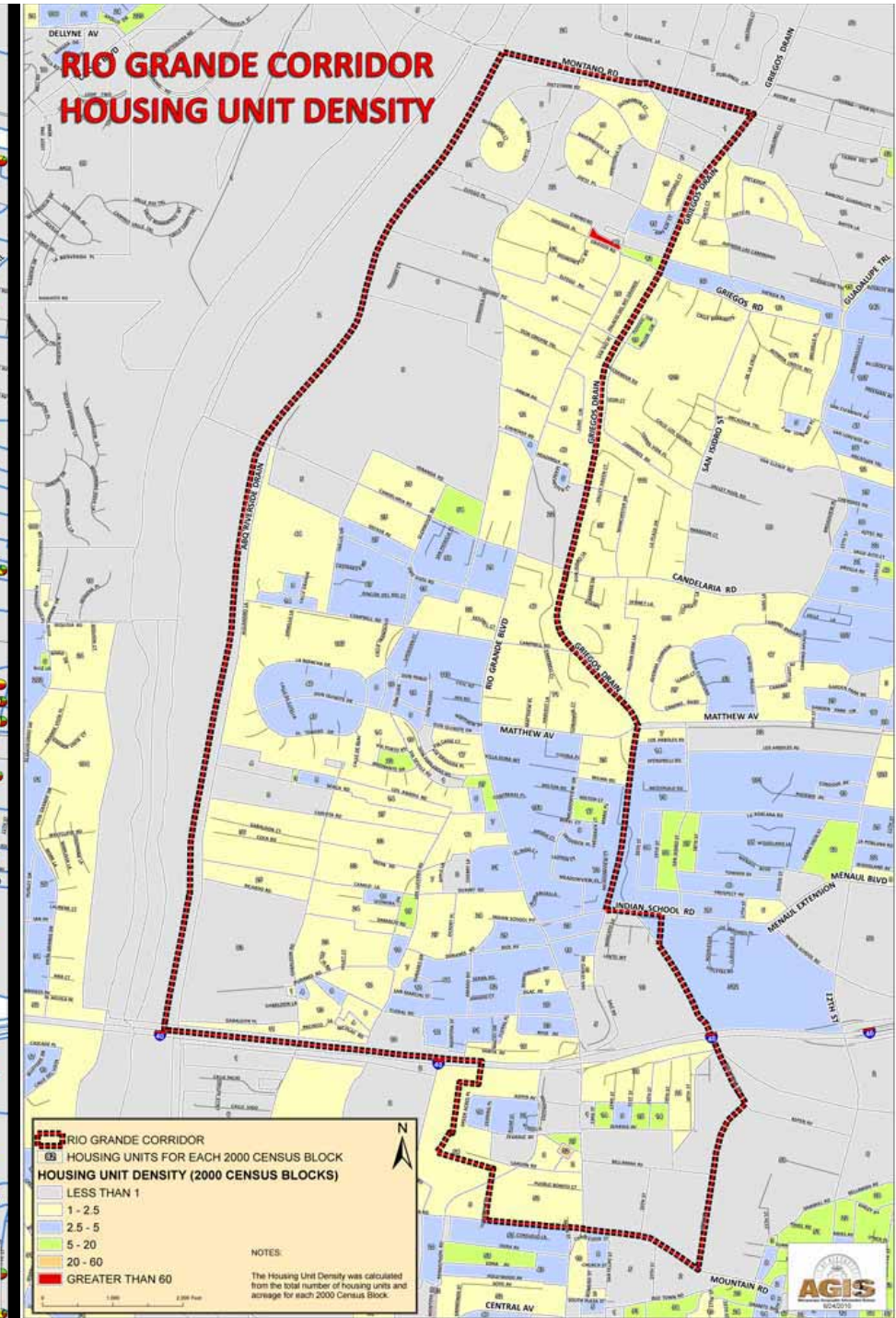
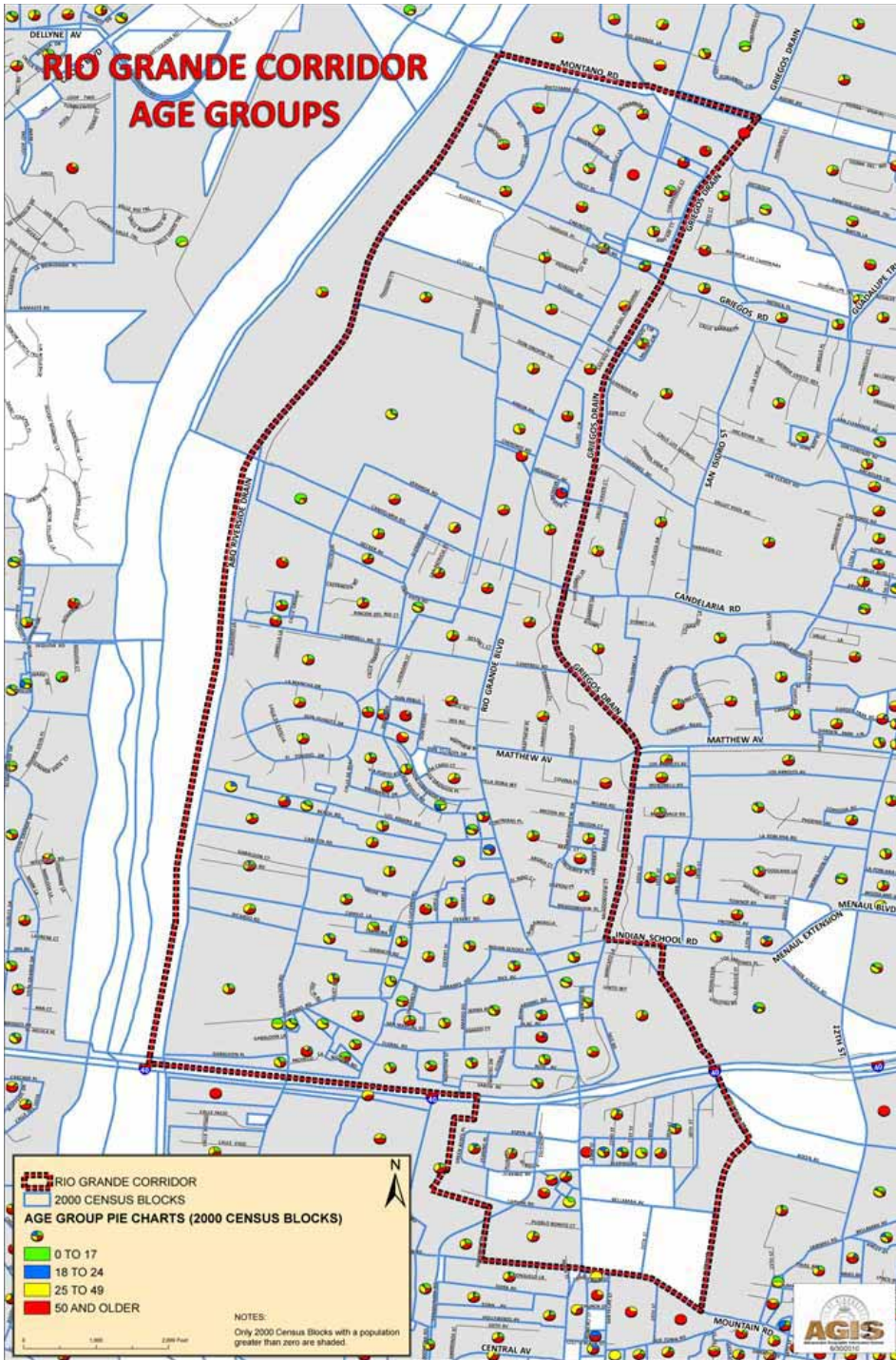


Drawn by: Matthew Schmader  
2nd Edition: C. Kenesson

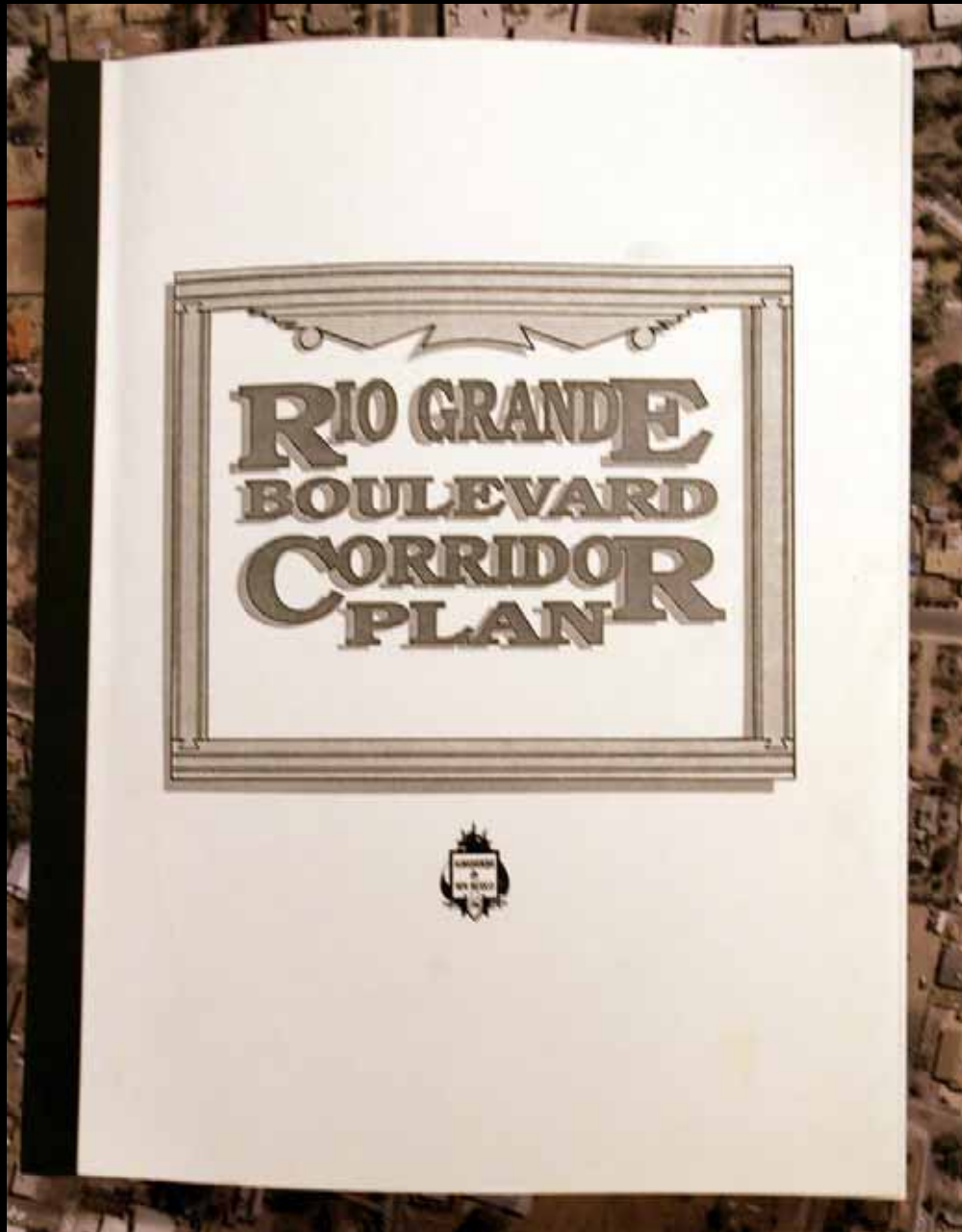
# analysis



acecias



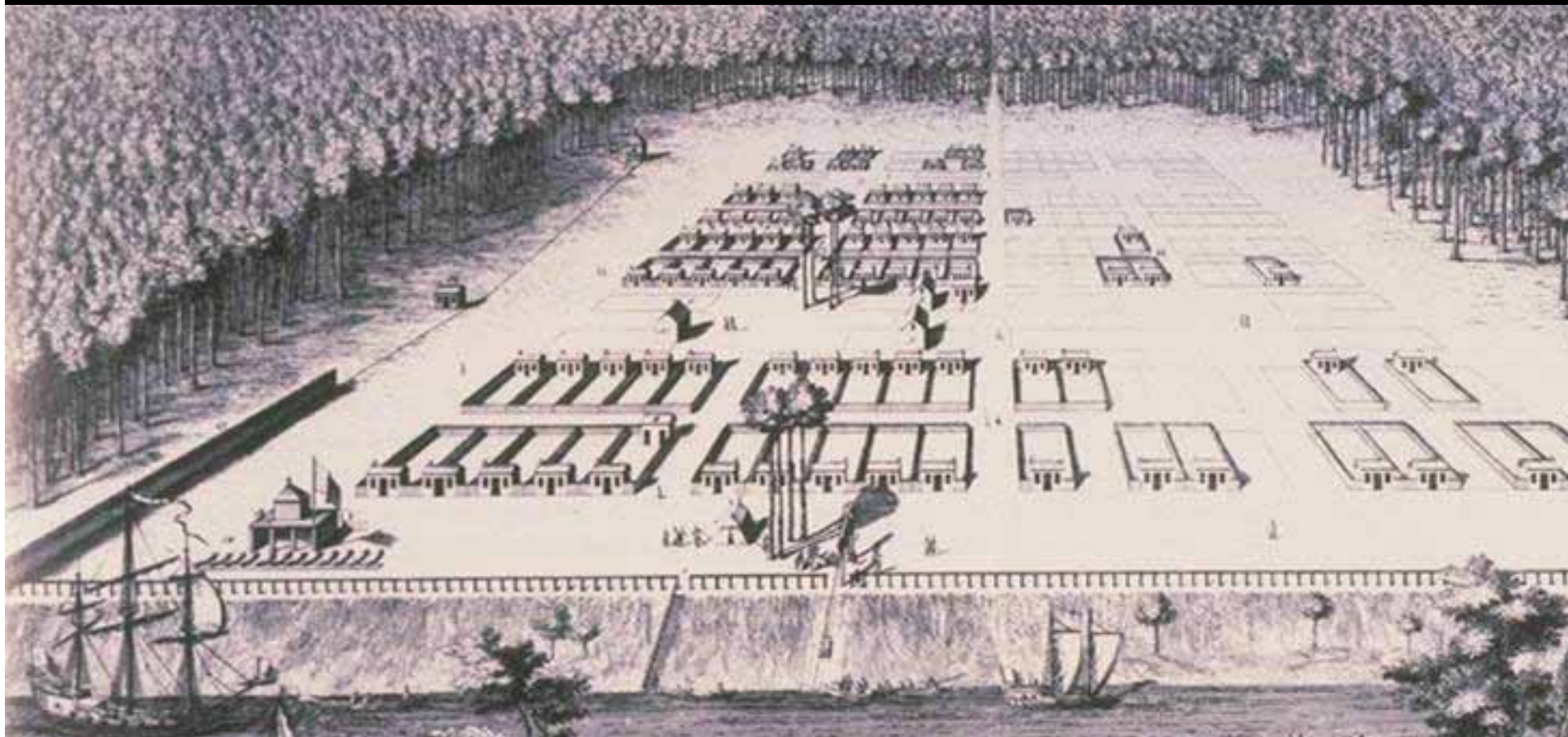
# reviewing the previous plan



1989

historic  
moment

# American settlement tradition







# Los Griegos



# Los Griegos, 2010



# Pedestrian friendly features



Shade, shelter, safety, interesting things to see

# Pedestrian friendly building fronts



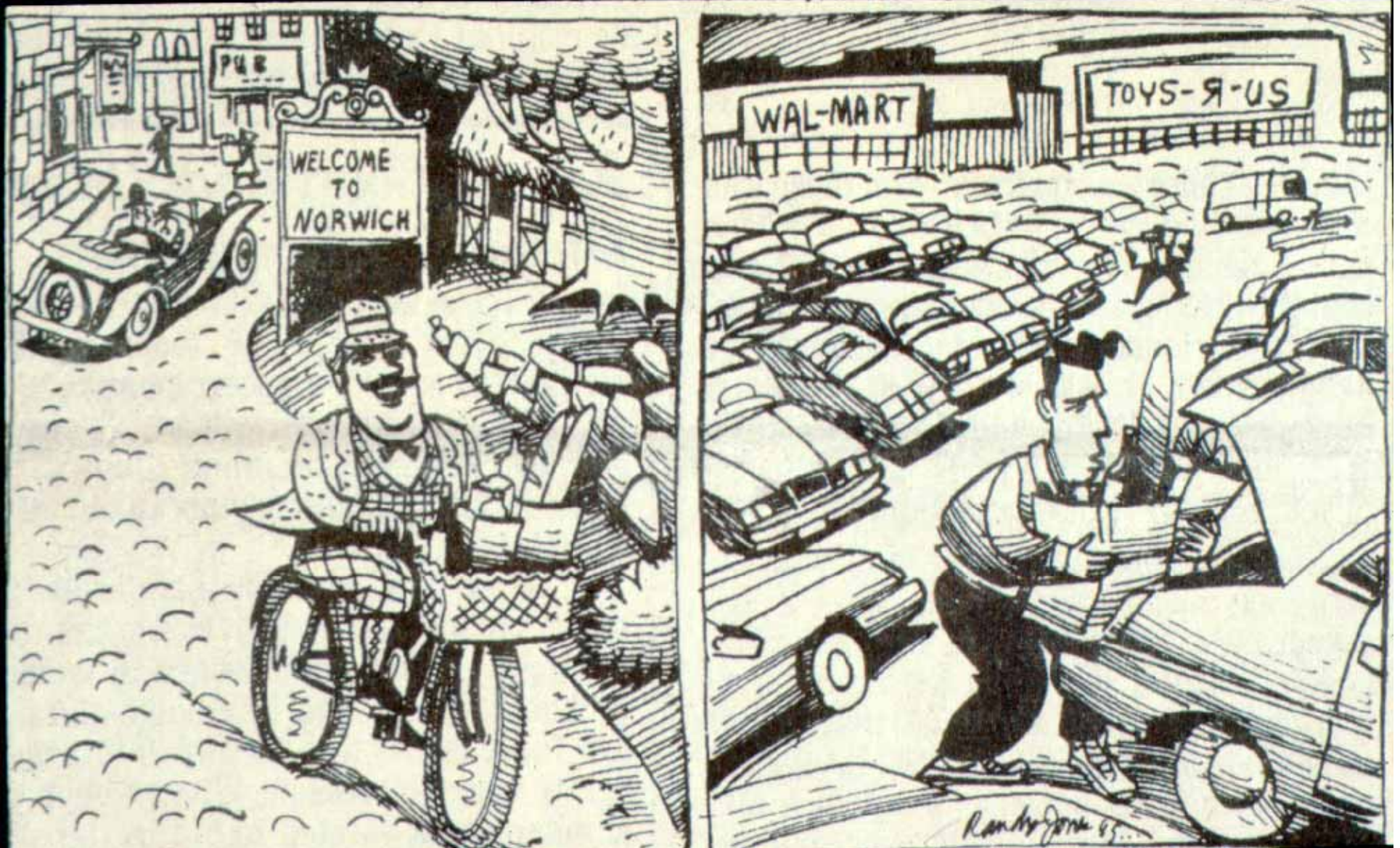
Colonnades and arcades

# Pedestrian friendly building fronts



Doors and windows facing the street, on-street parking, wide sidewalks

# the interest in livable communities



from *The Wall Street Journal*

# Why walk?



One person walking  
is exercise.



Millions of people walking  
is a step toward keeping  
healthcare affordable.

The illness and chronic disease resulting from inactive lifestyles cost as much as \$77 billion a year to treat. That's why Blue Cross and Blue Shield Plans across the nation are launching **WalkingWorks**<sup>SM</sup>, an unprecedented effort to work with employers to help Americans add physical activity to their daily routines. It's one of the many ways we're doing our part to control rising healthcare costs. For more information, visit our web site at [www.bcbs.com](http://www.bcbs.com).

**Healthcare. Affordable. Now.**



**BlueCross BlueShield  
Association**

An Association of Independent  
Blue Cross and Blue Shield Plans

# Why walk?



SOCIETY

## An American Epidemic

# Diabetes

**The silent killer:** Scientific research shows a 'persistent explosion' of cases—especially among those in their prime  
BY JERRY ADLER AND CLAUDIA KALBI

**S**cientists estimate a new epidemic is on its way. They have long known the high risk of the silent and slow-moving and even killing disease. The rate of type 2 diabetes, a chronic condition that can lead to heart disease, kidney failure, blindness, and amputation, has risen sharply in recent years. Now, the disease is spreading to younger people, and the numbers are rising. In a new study, researchers found that the rate of type 2 diabetes has risen sharply in young people, especially those who are overweight and have a family history of the disease. The study, published in the journal *Diabetes Care*, found that the rate of type 2 diabetes has risen sharply in young people, especially those who are overweight and have a family history of the disease. The study, published in the journal *Diabetes Care*, found that the rate of type 2 diabetes has risen sharply in young people, especially those who are overweight and have a family history of the disease.



# Newsweek

3 Million Kids Suffer From It. What You Can Do.

# Teen Depression





down the prices of these items. You get one of today's greatest bargains

**ETHYL CORPORATION** New York 17, N. Y.



**DRIVE  
MORE**  
...it gets cheaper  
by the mile!

**BY THE SEA:** Seaside towns have a special lure for travelers. The picturesque sights, the tang in the air and the friendliness of the fishermen make a few days' visit seem like a full vacation.

Colliers, 1955

Propaganda to promote the American Dream and sell cars

# the ten principles of smart growth

- **Mix land uses**
- **Take advantage of compact building design**
- **Create a range of housing opportunities & choices**
- **Create walkable neighborhoods**
- **Foster distinctive, attractive communities with a strong sense of place**
- **Preserve open space, farmland, natural beauty, & critical environmental areas**
- **Strengthen & direct development towards existing communities**
- **Provide a variety of transportation choices**
- **Make development decisions predictable, fair, cost effective**
- **Encourage community / stakeholder collaboration in development decisions**

# a mix of uses



sidewalk dining, offices, shops, gym, municipal buildings, residential



# new mixed uses



Mount Laurel, AL

# density without design?



Fawn Creek Apartments

# diversity by design







# mixing housing types, by design



Dilworth, Charlotte NC

# street width – lane width



Rio Grande Blvd at Indian School Road, looking north

# street width



Rio Grande Blvd at Indian School Road, looking north

# Roadway width



Aix-en-Provence

Public Works Officials Were Once Heroes

# Street elements



Width, curb cuts, proximity to moving traffic, landscaping, bike lanes

# landscaping



Street edges ? Medians ?

# destinations / amenities



# Overhead wires





**transportation:  
expanding choices**

to walk or not to walk,  
that is the question.

whether it is nobler...

# why walk?

- **economy**
  - development projects must sell
  - Read Greyfields into Goldfields, CNU Lee Sobel
  - TND property values \$\$, 40 to 200% premium
- **health**
  - CDC, obesity epidemic
  - astounding highway fatality rate – 45k/year
  - safe walk to school
- **environment – climate**
  - it's a crisis
  - IPCC UN Intergovernmental Panel on Climate Change
  - Urban design influences VMT, thus a valid solution

**THE OPTION  
OF URBANISM**

**INVESTING IN A NEW  
AMERICAN DREAM**

**CHRISTOPHER  
B. LEINBERGER**



NASA

  
**CITGO**

**CHECK CASHING 2%**

**CITGO  
DIESEL**

**309** <sup>9/10</sup>  
REG UNLD

**335** <sup>9/10</sup>  
SUPER PREM

**299** <sup>9/10</sup>  
DIESEL



Choice in  
the matter?

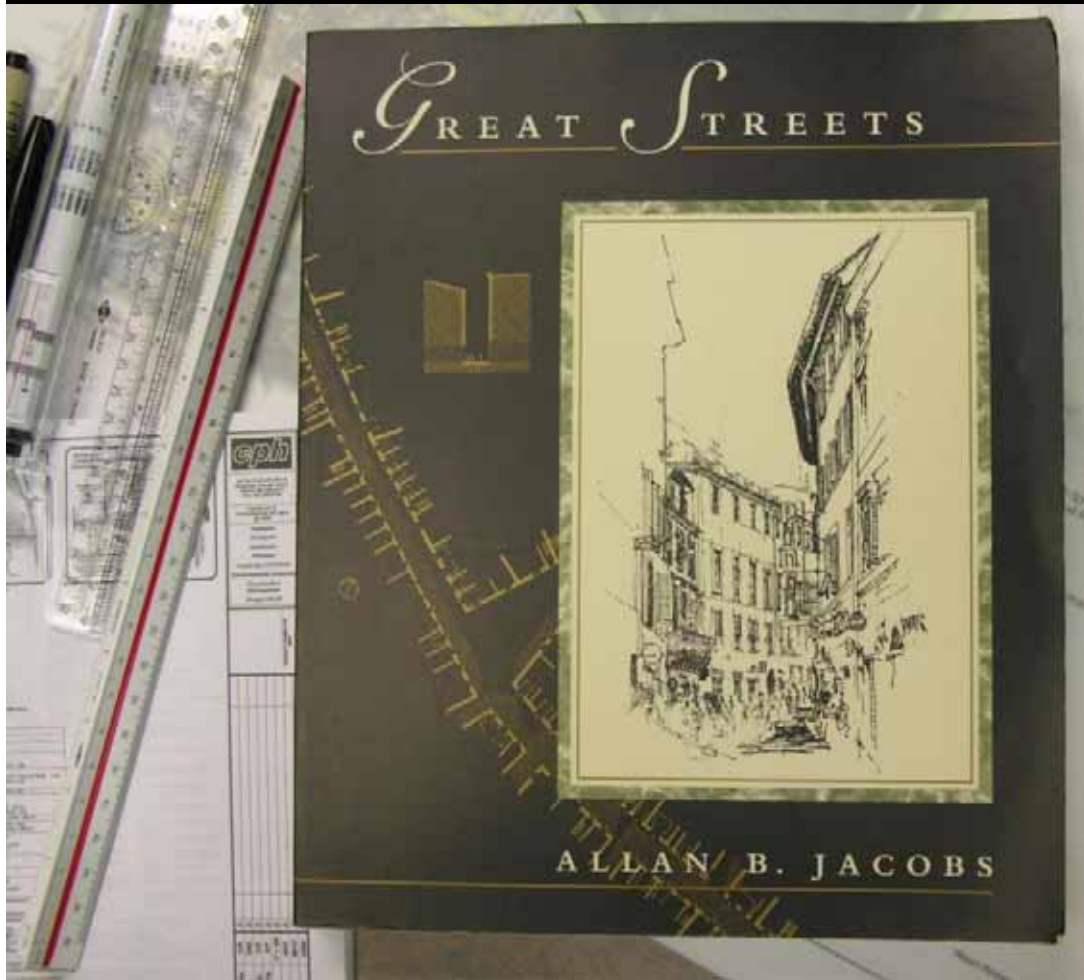




**Recreation Walking  
vs.  
Destination Walking**



# principle 1. urban form first



LU1 – TR 2

plan urban  
structure & land  
uses 1<sup>st</sup>

transportation 2<sup>nd</sup>

Chicken or egg?

# top 10 walkability factors

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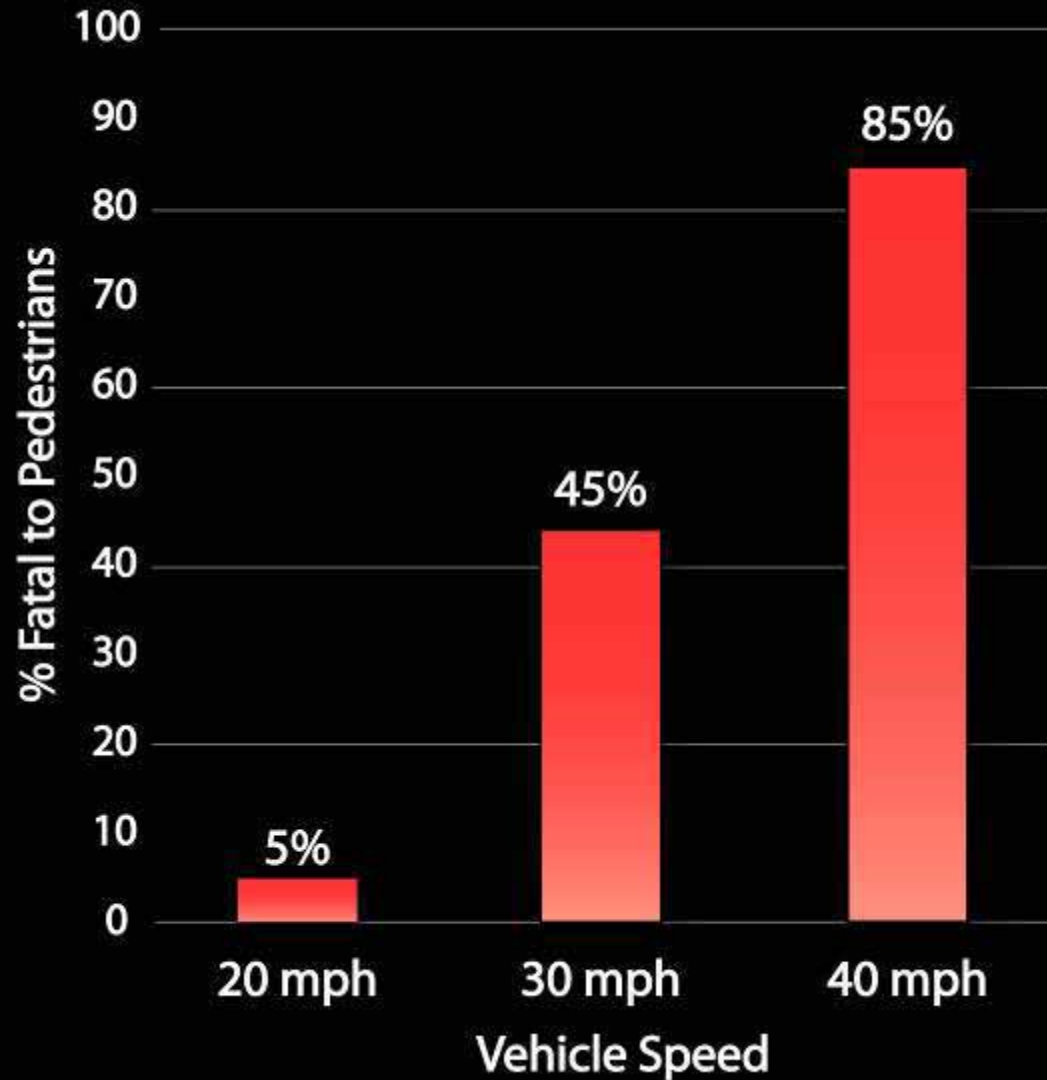
- 10. Street Trees
- 9. Traffic Volumes
- 8. Sidewalks
- 7. Narrow Streets
- 6. Interconnected Streets
- 5. On Street Parking
- 4. Lower Traffic Speeds
- 3. Mixed Land Use
- 2. Buildings Fronting St.
- 1. Small Block Size!

# Key West, FL



**Avg. Free Flow Speed = 28 mph**

# pedestrian fatalities & speed





early UNM  
engineering  
training













# traffic circles and roundabouts



- o large (300' to 800')
- o fast 30 to 50 mph
- o scary
- o high speed merge
- o dangerous 6x more crashes



- o smaller < 180'
- o slower 10 – 25 mph
- o friendly
- o yield at entry
- o safer

# not traffic circles!



Kingston, NY

roundabout

traffic circle

high speed vs. low speed


 ParkCircle 3-lane traffic circle

Image © 2005 DigitalGlobe

© 2005 Google



Center 32°52'53.35" N 79°59'06.47" W elev 26 ft

Streaming ||||| 100%

Eye alt 1528 ft



18 mph

18 mph

# roundabouts are safer because:

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- low speeds allow drivers
  - to see
  - to stop

# roundabout safety

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- decrease in crashes:
- overall: 39%
- injury-producing: 76%
- fatal or incapacitating: 90%

**"crash reductions following installation of (40) roundabouts in the united states"**  
**insurance institute for highway safety, march 2000**







# Roundabouts – voters got one, then asked for more

- University Place, WA** - 9 roundabouts in about 9 years
- Bend, OR** - more than 12 roundabouts
- Lenexa, KS** - 10 roundabouts (8 are multi-lane)
- Clearwater, FL** - 9 built (15 more in design)
- Honolulu, HI** - 6 built (more on the way)
- Lacey, WA** - 6 multi-lane roundabouts
- Modesto, CA** - 10 multi-lane roundabouts
- Gainesville, FL** - 12 built (15 more on the way)

Hundreds of cities have 2, 3 and 4 roundabouts and keep adding more

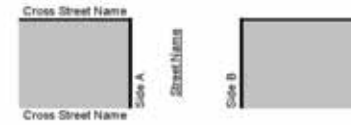




# HPE's Walkability Index

## WALKABILITY INDEX DATA SHEET:

Date: \_\_\_\_\_  
 Begin Time: \_\_\_\_\_ A.M. P.M. (Circle One)  
 Completed by: \_\_\_\_\_  
 Representing: \_\_\_\_\_  
 Posted Speed of Street/Road: \_\_\_\_\_



Transect Zone (Circle One): T3 T4 T5 T6

### WALKABILITY MEASURE

Criterion Value Score Side A Score Side B Total Score

#### STREET DESIGN (MAXIMUM SCORE 30 POINTS)

Non-peak hour Free Flow Speed (Vehicles not hindered by stop signal or other slowing/stopping vehicles)

[Note for this measure: If possible, take a minimum of 10 samples; if not possible, take at least 3 samples in 10 minutes]

≤15 mph	10			
20 mph	8			
25 mph	6			
30 mph	4			
Over 30 mph	0			
Segment Total				0

Pavement Width—curb face to curb face—at Pedestrian Crossing

[Note for this measure: Subtract 10' of width with angled parking.]

32' or less	10			
33' - 42'	8			
43' to 54'	6			
55' to 66'	4			
Over 66'	0			
Segment Total				0

Presence of Occupied On-Street Parking (Parallel or Angle Parking)

75% - 100% of Block Face  
 51% - 75% of Block Face  
 28% - 50% of Block Face  
 10% - 25% of Block Face  
 No on-street parking

5				
4				
3				
2				
0				
Segment Total				0

#### SIDEWALK DESIGN (MAXIMUM SCORE 30 POINTS)

Sidewalk Width: Sidewalk width should be appropriate to the built environment (Score for appropriate transect)

T3	T4	T5	T6				
>5'	>6'	>12'	>20'	5			0
>4' to 5'	>5' to 6'	>8' to 12'	>12' to 20'	3			0
>3' to 4'	>4' to 5'	>5' to 8'	>8' to 12'	2			0
≤3'	≤4'	≤5'	≤8'	0			0
Segment Total							0

Pedestrian Connectivity: Distance between intersections or mid-block crossings

300' or less  
 301' to 400'  
 401' to 500'  
 501' to 600'  
 Over 600'

5				
4				
3				
2				
0				
Segment Total				0

Presence and quality of pedestrian features (good sidewalk condition; lack of obstacles; ADA compliance; shade trees; street furniture)

High quality  
 Moderate quality  
 Low quality  
 Poor quality or no features

5				
3				
2				
0				
Segment Total				0

#### URBAN DESIGN (MAXIMUM SCORE 30 POINTS)

Street Enclosure: Ratio of building height to street width [building face to building face]

<1:1  
 1:1 to <1:3  
 1:3 to 1:6  
 >1:6

10				
8				
6				
0				
Segment Total				0

Land Use Mix: Presence of different land use types, e.g. retail, eating and drinking establishments, hotels and residential units

(Score for appropriate transect)

T4	T5	T6				
3+	4+	4+	5			0
2	3	3	3			0
1	2	2	2			0
N/A	1	1	0			0
Segment Total						0

Facade Design: Presence of facade arrangements and designs that are attractive to pedestrians\*

Small units; many doors (15-20 doors/block face); lots of character  
 Small units; many doors (10-14 doors/block face); many details  
 Mix of large & small units; (5-9 doors/block face); few details  
 Large units; little variation (2-5 doors/block face); few or no details  
 Large units; few or no doors (0-1 doors/block face); uniform facade

5				
4				
3				
1				
0				
Segment Total				0

\*Drawn from Close Encounters With Buildings; Jan Gehl, Lotte Johansen Kæstel and Solvejg Rejzgard

#### TRANSIT/BICYCLE FEATURES (MAXIMUM SCORE 10 POINTS)

Transit and/or Bicycle Features

Presence of special bus/bicycle features (e.g. bus shelters & bike lockers)  
 Presence of bus stops and bicycle racks  
 Presence of bus stops or bicycle racks only  
 No bus stops or bicycle racks

10				
8				
8				
0				
Segment Total				0

# 10 walkability index measures

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1. off-peak free flow speed
2. pavement width
3. on-street parking
4. sidewalk width
5. connectivity
6. pedestrian features
7. street enclosure [w:h]
8. land use mix
9. façade design
10. bus stops, bike features

ten points each for potential score of 100

# walkability index grades

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- 90 - 100 points      High Walkability (A)
- 70 - 89 points      Very Walkable (B)
- 50 - 69 points      Moderately Walkable (C)
- 30 - 49 points      Basic Walkability (D)
- 20 - 29 points      Minimal Walkability (E)
- 19 points or less    Uncomfortable/hazardous for Walking (F)



# walkability index application

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## Broughton Street, Savannah

(6 Blocks from Montgomery Street to Abercorn Street)

94

“A” High Walkability

# study area



# Broughton Street – Lincoln St. to Abercorn St.



**Walkability Score = 73**

# Broughton Street – Abercorn St. to Drayton St.



**Walkability Score = 94**

# Broughton Street – Drayton St. to Bull St.



**Walkability Score = 92**

# Broughton Street – Bull St. to Whitaker St.



**Walkability Score = 96**

# Broughton Street – Whitaker St. to Barnard St.



**Walkability Score = 96**

# Broughton Street – Barnard St. to Jefferson St.



**Walkability Score = 92**



# Broughton Street - Jefferson St. to Montgomery St.



**Walkability Score = 94**

# Broughton Street - Montgomery St. to MLK Jr. Blvd.



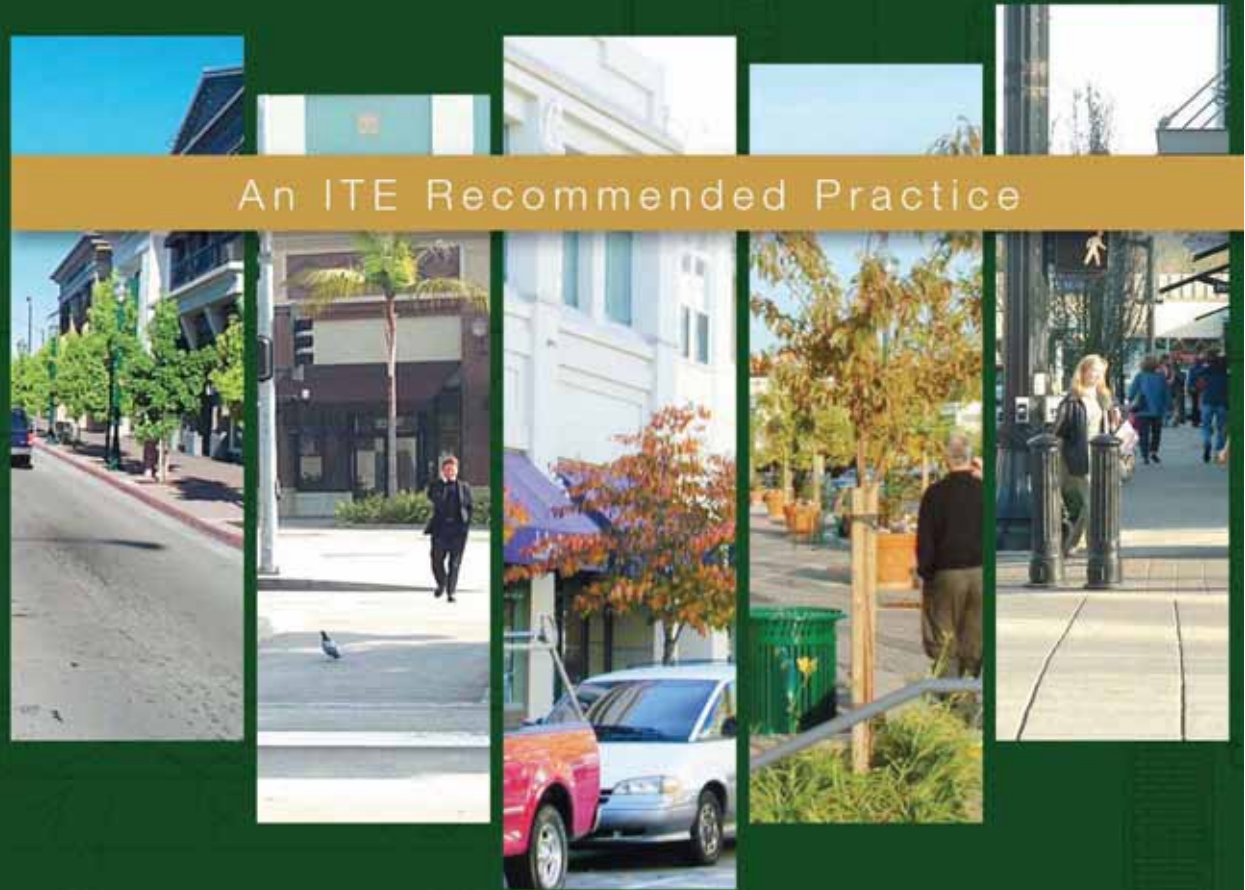
**Walkability Score = 72**

# Results



joint CNU / ITE  
product

released March  
2010



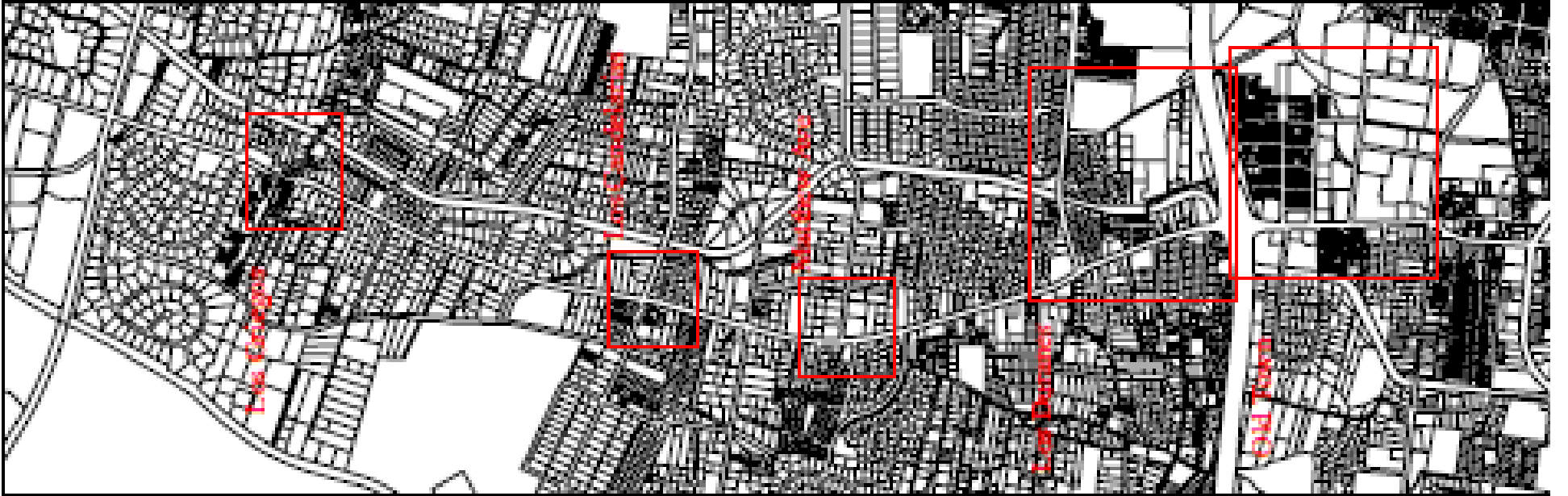
An ITE Recommended Practice

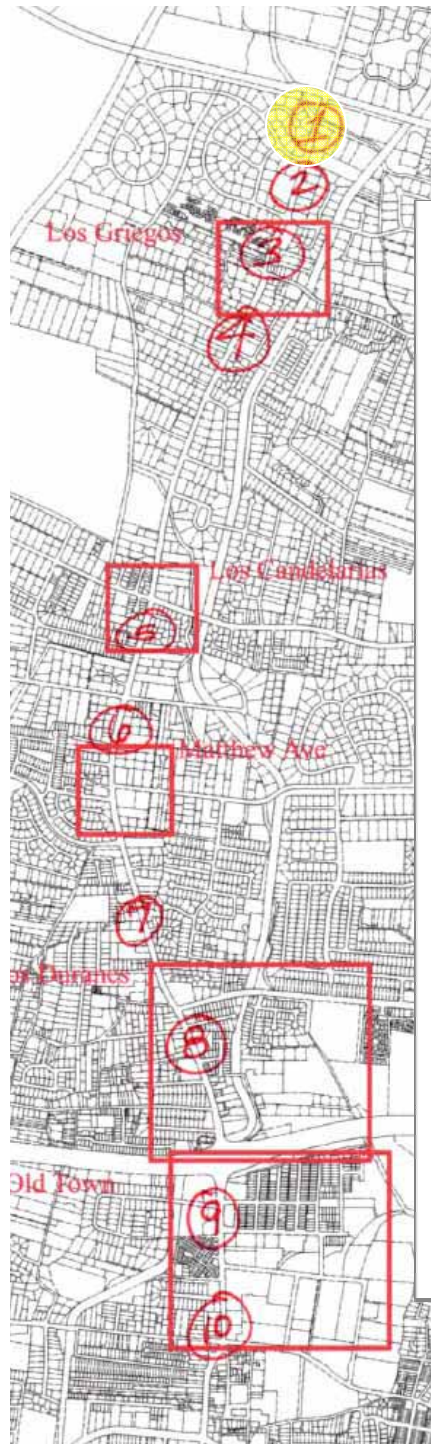
Designing Walkable Urban Thoroughfares:  
A Context Sensitive Approach



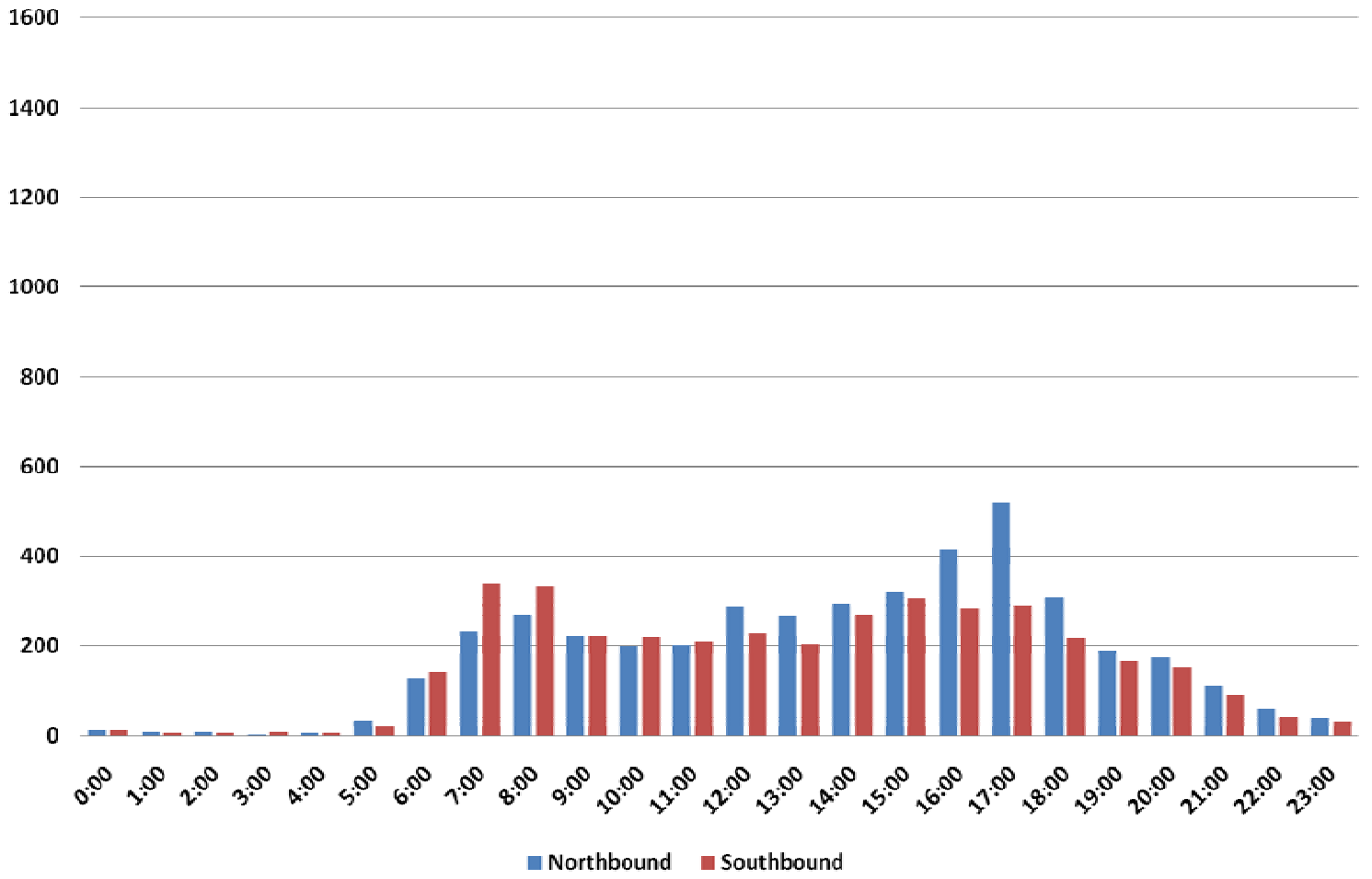
Institute of Transportation Engineers

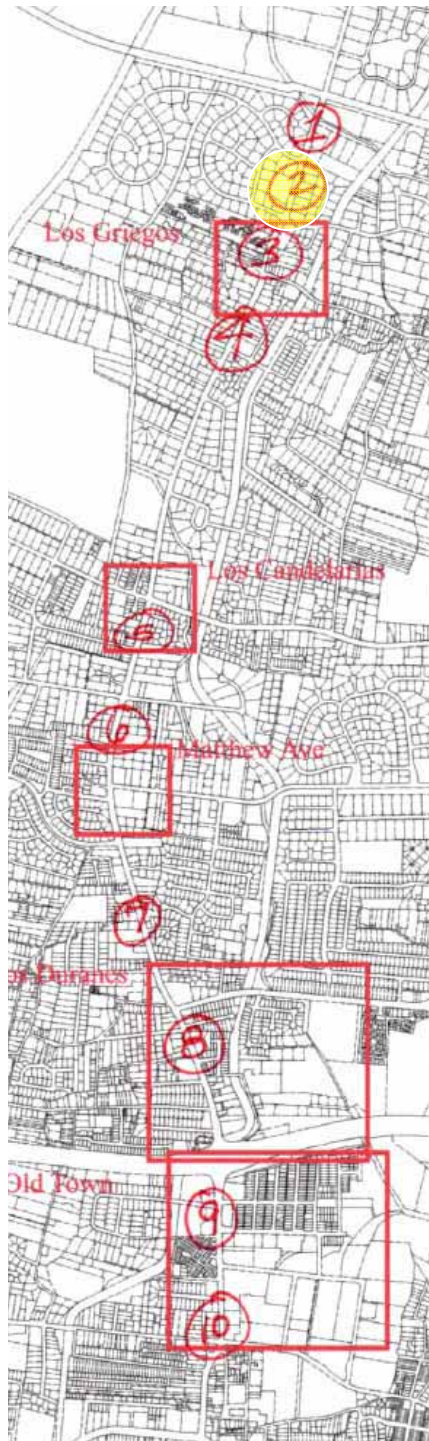
CONGRESS  
FOR THE  
NEW  
URBANISM



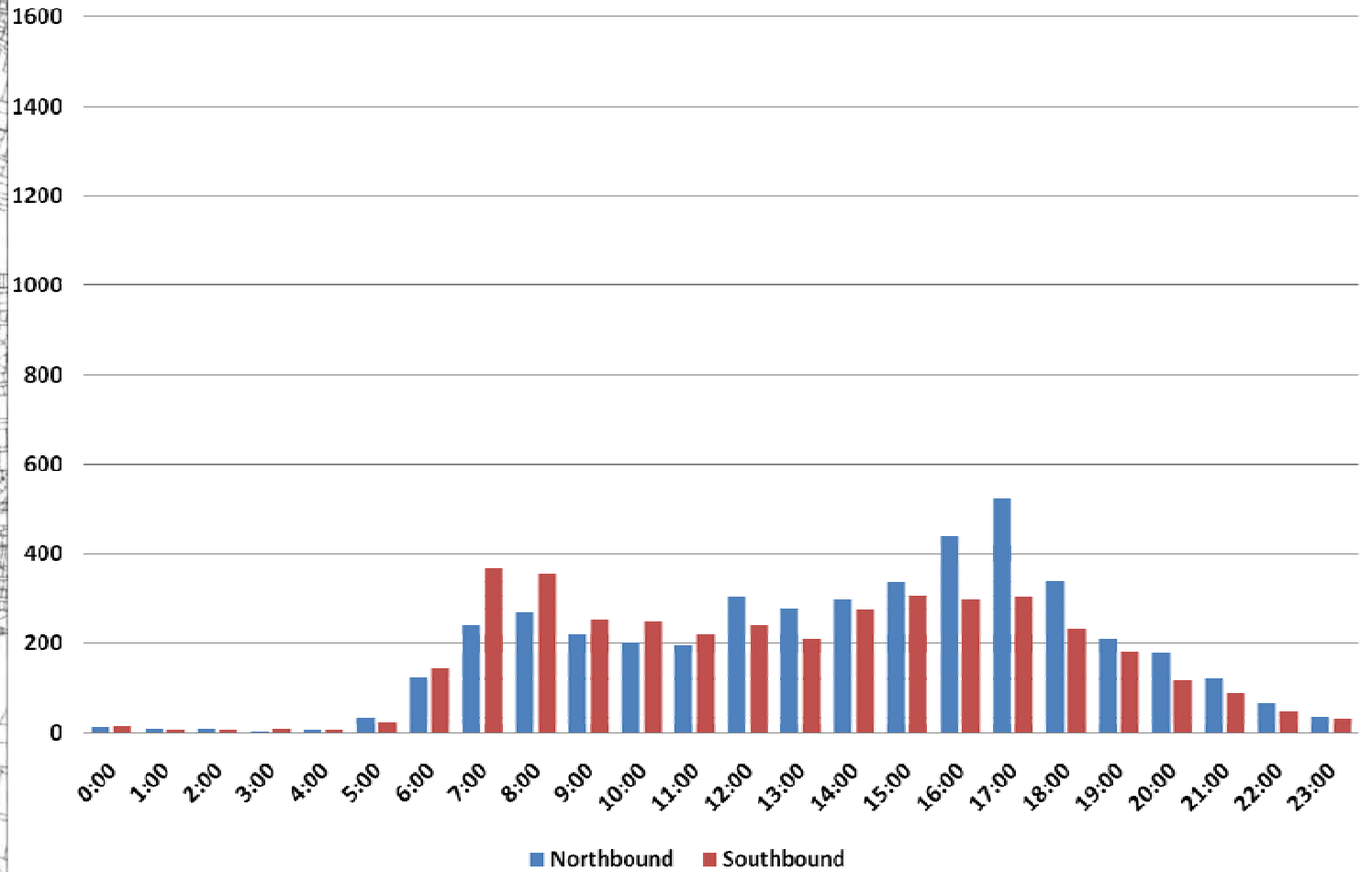


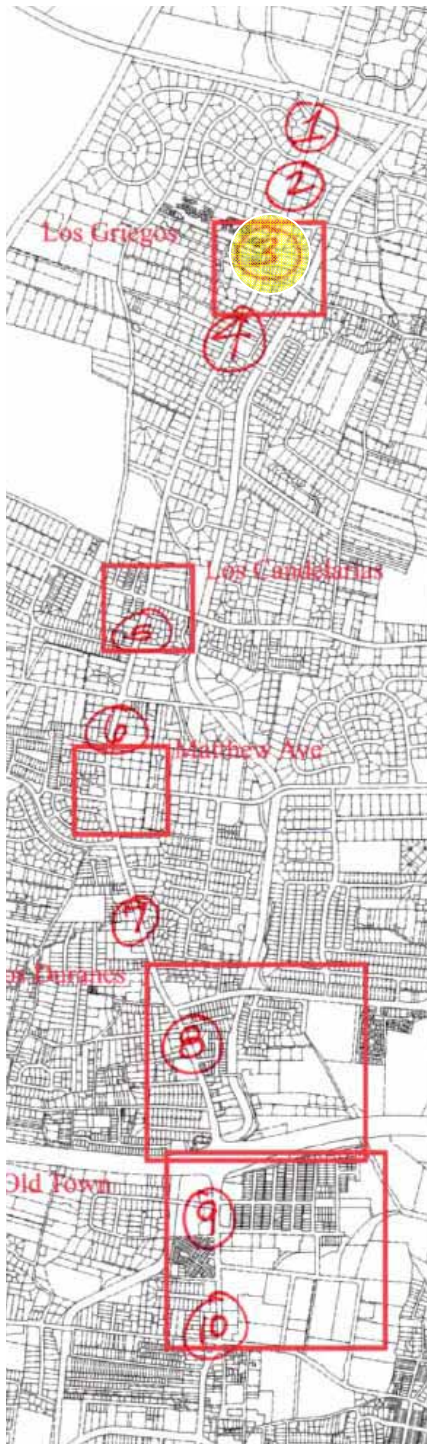
**Rio Grande Blvd. Daily Traffic Profile  
Between Montano Road and Dietz Farm Road**



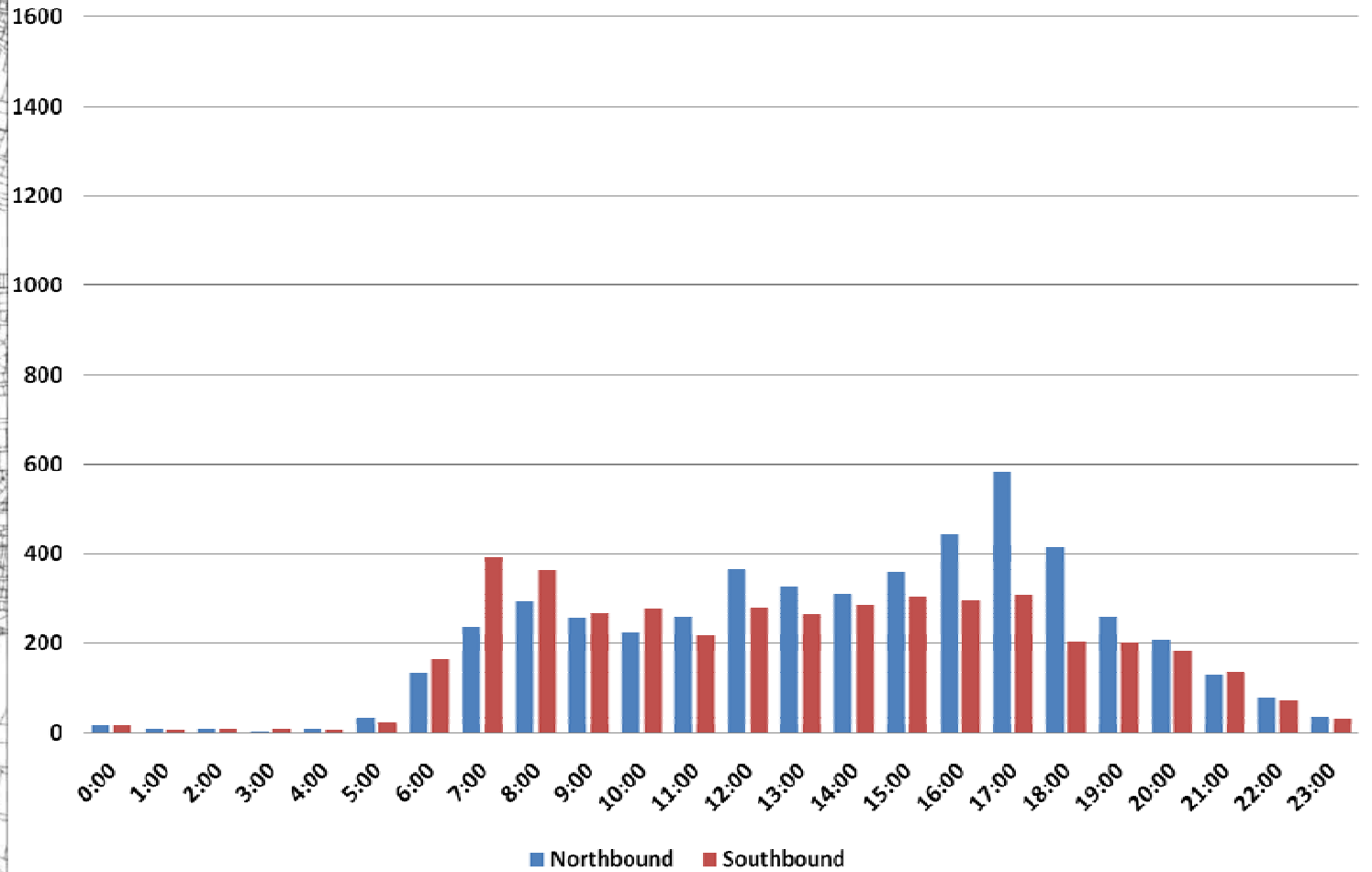


**Rio Grande Blvd. Daily Traffic Profile  
Between Dietz Farm Road and Dietz Place**

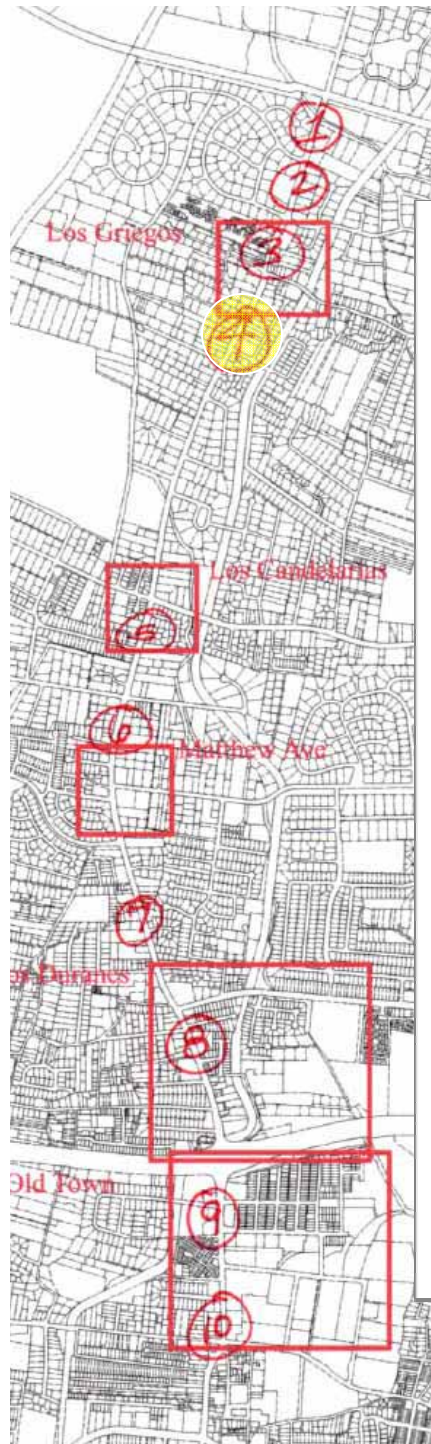




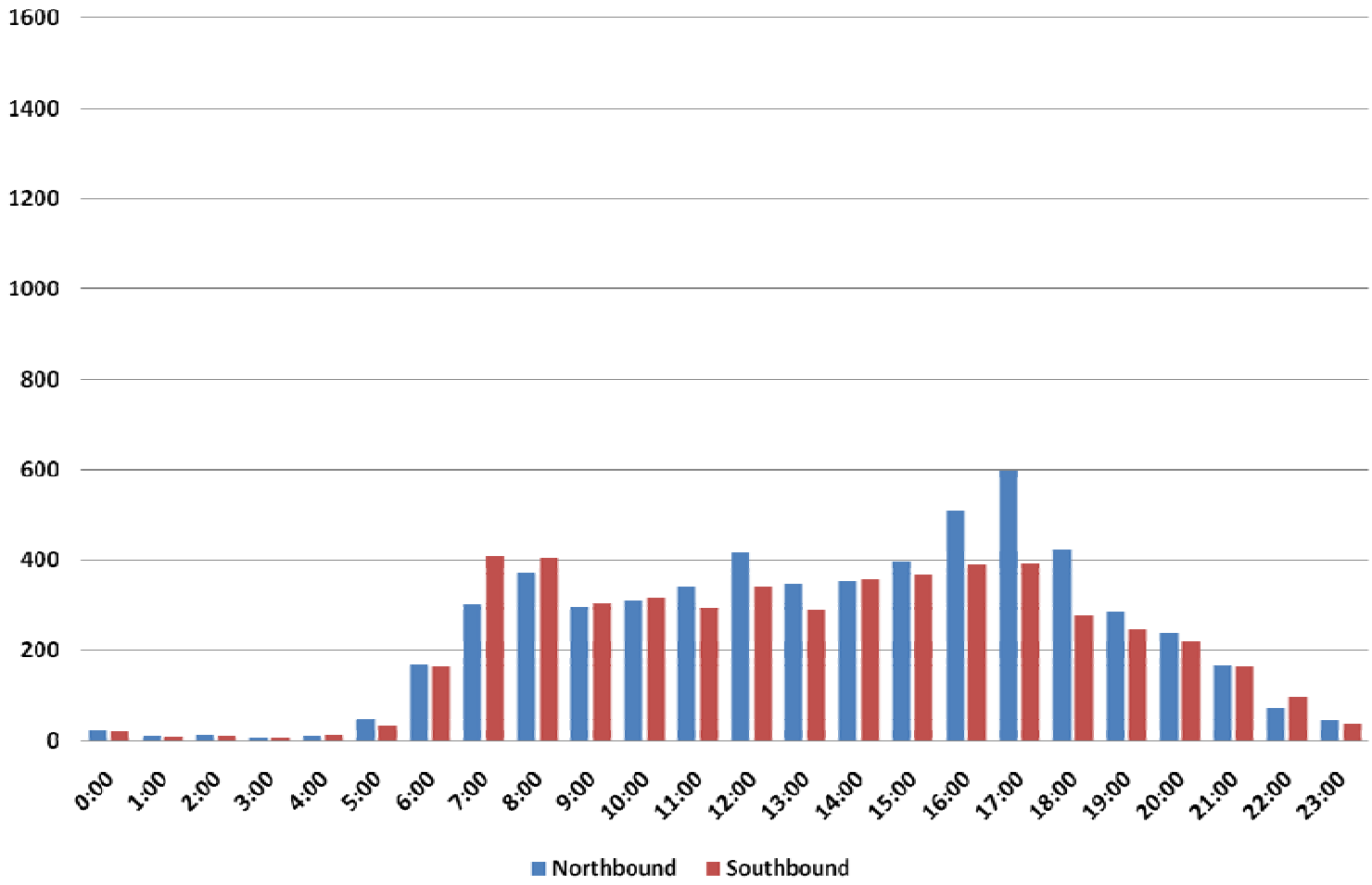
Rio Grande Blvd. Daily Traffic Profiles  
Between Dietz Place and Griegos Road

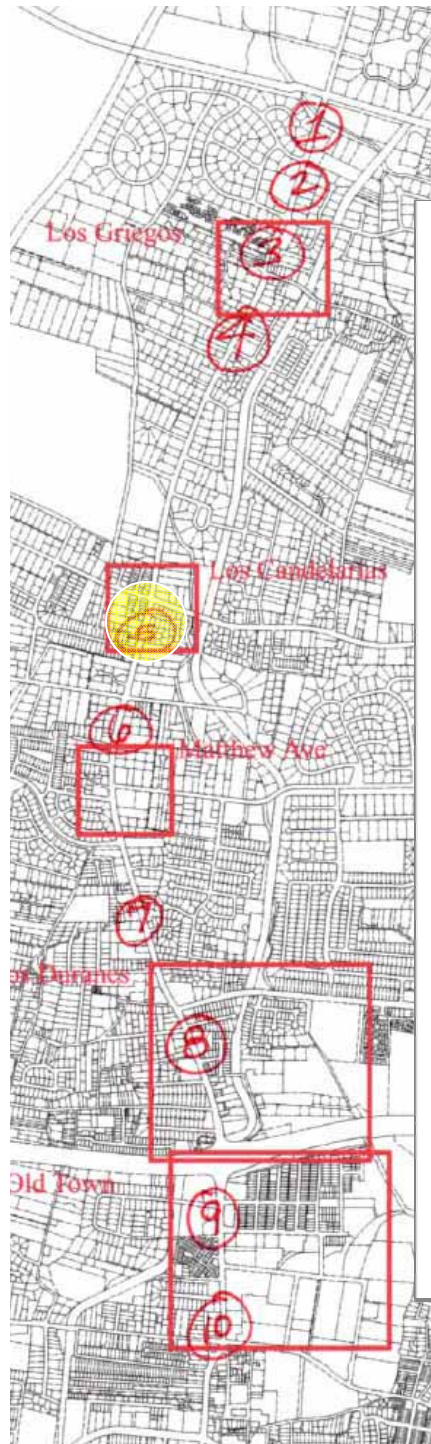




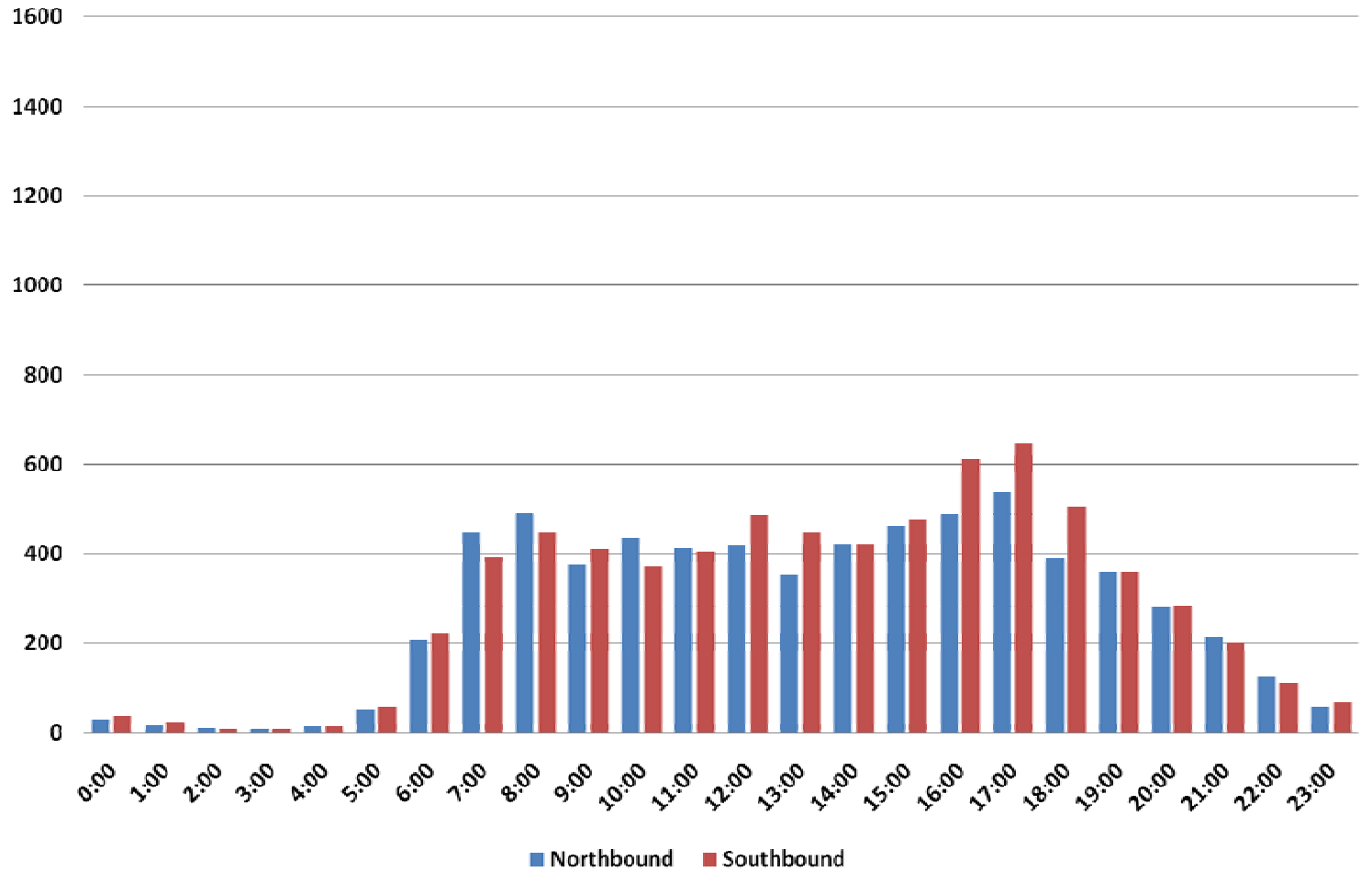


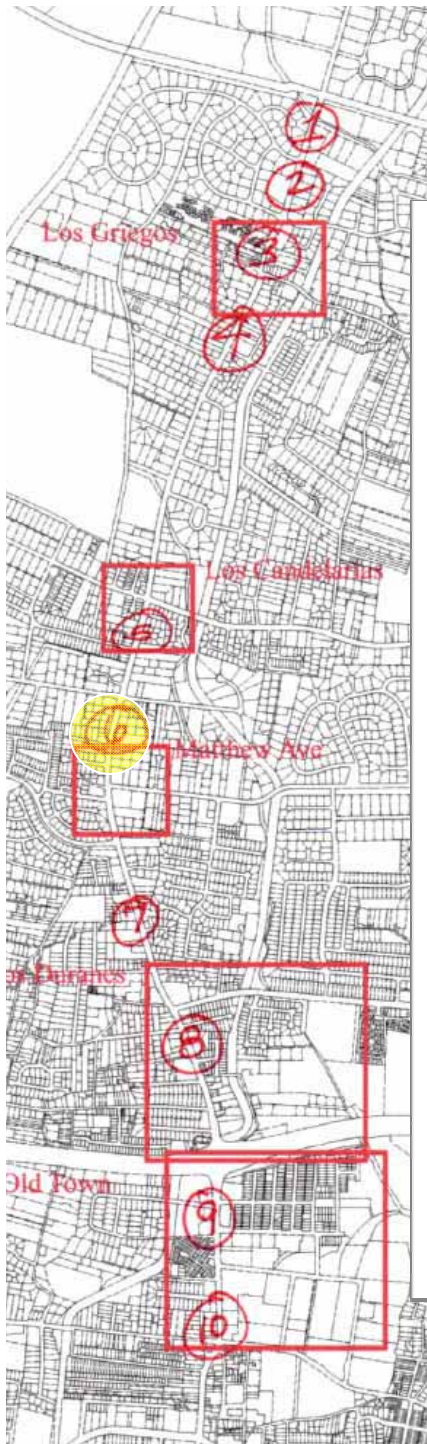
**Rio Grande Blvd. Daily Traffic Profile  
Between Elfege Road and San Lorenzo Avenue**



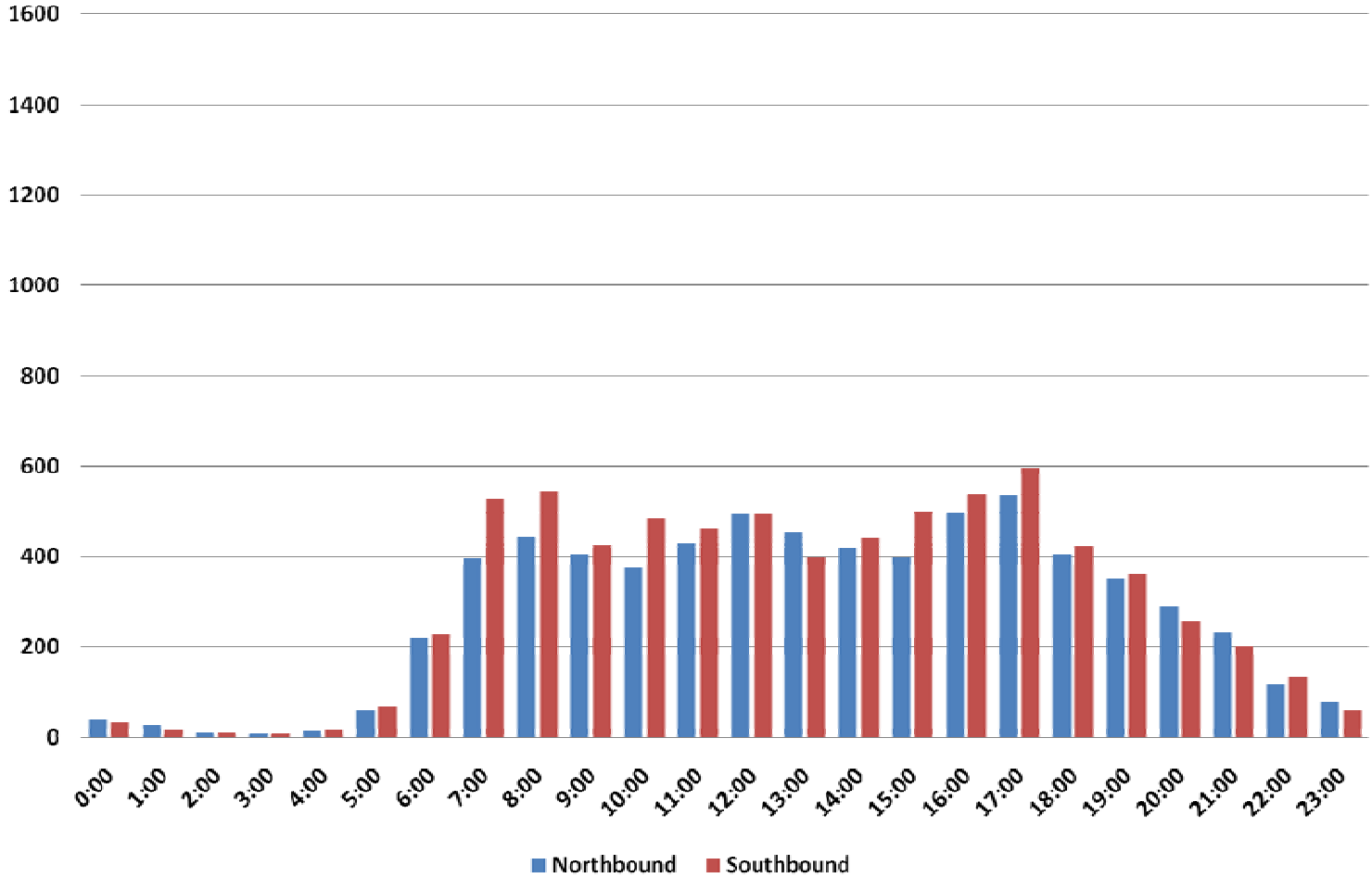


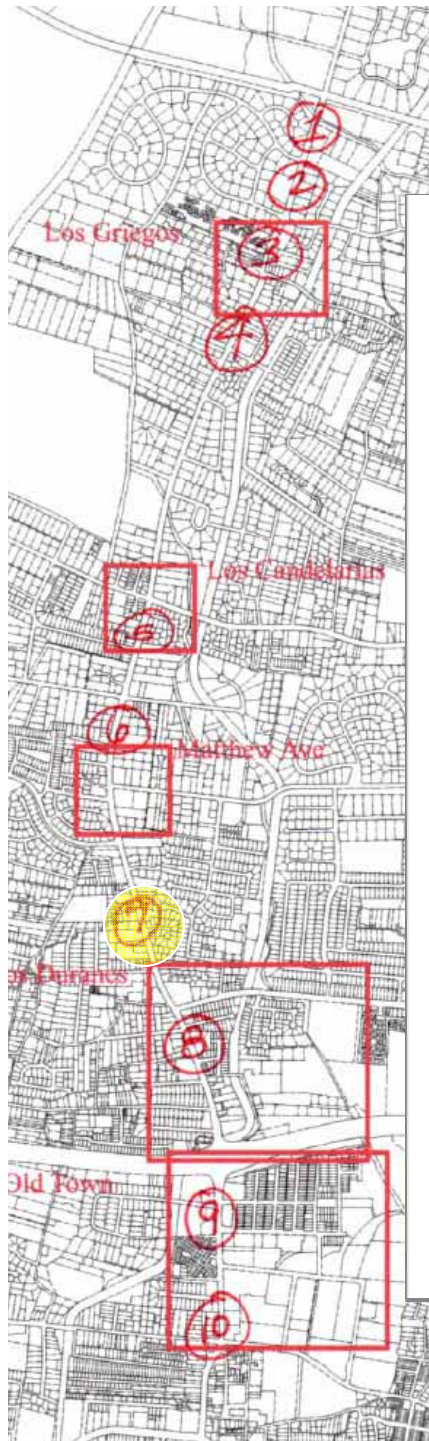
**Rio Grande Blvd. Daily Profile  
Between Artesanos Court and Oro Vista Road**



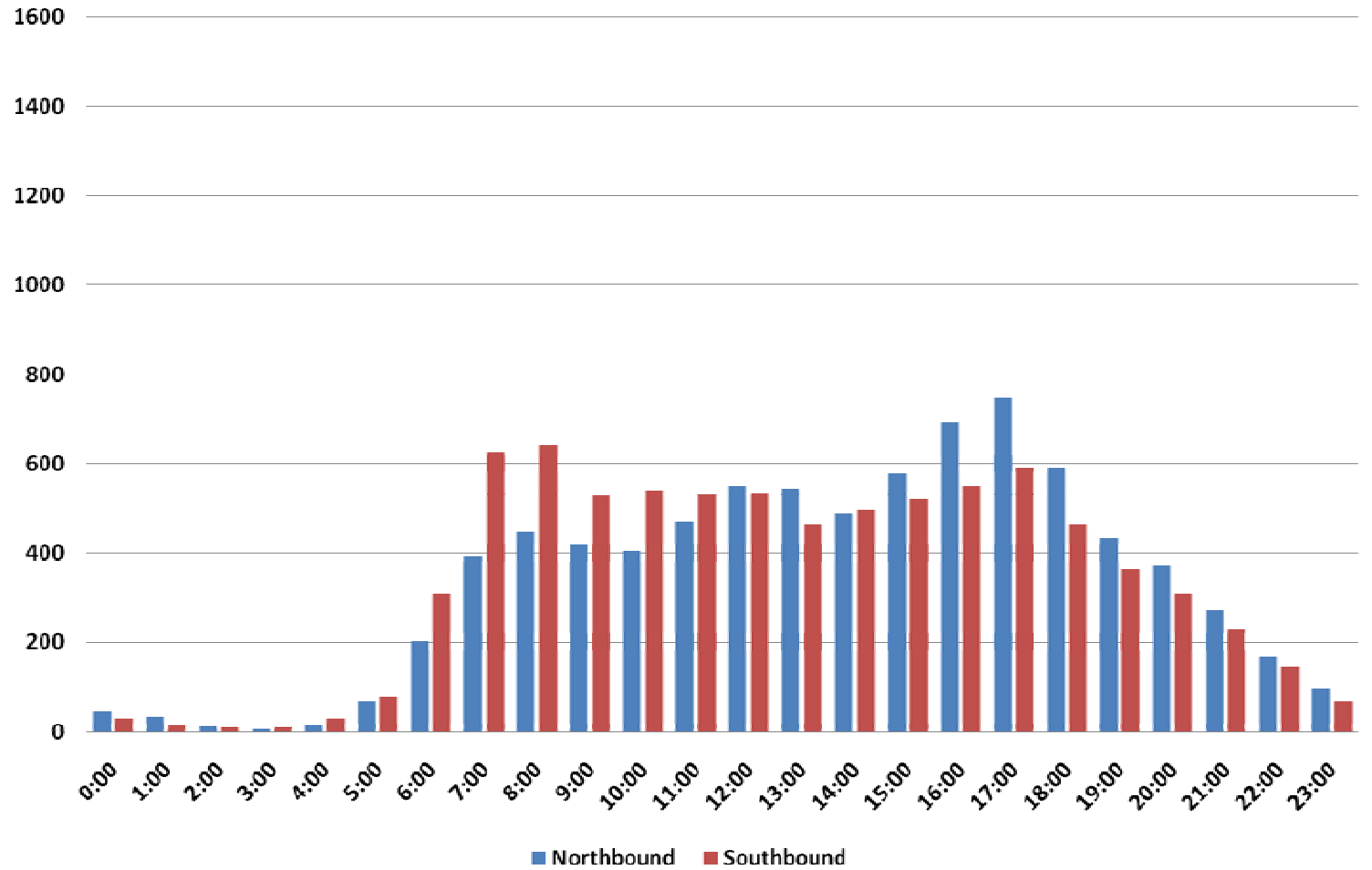


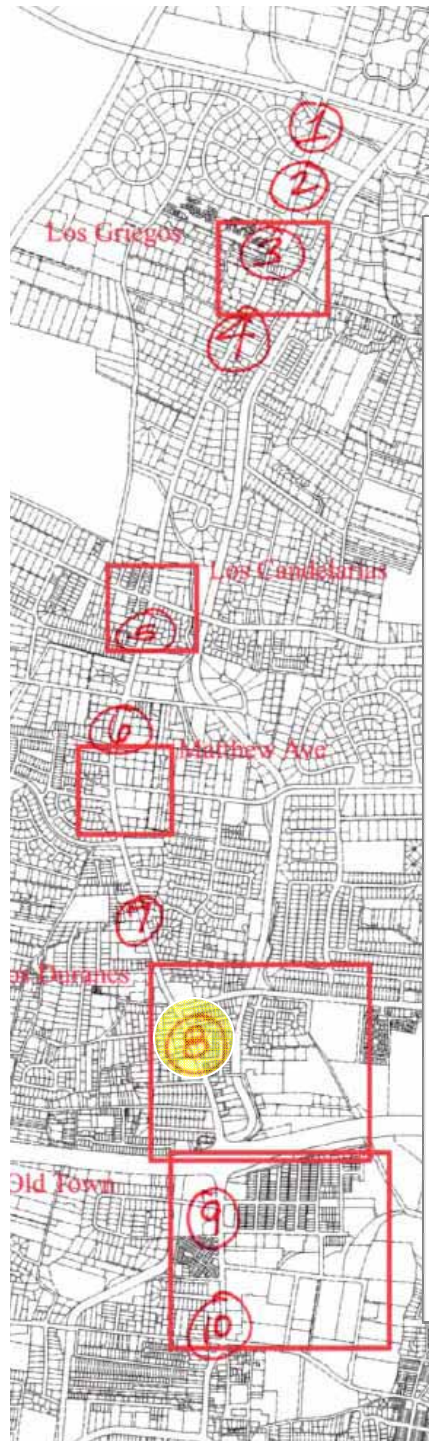
**Rio Grande Blvd. Daily Traffic Profile  
Between Campbell Road and Vicic Road**



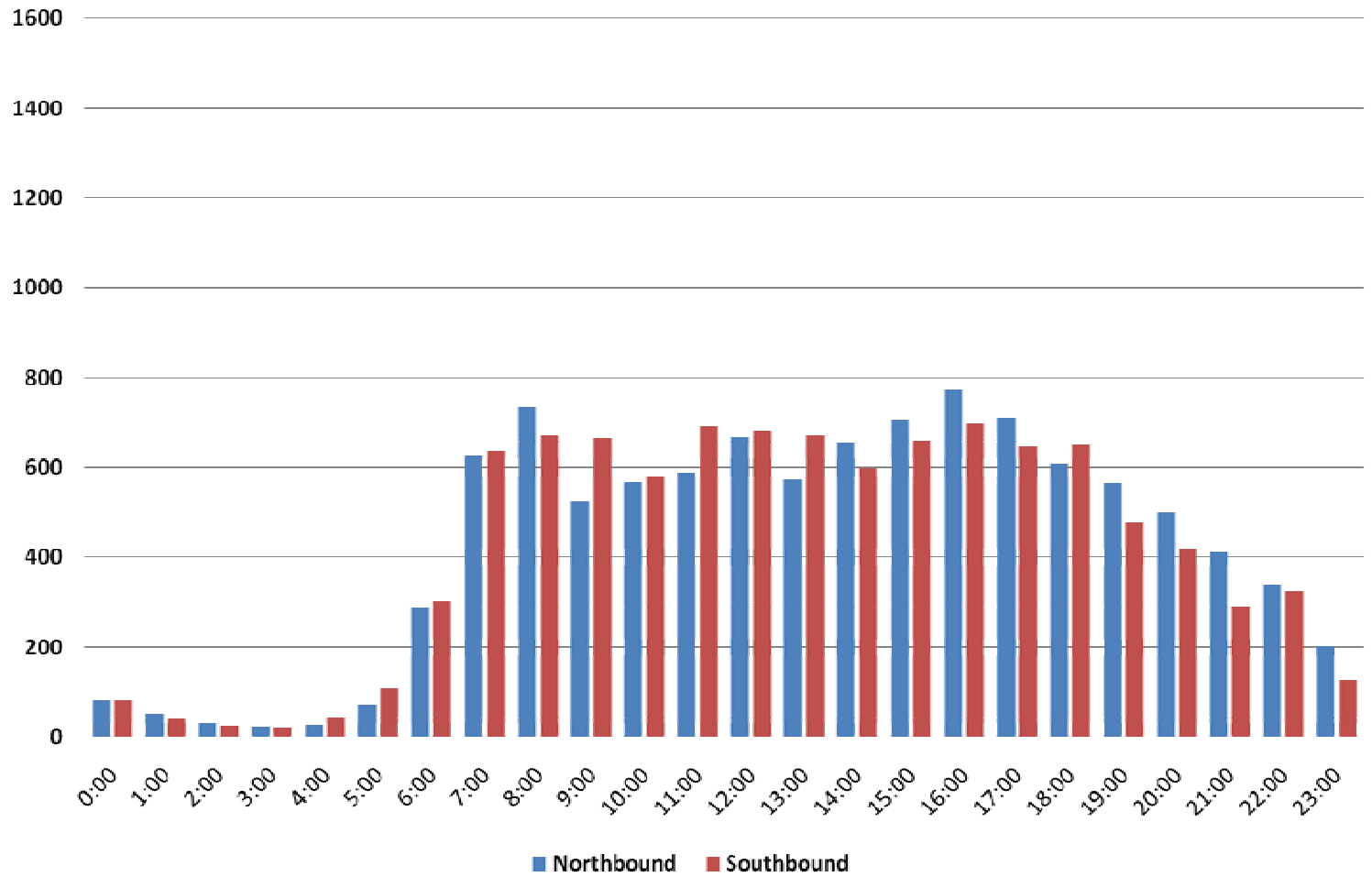


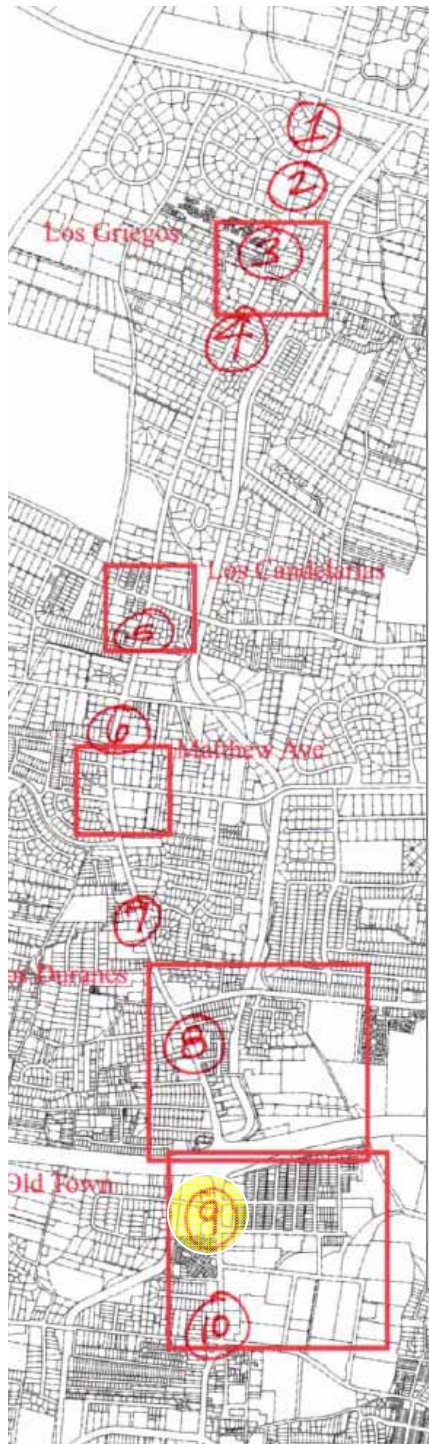
**Rio Grande Blvd. Daily Traffic Profile  
Between Plaza Vizcaya and El Nido Court**



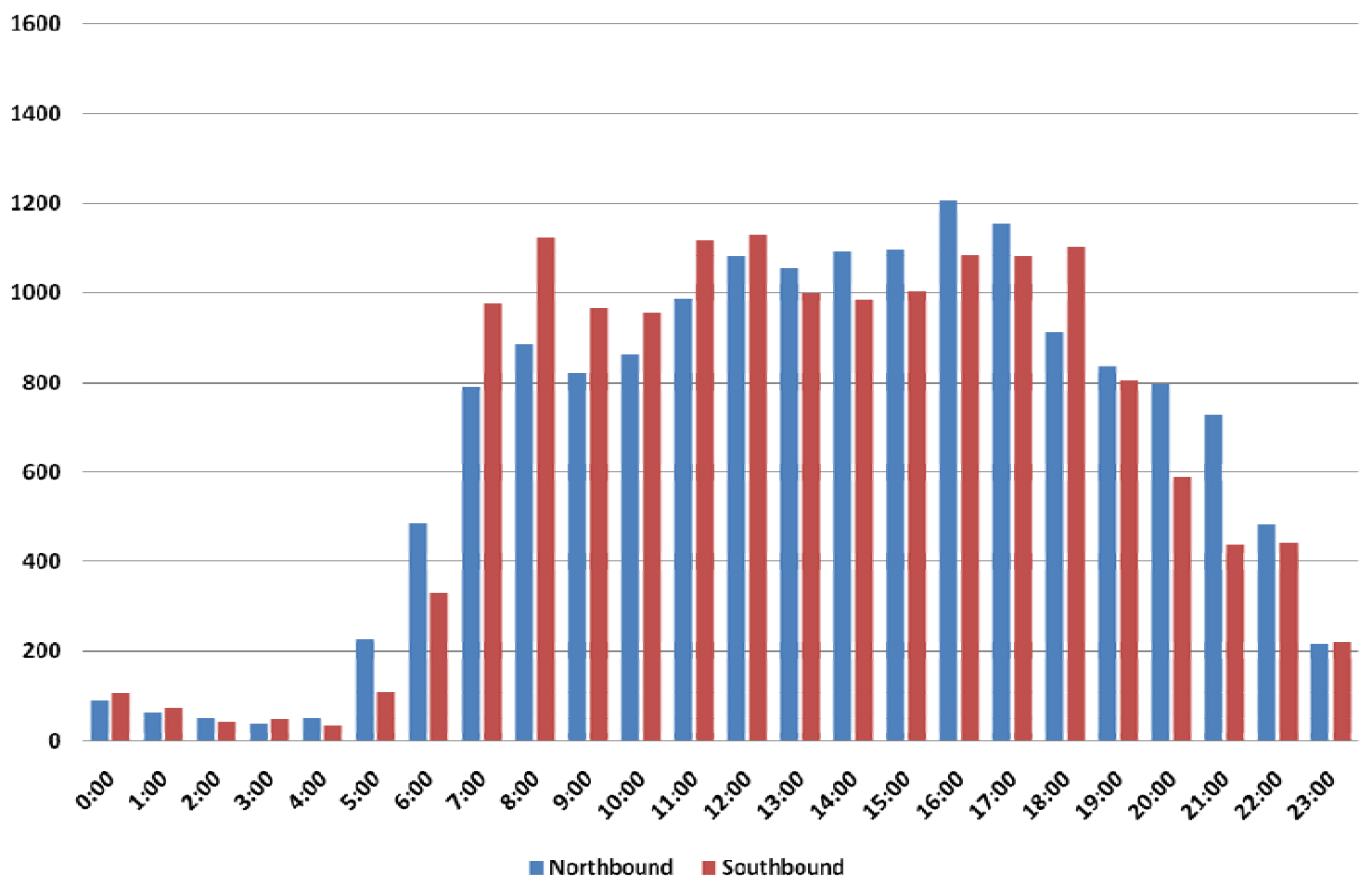


**Rio Grande Blvd. Daily Traffic Profile  
Between Rice Avenue and San Francisco Road**

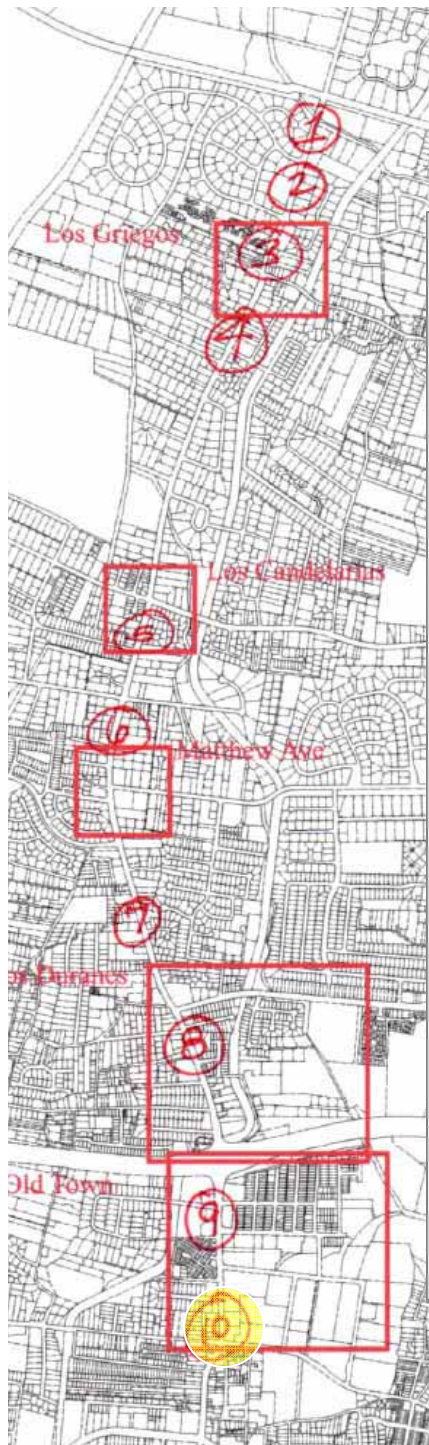
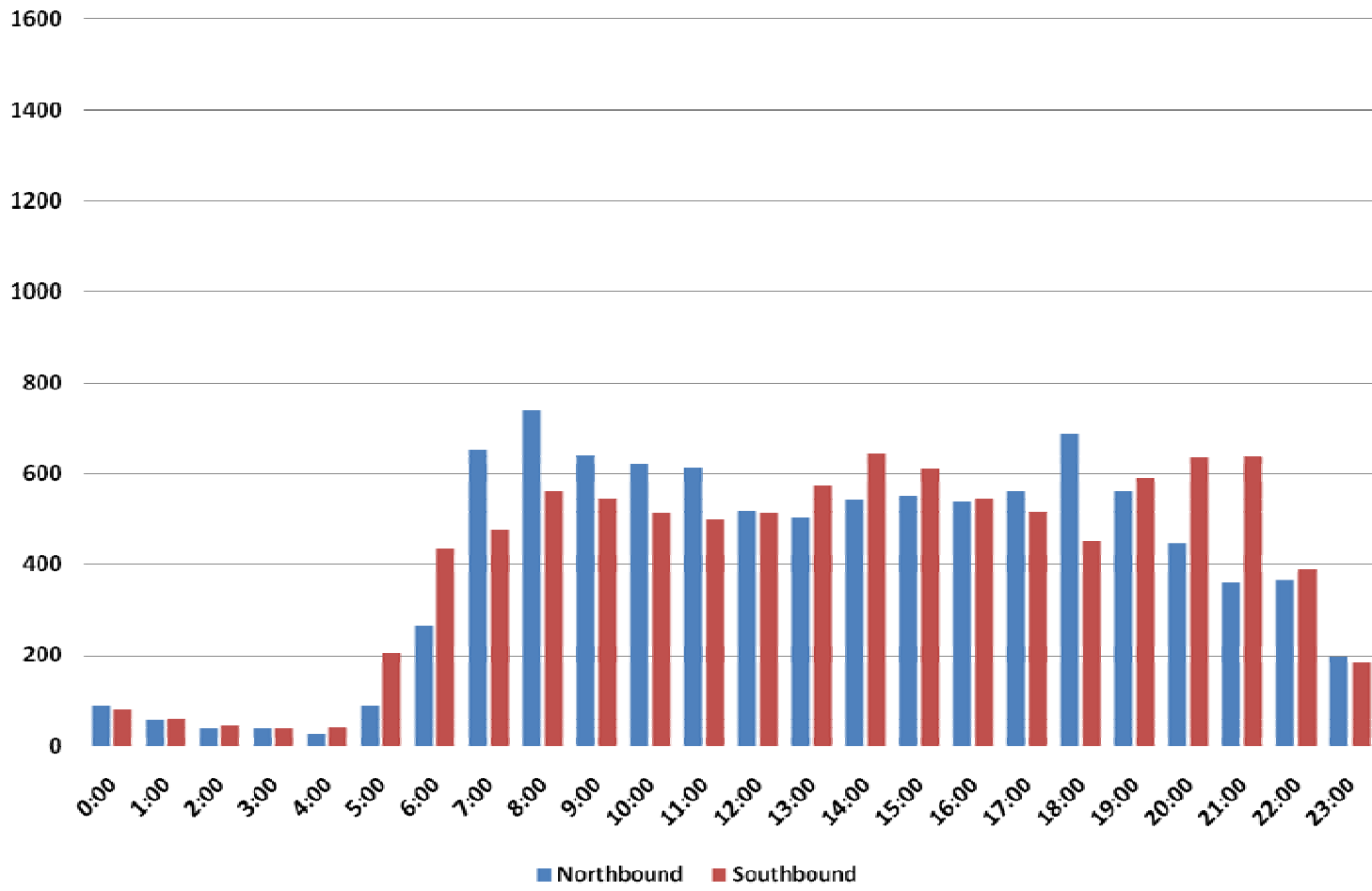




**Rio Grande Blvd. Daily Traffic Profile  
Between Aspen Avenue and Zearing Avenue**



**Rio Grande Blvd. Daily Traffic Profile  
Between Pueblo Bonito Court and Mountain Road**

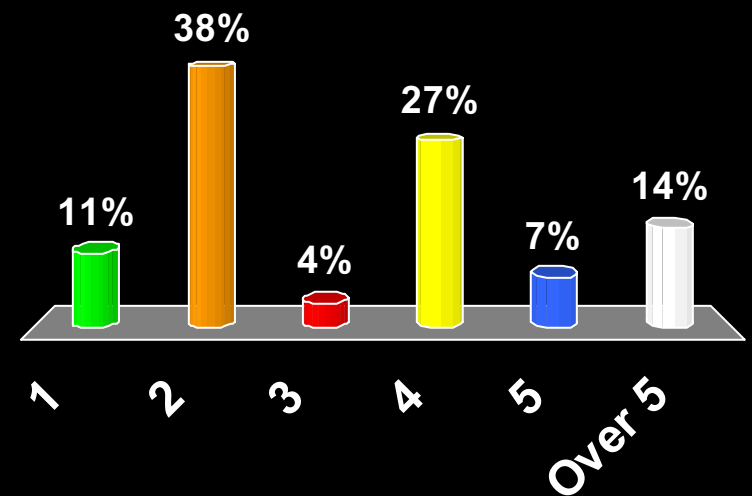


quick poll



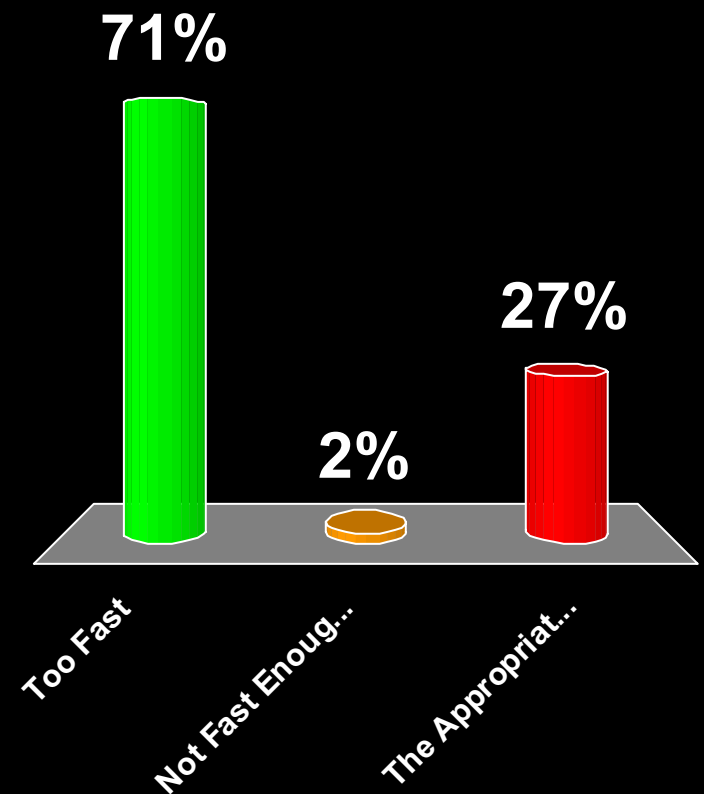
# How many car trips per day do you make along Rio Grande Boulevard?

- 1. 1
- 2. 2
- 3. 3
- 4. 4
- 5. 5
- 6. Over 5



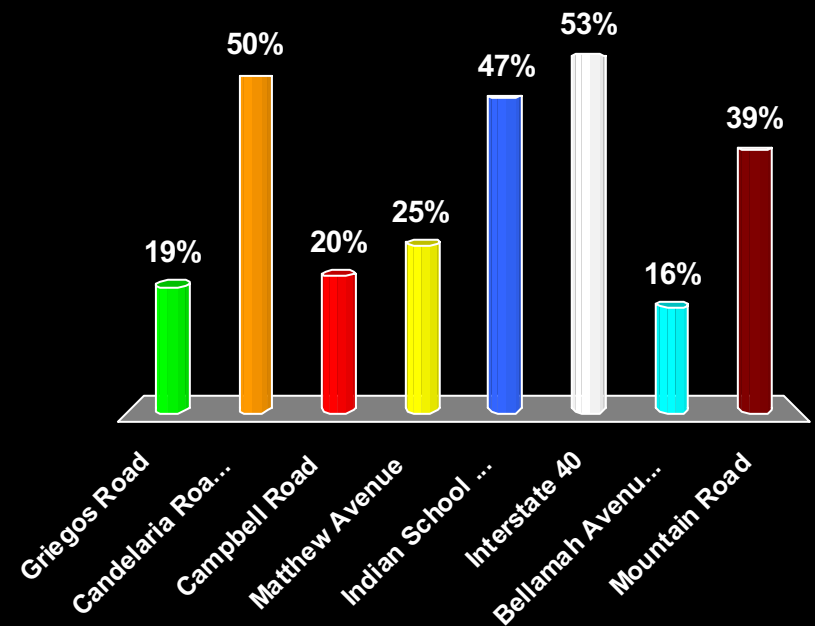
# The average car speeds along Rio Grande Boulevard are:

1. Too Fast
2. Not Fast Enough
3. The Appropriate Speed



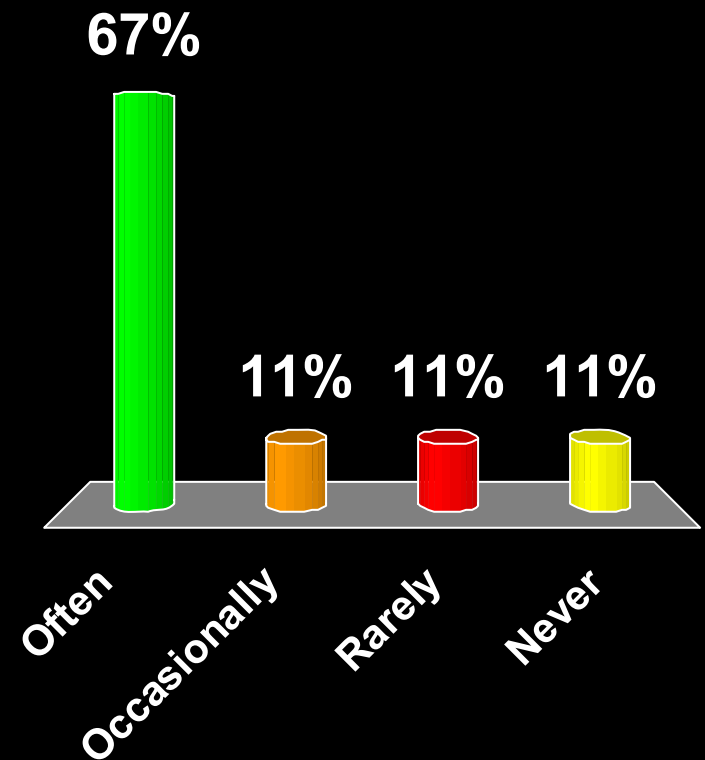
# What intersections along Rio Grande Boulevard need the most attention? (pick 3)

1. Griegos Road
2. Candelaria Road
3. Campbell Road
4. Matthew Avenue
5. Indian School Road
6. Interstate 40
7. Bellamah Avenue
8. Mountain Road



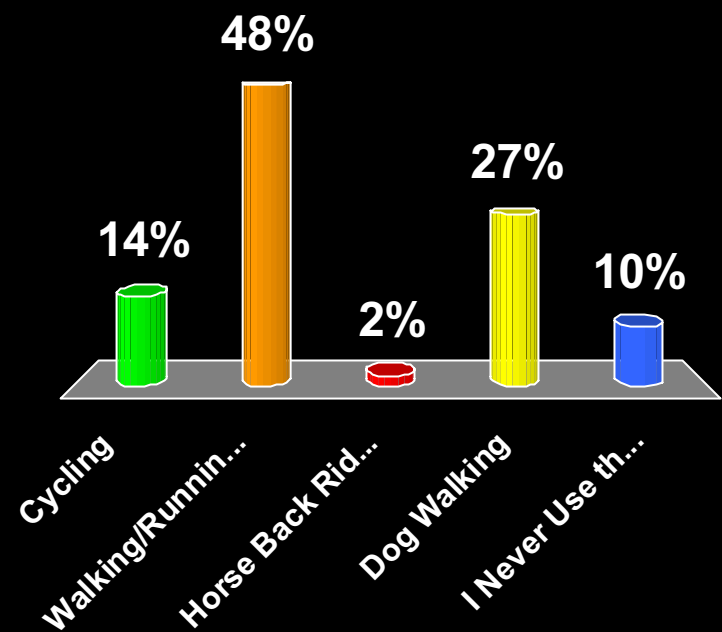
# How often do you use the trails along the network of ditches and drains?

1. Often
2. Occasionally
3. Rarely
4. Never



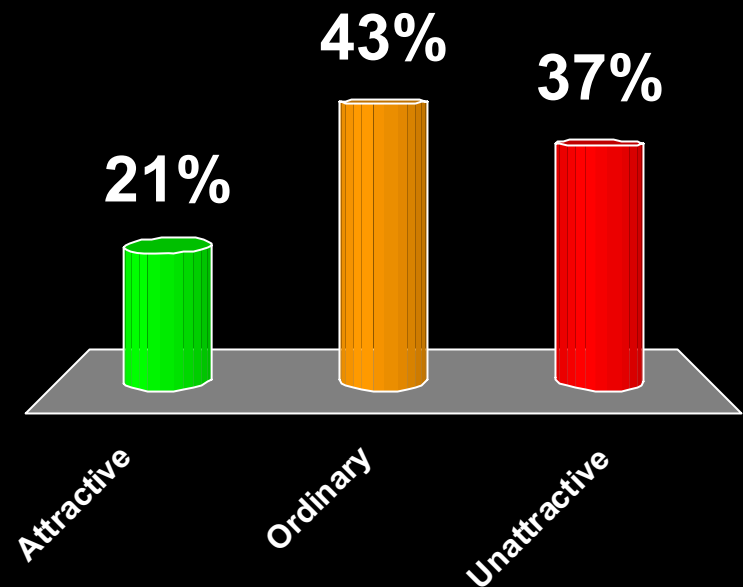
# I use the network of trails along the drains and ditches primarily for:

1. **Cycling**
2. **Walking/Running**
3. **Horse Back Riding**
4. **Dog Walking**
5. **I Never Use the Trails**



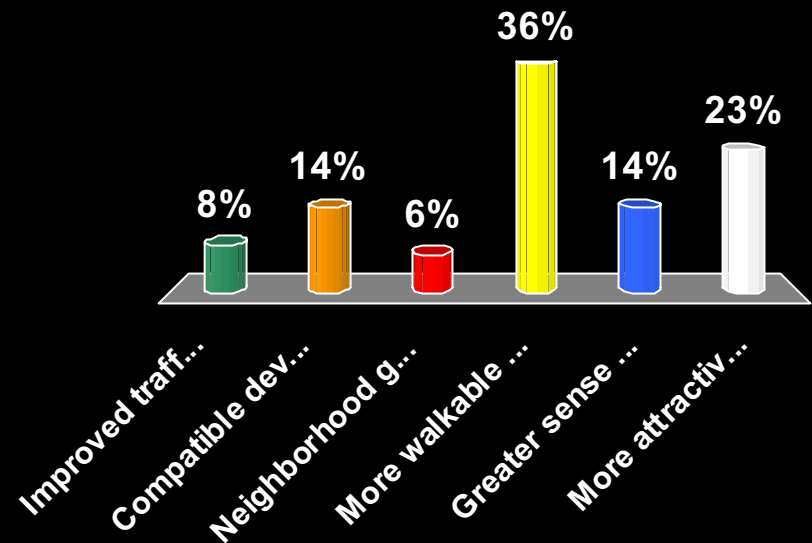
The character of Rio Grande Boulevard today  
(buildings, streets, public spaces, etc.)  
can generally be described as:

1. Attractive
2. Ordinary
3. Unattractive



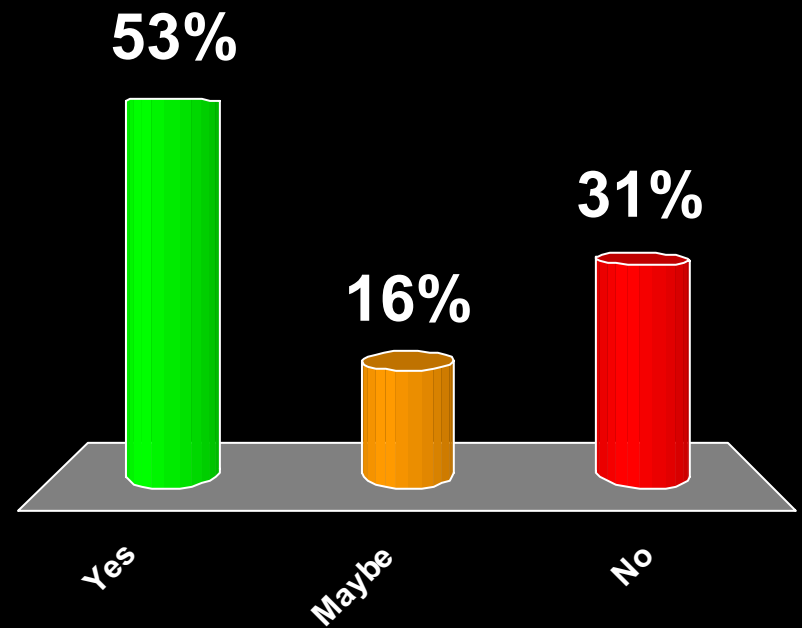
# My biggest hope for Rio Grande Boulevard is:

1. Improved traffic patterns
2. Compatible development with the neighborhood
3. Neighborhood gathering place
4. More walkable and bicycle friendly
5. Greater sense of safety
6. More attractive streetscape



# Do you plan on attending the Hands-on Design Session tomorrow?

1. Yes
2. Maybe
3. No





1

## **Kick-Off Presentation**

Friday July 9 6:00pm

Gymnasium - Los Duranes Community Center

2

## **Hands-On Design Session**

Saturday July 10 9:00am – noon

Gymnasium - Los Duranes Community Center

3

## **Open House**

Monday July 12 11:30pm – 1:00pm

Game Room – Los Duranes Community Center

4

## **Work-in-Progress Presentation**

Wednesday July 14 6:00pm

Gymnasium – Los Duranes Community Center

