CONTEXT SENSITIVE DESIGN

Center for Quality Growth
And Regional Development

Tim Jackson  P.E., AICP
Glatting Jackson Kercher Kercher
Anglin Lopez Rinehart, Inc.

May 12, 2004
Transportation investments are powerful and far-reaching.
Yesterday’s farms are today’s suburbs
Cheaper land draws many from downtown

By CHRISTINE SHIROT
OF THE SENTINEL STAFF

This is the definition of urban sprawl.

The city of Orlando picked up 21,277 people in the 1990s. But more than 10 miles from downtown, just about as many people settled in an area that a decade ago was little more than pasture, pine and palmetto.

The neighborhoods along south Alafaya Trail — Waterford Lakes, Eastwood and Stonebridge — account for most of the 24,506 people who now live in this section of Orange County. U.S. Census figures show:

In a single decade, this suburban enclave grew by nearly 550 percent, from fewer than 4,000 people to the size of Winter Park.

Like the Alafaya corridor, many areas in Central Florida

Poinciana’s growth changes its essence
The hamlet with a country atmosphere has added 10,000 people and considerable sprawl since 1990.

By APOL HUNT
OF THE SENTINEL STAFF

Fast-growing flock. Miguel Santos, pastor of Iglesia De Dios Pentecostal Church, prays with his congregation.

Snapshot: Poinciana

Our Coverage

Transportation and Sprawl
Ideal Traffic Planning

20-Year Forecast

Capacity

Years

Widen
Conventional
Trip Assignment: Conventional
Smart Growth and Smart Transportation
"America, a nation that flourished from 1900-1942, conceived many odd inventions for getting somewhere, but could think of nothing to do when they got there."

Will Rogers, 1936
Chain of Impacts - Widen Road

**FIRST ORDER**
- Widen Road

**SECOND ORDER**
- Reduce Delay
  - Move Home
  - Range Farther

- Reduce Cost
  - Drive Home
  - Own More Cars

**THIRD ORDER**
- Move Business
- Move Jobs
- Mega Boxes
- More Strip
- More Lane Miles
- New Construction
Traffic Planning: The Reality

- Actual
- Induced Traffic
- Forecast
- Widen
- Capacity
- Years
Land use/transportation cycle

Land use and transportation are intermeshed.

Traffic Engineering

Road widened

No congestion on roadway

Land further out become accessible

Land prices rise, and farmers request rezonings to residential and commercial

Landuse Planning

Subdivisions and businesses develop and people move out to larger, cheaper homes

Under political and development pressure, land is rezoned

More residents and shoppers now traveling further

Congestion develops

Residents call for road widening
Impact of Road Widenings
Developed by Steve Price
in association w/ Dover Kohl & Partners
& Glatting Jackson
for Johnson City, Tennessee
Why Widenings Happen: Induced Demand

- Traffic
- Capacity
- Years

Congestion

Widen

Why Widenings Happen: Induced Demand
COVER STORY

Grab your coffee for an earlier morning rush

By Scott Bowles
USA TODAY

Never before have so many drivers been on the road so early.

Gridlock is creeping into the pre-dawn hours as traffic tie-ups begin in some cities as early as 5 a.m. More than 10% of the nation's morning commuters leave for work between 5 and 6 a.m., the largest percentage ever, according to a USA TODAY analysis of Department of Transportation statistics. By some estimates, more than 12 million motorists are making the morning drive before the sun comes up.

"We used to classify the morning rush hour as 7 a.m. to 9 a.m.," Dallas traffic engineer Benjamin Harris says. "Now we look at serious traffic peaks before dawn."

The new morning rush is especially evident in growing regions where suburbs are thriving, in places like Dallas and Atlanta and Los Angeles. But drivers everywhere are finding their roadways clogged earlier than ever.

"Five years ago I'd leave the house at 5:45 a.m., and maybe I'd see another car or two, but the road was mine," says Paul Nava, 47, of Columbus, Ohio. "Now, I see headlight after headlight."

Among forces driving the trend:

► More drivers on the road. A booming economy has created the nation's largest workforce. More workers mean more commuters. A surging computer industry, especially, has created a workforce of millions who go to work early to do business with people in time zones around the globe.

See COVER STORY next page ▶

Senate: No to

Nominee Summers' new challenge, 1,2B
Strong economy best politics, 3B
THIS LIGHT NEVER TURNS GREEN
KEYS TO SUCCESS

- Transportation/Land Use
- Alternatives
- Community Engagement
KEYS TO SUCCESS

- Transportation/Land Use
- Alternatives
- Community Engagement
Conventional suburban development patterns
Traditional
Trip Assignment: Traditional
Trip assignments in two patterns of development
Streets and Building Orientation

Typical conditions

- Over sized parking lots separate commercial buildings from streets
- Pedestrian hostile public streets
- Pedestrians discouraged from walking to adjacent businesses
- Development lacks public space or amenity (park/plaza)
- Transit service ineffective (Buildings too far from street, results long walks and inefficient routing)
- Sidewalks do not connect to buildings

Over sized parking lots separate commercial buildings from streets
Create walkable neighborhoods

Orient building to the street

Public investment

Streetscape improvements invite pedestrians to public street

Access management minimizes driveways and curb cuts
Street oriented development

Orient building to the street

Private development accepts the invitation and builds to the street

Windows and doors are located along the street frontage to make building "front" the street
Create walkable neighborhoods

Public park and continued street orientation

- Density and location of buildings support public transit
- New development continues to build to the street
- Public/private park improvements create a valuable amenity
- Shared “park once” environment is created
- Density and location of buildings support public transit
OVERALL EXPERIENCE

Time

Good

Poor

APPROACH

DRIVE

CONVENTIONAL

PARK

WALK

THERE
SR 415 Land Use Analysis Study

Volusia County Council
February 20, 2003
RANGE OF LAND USE SCENARIOS

- **Urban**
- **Suburban**
- **Rural**
- **Conservation**

Diagram showing the range of land use scenarios from natural environment to more urban and from more rural to countryside and agricultural heritage.
In order to maintain and preserve the scenic/historic nature of the roadway, implement context sensitive design guidelines when improvements are made.

Capital improvements along the right-of-way can improve the character of the roadway.

Minimal access regulation

Preserve environmentally sensitive land through transfer or purchase of development rights.
Viewshed is affected by width of right-of-way and tree removal.

Opportunities to construct continuous sidewalks and/or bike lanes.

Manage driveways through more stringent access management.

Create a buffer zone between use and roadway.
The needs of the automobile must be balanced with the needs of adjacent land uses. Additional right-of-way decisions should respect the effect road widening will have on existing parcels.

Well located utilities and clearly defined driveways cut minimizes confusion for both pedestrians and motorists.

Manage driveways through more stringent access management.

Good design and site planning support the more organized structure of the urban uses.
KEYS TO SUCCESS

- Transportation/Land Use
- Alternatives
- Community Engagement
Traditional Approach to Transportation Planning

Transportation Principles

- More Lanes
- More Roads
- System Mgmt.
- IVHS

More Pavement

More Efficiency

Move Cars

Vertical Approach
Providing capacity through roadway networks

Strengthen and direct development towards existing communities
Network and Capacity

Same Total Lanes

More Capacity

- VMT
- Turns
- Clearance Time
- Signal Phase
Transportation Options and Community Livability

VEHICULAR SERVICE

Seconds

Large Gain

LIVABILITY
Speed-flow relationship

Greatest capacity at a calm 25-30 mph

Maximum Volume 25-30 Miles Per Hour
Speed-flow relationship

Greatest capacity at a calm 25-30 mph

Maximum Volume 25-30 Miles Per Hour
Transportation Options and Community Livability

VEHICULAR SERVICE

Seconds

Large Gain

LIVABILITY
Orlando Avenue Project Development and Environmental Impact Study

Florida Department of Transportation

&

City of Winter Park, Florida

Glatting Jackson Kercher Anglin Lopez Rinehart, Inc.
• Improve the walking, bicycling, and vehicular circulation
• Improve the safety of the corridor
• Retain and enhance business climate
• Balance mobility and accessibility
• Match capacity improvements to redevelopment opportunities
Pedestrian Context

- Ideal signal spacing for pedestrians = 600-800 ft.
- Too few signals for pedestrians to cross
Bicycle Context

- North-south bike connection needed

- Options
  - Orlando Avenue
  - Denning Drive
  - Others?
Hourly Traffic Volumes

*Counts collected February 18, 2002 between Gay Road and Canton Avenue
Source: FDOT
Pedestrian and Bicycle Improvements

Access to Lake Lilly

Bike Lanes North of Lee Road

Future Bike Facilities

New Bike / Ped Bridge Over US 17/92

Bike Lanes Along Denning

Future Bike Facilities

Mead Gardens Bike Path

Signalized Intersection

Pedestrian Crossing

Pedestrian and Bicycle Improvements
North of Lee & Webster
Proposed

Legend
- FDOT Improvements
- City/Redevelopment Improvements
What If?
Access and Local Connections

Driveway Consolidation

<table>
<thead>
<tr>
<th>Driveways</th>
<th>Consolidated</th>
<th>Narrowed</th>
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<tbody>
<tr>
<td>97</td>
<td>15</td>
<td>11</td>
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Parallel Access

<table>
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<th>Parallel Access</th>
<th>Developed over</th>
<th>Additional</th>
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<tr>
<td>8,000 (LF)</td>
<td>Last 5 years</td>
<td>1,850 (LF)</td>
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<tr>
<td>3,000 (LF)</td>
<td></td>
<td></td>
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Median

1. Median north of Lee Road
2. Brick texture continuous left-turn lane south of Lee Road
3. Four Pedestrian Islands
Weekday Traffic Distribution
Lake Shore Road, west of Camp Road

Hourly Traffic Volume

EB
WB

Traffic Data
Traffic Level of Service

Pleasant
Amsdell
Cloverbank
Rogers
Old Big Tree
Camp
Clifton
Avery
A
B
C
D
E
AM
PM

Traffic Level of Service

Pleasant
Amsdell
Cloverbank
Rogers
Old Big Tree
Camp
Clifton
Avery
A
B
C
D
E
AM
PM
PM Peak Hour

- 460 through trips
- 350 internal trips
- 750 internal trips
- Rogers
- Cloverbank
- Amsdell
- Pleasant
- Old Big Tree
- 160 through trips
- 440 internal trips
- 385
- 225 internal trips
- 600
- Through Traffic
- 30%
<table>
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<tr>
<th>Location</th>
<th>Time Period</th>
<th>No. of Heavy Vehicles/Total No. of Vehicles</th>
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<tbody>
<tr>
<td>Between Amsdell &amp; Access to Route 75</td>
<td>Weekday</td>
<td>817 / 25,267</td>
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<tr>
<td></td>
<td>Saturday</td>
<td>66 / 15,154</td>
</tr>
<tr>
<td></td>
<td>Sunday</td>
<td>38 / 11,946</td>
</tr>
<tr>
<td>Between Old Lake Shore &amp; Amsdell</td>
<td>Weekday</td>
<td>708 / 15,093</td>
</tr>
<tr>
<td>Between Sturgeon Point &amp; Old Lake Shore</td>
<td>Saturday</td>
<td>225 / 20,655</td>
</tr>
<tr>
<td></td>
<td>Sunday</td>
<td>147 / 17,939</td>
</tr>
</tbody>
</table>
• Angola to Old Big Tree  
  (Old Town Hall/Theatre area to Old Big Tree)  
  – 16 min. 40 sec.

• Derby to Old Big Tree  
  (Tops Plaza to Old Big Tree)  
  – 10 min. 25 sec.

• Old Lake Shore to Old Big Tree  
  (Study Corridor)  
  – 5 min. 15 sec.
Legend
48- Non-Peak Free Flow
51- Morning Peak Hour
51- Afternoon Peak Hour

*85th Percentile Speed

Travel Speed
Physical Context – Commercial Land Use

- Camp Road Restaurants
- Pacifico Cleaners
- Wilson Farms
Physical Context – Parks and Institutions

- Hamburg Town Park
- Hamburg Fire Hall
- St. Francis Church & High School
- Wanakah Waterworks Future Seaway Trail Visitor Center
- Wayside Presbyterian Church
- Frontier Education Center
- St. Mary Church & School
- Hamburg Library
- Cloverbank Elementary School
- Frontier Middle School

Map showing the location of various parks and institutions in the area.
Physical Context – Residential Land Use
Design Principles

1. Reduce Speeds to 40 mph Through Traffic Calming
2. Recognize the Diversity of Land Uses
3. Showcase Lake Views & Cultural Facilities
4. Design for ALL Modes of Travel
5. Reasonable Regional Traffic Flow
Wilson Farms

1. Neighborhood Center
2. Access Management
Wilson Farms – Future?
Wilson Farms – Future?
Transportation Options and Community Livability

VEHICULAR SERVICE

Seconds

Large Gain

LIVABILITY
Provide a variety of transportation choices
25th Moonwalk Anniversary
JOURNALISM 1969
MAN WALKS ON MOON!
GIANT LEAP FOR MANKIND

JOURNALISM 1999
MAN MOONS ON WALK!
QUIET NEIGHBOR KEPT TO SELF
LAWSUITS FILED
MOVIE RIGHTS SOLD;
BOOK TO FOLLOW

"MY BELT WAS LOOSE"
KEYS TO SUCCESS

- Transportation/Land Use
- Alternatives
- Community Engagement
IT'S NEVER TOO LATE, BUT EARLY IS BETTER
Encourage community and stakeholder collaboration

- Charettes
- One-on-one stakeholder review
- Visualization
- Coordination with DOT
Public charrettes

Encourage community and stakeholder collaboration
Encourage community and stakeholder collaboration

Open house design sessions

Project office – open to everyone
Encourage community and stakeholder collaboration
Multiple approaches to every problem

“Urban”, Pedestrian Street Design

Pedestrian Connections From Neighborhood

Traffic Calm
Enhance Key Roads:
- Shallowford Rd. (2-3 lanes)
- Signal at Jenkins/Shallowford

Pedestrian Streetscape
(sidewalks, street trees)

New Road Network
- Better utilize I-75 interchange

Enhance Key Roads:
- Gunbarrel Rd. (2-3 lanes)
- Igou Gap Rd. (2-3 lanes)

New Road Network:
- Goodwin extension (Gunbarrel to Jenkins)
- Secondary Long-term access to Shallowford

New Road Network:
- Protect & Enhance Roads

Merge plans
Saturday Seed-Bed Plan Concepts

Ownership and Champions

Full group discussion

Plan ownership

Small group consensus building

Community Ownership and Project Champions
CHURCH PARKING ONLY
VIOLATORS WILL BE "BAPTIZED"
Visualization Communication

- Best conveys character and aesthetics of a place
- Simple and fast graphics
- Can be hand drawn or computer enhanced
- Great for phasing and buildup explanation

Encourage community and stakeholder collaboration
Design Principles

Protect the Unique Character of the District
Design Principles

Connect the Neighborhoods to the District
Design Principles

Link Parks and Open Spaces
Existing Traffic Flow

- Congestion
- Long Signal Delay
- Cut-Through
- Left Turn Demand Often Blocks Through Movement
- Congestion

Lake Ivanhoe
Lake Highland
Future Traffic Flow

- **Congestion**
- **Improve Signal Time for Princeton Arrow Right on Red**
- **No Change**
- **Traffic Calm**
- **Planned Improvement**
- **Lake Ivanhoe**
- **Lake Highland**
- **Brookhaven Dr**
Potential Bicycle Circulation

- **Red**: Multi-Use Trail
- **Green**: Bike Lanes
- **Blue**: Signed Route / Bicycle Friendly Street

Sections:
- Virginia Dr
- Ivanhoe
- Lake Highland
- Lake Florida

[Map showing potential bicycle circulation routes]
Foster distinctive, attractive places with a strong sense of place
Foster distinctive, attractive places with a strong sense of place.
Foster distinctive, attractive places with a strong sense of place
Preserve open space and farmland

Rural Crossroad

First Building Does Not Address Street and Does Not Establish a Block Pattern For Others to Respond

Lack of street network strings out development
Preserve open space and farmland

Lack of street network strings out development
Lack of street network strings out development

Preserve open space and farmland
Preserve open space and farmland

Street network creates a rural place

Rural Crossroad

First Building Should Address Street and Establish a Block Pattern For Others to Respond
Street network creates a rural place

Preserve open space and farmland
Preserve open space and farmland

Street network creates a rural place
supporting alt: Preserve open space and farmland

Development drawn to rural crossroads

Pristine Rural Landscape

Rural Crossroad

Preserved Rural Vista

Defined Town & Country Edge

Pristine Rural Landscape
Rural development in defined places preserves vistas.

Preserve open space and farmland.
ROADWAY
Existing Cross Section
4-Lane with Bike Path
3-Lane w/ Bike Lane
3-Lane w/ Bike Lane
Traffic Calming Tactic: Enforcement
WHAT’S NEXT?

- Manual / Guidance
- Flexible Development
- Capital Cost Savings
### Corridor Types

<table>
<thead>
<tr>
<th>Land Use Context</th>
<th>Arterials</th>
<th>Collectors</th>
<th>Main Streets</th>
<th>Neighborhood Streets</th>
<th>Farm-to-Market Roads</th>
<th>Bicycle and Pedestrian Trail</th>
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<tbody>
<tr>
<td>Urban Activity Center</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Industrial</td>
<td></td>
<td></td>
<td></td>
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<td>Village Center</td>
<td></td>
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<tr>
<td>Neighborhood Center</td>
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<td>Neighborhood</td>
<td></td>
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<td></td>
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<tr>
<td>Rural Agricultural</td>
<td></td>
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</table>
Corridor Design Guidelines

Corridor Types

- Arterials
- Main Streets
- Collectors
- Neighborhood Streets
- Farm to Market Roads
- Bicycle and Pedestrian Trails
Corridor Design Manual

Comprehensive Plans

Countywide Vision

Regional Plans

Communicate Standards

Land Development Regulations

Capital Improvements Plan

Purpose
**Corridor Specific Guidelines**

**Corridor Type:** Arterial

**Land Use Classification:** Urban Activity Center

<table>
<thead>
<tr>
<th>Required</th>
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</thead>
<tbody>
<tr>
<td>• Curb and gutter</td>
</tr>
<tr>
<td>• Street and pedestrian scale lighting</td>
</tr>
<tr>
<td>• Shade trees</td>
</tr>
<tr>
<td>• Sidewalks</td>
</tr>
<tr>
<td>• Transit stops with benches (if service is provided)</td>
</tr>
<tr>
<td>• Pedestrian activated crossing signal at signalized intersections</td>
</tr>
<tr>
<td>• Bicycle lane or wide outside travel lane</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Design Element</th>
<th>Minimum Width (feet)</th>
<th>Maximum Width (feet)</th>
</tr>
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<tbody>
<tr>
<td>• Vehicle lanes (when bicycle lane is present)</td>
<td>10</td>
<td>12</td>
</tr>
<tr>
<td>• Outside vehicle lane (no bicycle lane present)</td>
<td>14</td>
<td>14</td>
</tr>
<tr>
<td>• Raised median</td>
<td></td>
<td></td>
</tr>
<tr>
<td>• - infrequent driveways and intersections</td>
<td>4</td>
<td>6</td>
</tr>
<tr>
<td>• - short blocks, left turn lanes</td>
<td>12</td>
<td>30</td>
</tr>
<tr>
<td>• Continuous left turn lanes</td>
<td>11</td>
<td>14</td>
</tr>
<tr>
<td>• Bicycle lane</td>
<td>4</td>
<td>5</td>
</tr>
<tr>
<td>• Parking lane</td>
<td></td>
<td></td>
</tr>
<tr>
<td>• - with bicycle lane</td>
<td>7</td>
<td>7</td>
</tr>
<tr>
<td>• - no bicycle lane</td>
<td>8</td>
<td>10</td>
</tr>
<tr>
<td>• Planting strip</td>
<td>4</td>
<td>8</td>
</tr>
<tr>
<td>• Sidewalk</td>
<td></td>
<td></td>
</tr>
<tr>
<td>• - on curb</td>
<td>8</td>
<td>12</td>
</tr>
<tr>
<td>• - off curb</td>
<td>6</td>
<td>10</td>
</tr>
<tr>
<td>• ROW width</td>
<td>80</td>
<td>130</td>
</tr>
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</table>

**Design Speed:** 35 mph - 45 mph

Note: Where ROW permits, it is always preferred to provide a bicycle lane.
**Corridor Design Guidelines**

**Corridor Specific Guidelines**

---

**Corridor Type:** Arterial

**Land Use Classification:** Rural Agricultural

<table>
<thead>
<tr>
<th>Required</th>
<th>Optional</th>
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<tbody>
<tr>
<td>• Grass median</td>
<td>• Striped bicycle lane</td>
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<tr>
<td>• Paved shoulder</td>
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<table>
<thead>
<tr>
<th>Design Element</th>
<th>Minimum Width (ft)</th>
<th>Maximum Width (ft)</th>
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<tbody>
<tr>
<td>• Vehicle lanes</td>
<td>10</td>
<td>12</td>
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<tr>
<td>• Paved shoulder/Bicycle lane</td>
<td></td>
<td></td>
</tr>
<tr>
<td>speed &lt; 45 mph</td>
<td>5</td>
<td>8</td>
</tr>
<tr>
<td>speed &gt; 45 mph</td>
<td>6</td>
<td>8</td>
</tr>
<tr>
<td>• Median</td>
<td>24</td>
<td>50</td>
</tr>
<tr>
<td>• ROW width</td>
<td>100</td>
<td>146</td>
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Distance is equal to or greater than required clear zone.

---

Image showing a road design with the design speed of 45-60 mph.
Corridor Specific Guidelines

CORRIDOR TYPE: MAIN STREET

LAND USE CONTEXT: URBAN ACTIVITY CENTER/VILLAGE CENTER/RURAL CLUSTER

<table>
<thead>
<tr>
<th>REQUIRED</th>
<th>OPTIONAL</th>
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<tbody>
<tr>
<td>On-street parking</td>
<td>Bicycle lane</td>
</tr>
<tr>
<td>Bulb-outs with landscaping</td>
<td>Curb</td>
</tr>
<tr>
<td>Gutter</td>
<td></td>
</tr>
<tr>
<td>Shade trees</td>
<td></td>
</tr>
<tr>
<td>Pedestrian scale lighting</td>
<td></td>
</tr>
<tr>
<td>Shelter at bus stop (if served by transit)</td>
<td></td>
</tr>
<tr>
<td>Pedestrian crosswalk treatment</td>
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<table>
<thead>
<tr>
<th>DESIGN ELEMENT</th>
<th>MINIMUM Width (feet)</th>
<th>MAXIMUM Width (feet)</th>
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<tr>
<td>Vehicle lane width</td>
<td>10</td>
<td>11</td>
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<td>Bicycle lane</td>
<td>5</td>
<td>5</td>
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<tr>
<td>Parallel parking</td>
<td>7</td>
<td>7</td>
</tr>
<tr>
<td>- with bike lane</td>
<td>7</td>
<td>10</td>
</tr>
<tr>
<td>- without bike lane</td>
<td></td>
<td></td>
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<tr>
<td>Angled parking</td>
<td>19</td>
<td>20</td>
</tr>
<tr>
<td>- length</td>
<td>9</td>
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<td>- width</td>
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<tr>
<td>Sidewalk</td>
<td>8</td>
<td>15</td>
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<tr>
<td>ROW width</td>
<td>56</td>
<td>82</td>
</tr>
</tbody>
</table>

PARKING OPTIONS

PARALLEL PARKING

- Side walk: 7' 5'
- Parking Lane: 10' 11'

FRONT END ANGLED PARKING

- Side walk: 7' 9'
- Parking Lane: 10' 11'

REAR END ANGLED PARKING

- Parking Lane: 7' 10'
- Travel Lane: 12' 15'

SIDEWALK OPTIONS

STROLL

Allows for 2 way pedestrian travel and amenities such as benches and trash receptacles.

- Width: 10' 11'
- Length: 5'
- Design Speed: 25-30 mph

PLAZA

Provides space for outdoor dining or cafes.

- Width: 10' 11'
- Length: 7'
- Design Speed: 25-30 mph

- Length: 5'
- Design Speed: 25-30 mph

Note: Width of parking lane may be measured from face of curb and may include all or a portion of the gutter.
Corridor Type: Neighborhood Street

Land Use Context: Neighborhood/Neighborhood Center

<table>
<thead>
<tr>
<th>Required</th>
<th>Optional</th>
</tr>
</thead>
<tbody>
<tr>
<td>Curb and gutter</td>
<td>Brick pavement</td>
</tr>
<tr>
<td>On-street parking</td>
<td>Neckdowns at intersections</td>
</tr>
<tr>
<td>Pedestrian scale lighting</td>
<td>Bulbs</td>
</tr>
<tr>
<td>Planting strip</td>
<td></td>
</tr>
<tr>
<td>Shade trees</td>
<td></td>
</tr>
<tr>
<td>Sidewalks</td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Design Element</th>
<th>Minimum Width (feet)</th>
<th>Maximum Width (feet)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Cutway (includes gutter)</td>
<td>10</td>
<td>26</td>
</tr>
<tr>
<td>Planting strip</td>
<td>4</td>
<td>8</td>
</tr>
<tr>
<td>Sidewalk</td>
<td>5</td>
<td>8</td>
</tr>
<tr>
<td>ROW Width</td>
<td>36</td>
<td>58</td>
</tr>
</tbody>
</table>

Note: In neighborhood centers with high activity uses such as schools, parks, and churches, 6' sidewalks are required.
## Corridor Types

<table>
<thead>
<tr>
<th>Land Use Context</th>
<th>Arterials</th>
<th>Collectors</th>
<th>Main Streets</th>
<th>Neighborhood Streets</th>
<th>Farm-to-Market Roads</th>
<th>Bicycle and Pedestrian Trail</th>
</tr>
</thead>
<tbody>
<tr>
<td>Urban Activity Center</td>
<td></td>
<td>✔</td>
<td>✔</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Industrial</td>
<td>✔</td>
<td>✔</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Village Center</td>
<td></td>
<td>✔</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Neighborhood Center</td>
<td></td>
<td>✔</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Neighborhood</td>
<td></td>
<td>✔</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Rural Cluster</td>
<td>✔</td>
<td>✔</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Rural Agricultural</td>
<td>✔</td>
<td>✔</td>
<td></td>
<td></td>
<td></td>
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</tr>
</tbody>
</table>
Master Planning Process

Step 1: Define Study

Step 2: Define Context

Step 3: Visioning

Step 4: Design

Step 5: Implementation
For America’s Big Retailers, Small Is Beautiful, Sometimes

How Wal-Mart Became Small-Mart

Pushed by smaller rivals, Wal-Mart created Neighborhood Markets to offer more convenient shopping to those too rushed or too weary to roam the much larger Wal-Mart stores.

<table>
<thead>
<tr>
<th></th>
<th>Average Square Feet</th>
<th>Number of Items</th>
<th>Number of Stores</th>
<th>Stores Opening This Year</th>
</tr>
</thead>
<tbody>
<tr>
<td>Neighborhood</td>
<td>40,000</td>
<td>24,000</td>
<td>8 states</td>
<td>20-25</td>
</tr>
<tr>
<td>Supercenters</td>
<td>200,000</td>
<td>100,000</td>
<td>44 states</td>
<td>200-210</td>
</tr>
</tbody>
</table>

Source: Wal-Mart

By CONSTANCE L. HAYS

The New York Times

After carpeting the country with stores measuring 150,000 square feet or more, retailers are discovering that people do not always have the time or the inclination to get all the way through them.

Yes, the abundance of a 200,000-square-foot Wal-Mart Supercenter is impressive: the equivalent of four football fields of stuff. And sure, it’s handy to be able to buy just about everything at a single 175,000-square-foot SuperTarget. But at the same time, time-pressed shoppers, particularly millions of aging baby boomers, are sometimes finding these stores to be too large, too inconvenient and too tiring to get all the way through.

And the big-box retailers have noticed. Wal-Mart Stores has been aggressively opening scaled-down versions of its Supercenters — less than one-quarter their size — called Neighborhood Markets. So far the company has built 46 smaller stores scattered through Oklahoma, Arkansas, Texas, Mississippi and Tennessee; a handful opened in Florida, Alabama and Utah in the past week.

Retail analysts have taken to calling them Small-Marts.

In Brooklyn, Home Depot has opened a shrunken version of its usual model. Other retailers, including Toys “R” Us and Staples, are retrofitting stores to make them smaller, cozier and more intimate, qualities the big-box format was supposed to displace.

“Customers are demanding respect for their time,” said David M. Szymaniak, director of the Center for Retailing Studies at Texas A&M University. “One way to respond to that is to offer formats that cater to that.”

Leisa Still suffers at times from big-store fatigue. Ms. Still,
“Put the Fat Chicken Out Front” – David Butterfield
Initial Approach to CSD

- **Capital Cost**
  - Conventional 4/6 Lane
- **Community Acceptance**
  - Preferred Alternative
  - Sidewalks
  - Bike Lanes
  - Landscaping
  - Access Control

Additions
Emerging Approach to CSD

- Preferred Alternative
- Conventional 4/6 Lane
- Conventional 2/4 Lane
- Local Roads/Connections
- Land Development Regulations
Transportation Options and Community Livability

VEHICULAR SERVICE

Seconds

Large Gain

LIVABILITY
OUR LADY OF THE HIGHWAYS
CATHOLIC CHURCH

MASS TIME
5:30PM SAT & 10:30 SUN
12:30 SUN ESPANISH

Smart Growth and Smart Transportation
CONTEXT SENSITIVE DESIGN

Center for Quality Growth
And Regional Development

Tim Jackson  P.E., AICP
Glatting Jackson Kercher
Anglin Lopez Rinehart, Inc.

May 12, 2004