

# **Clarksville Urbanized Area Pedestrian and Sidewalk Study**

**March 9, 2004**

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RPM & Associates**

# Why was a Study Needed?

- Significant growth, youthful community
- Growing number of pedestrians
- Increasing number of sidewalk requests
- Increasing sidewalk maintenance needs
- Limited funds for sidewalks
- How to prioritize use of limited sidewalk improvement funds (\$250k in '04 budget)
- How to fund more sidewalks
- Implementation of Greenways Plan

## **Some Key Questions to Answer**

- Do all streets need sidewalks?
- On one or both sides?
- Can shoulders be used as alternatives to sidewalks?
- What are the highest priority streets to install sidewalks?
- What factors drive the priority?
- What should our basic sidewalk standards be?

# Some Key Questions to Answer

- How do TDOT and Federal standards affect our program (i.e., ADA) ?
- How do sidewalks affect street design?
- What should private development be required to build?
- What are the costs?
- What is the best funding approach?
- Who should maintain sidewalks?

# Key Study Tasks

1. Evaluate Current Conditions in Urban area
2. Develop *Draft* Policies and Standards
3. Develop *Draft* Prioritization Process
4. Estimate Future Needs and Costs
5. Seek Public Review and Input
6. Identify Needed Ordinance Revisions
7. Submit Final Pedestrian & Sidewalk Plan

# Study Steering Committee

Representatives from:

- Clarksville/Montgomery County RPC
- City of Clarksville
- Montgomery County
- Clarksville/Montgomery County School System

# Everyone is a pedestrian at one time or another



# Safety is Key



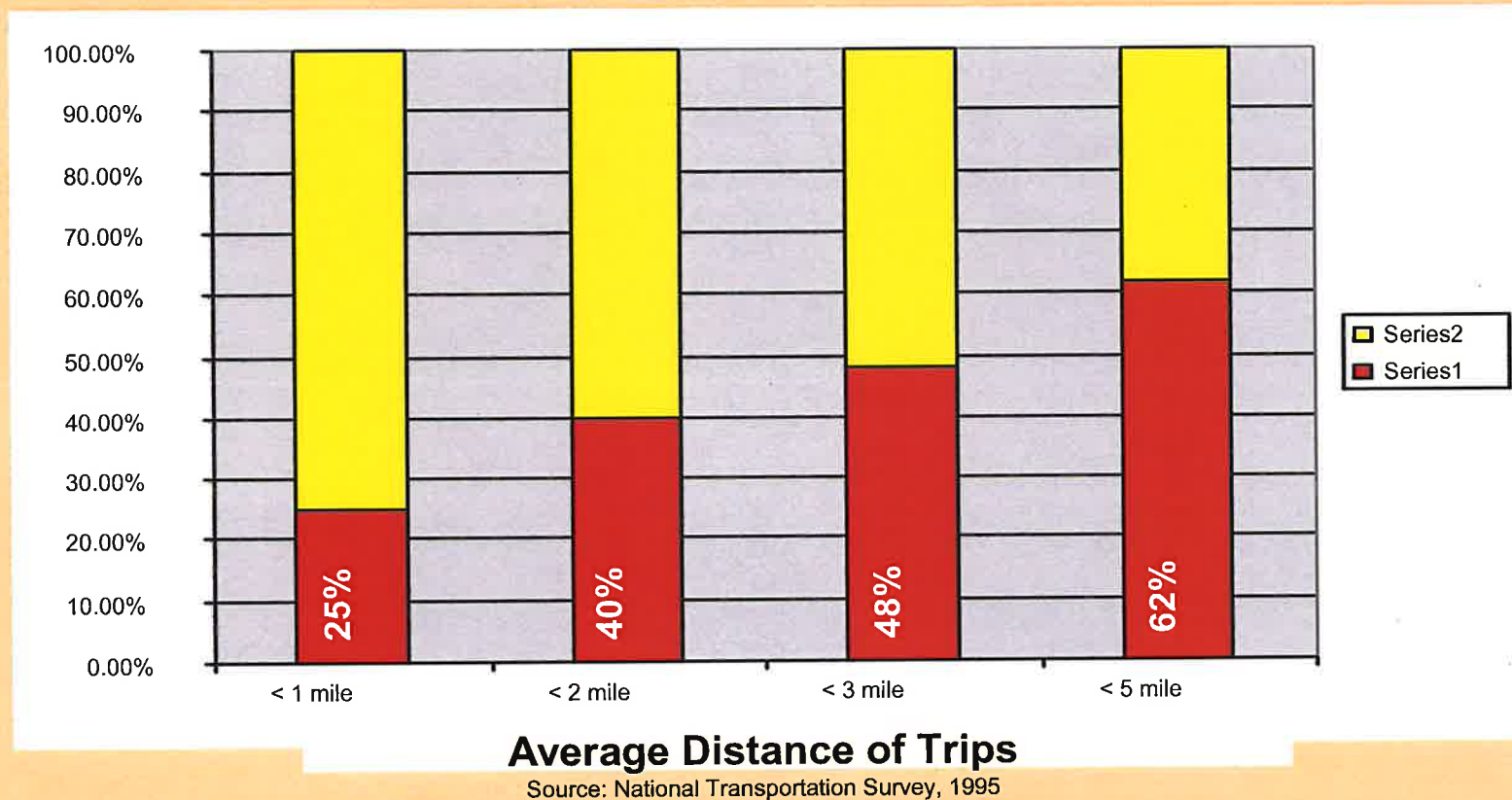
- 6,000 pedestrians are killed every year
- 90,000 pedestrians are injured every year
- Pedestrian injuries and fatalities result in societal costs of \$20 billion





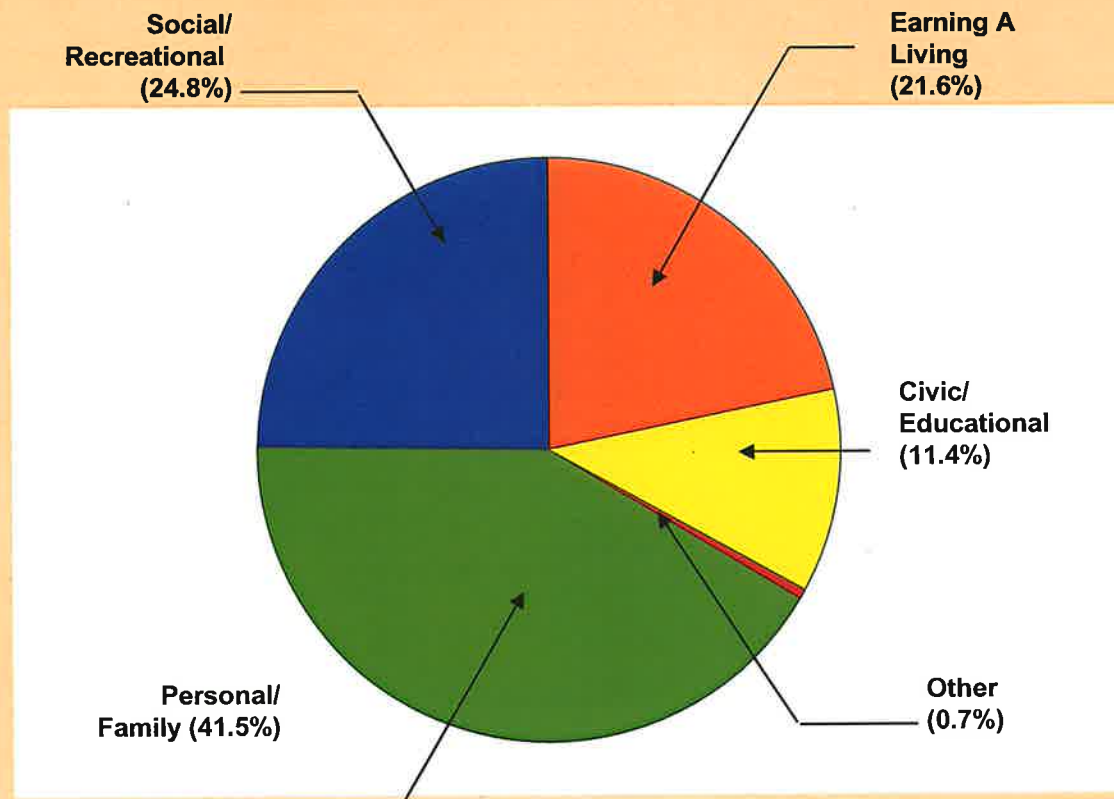
# Convenience

One-fourth of all trips people make are one mile or less, yet three-fourths of these short trips are made by car when they could be made by walking or biking



# Mobility

The average person is willing to walk a half-mile for non-recreational travel



**Purpose of Daily Trips For  
All Modes of Travel**

Source: National Transportation Survey, 1995

**What are the sidewalk  
issues in Clarksville?**

# Sidewalk Issues for Clarksville



**Lack of Sidewalks**



# Sidewalk Issues for Clarksville



**Incomplete Sidewalks**



# Sidewalk Issues for Clarksville



**Sidewalk  
Obstructions**

# Sidewalk Issues for Clarksville



**Lack of connections to schools, parks and other high-volume destinations**



# Sidewalk Issues for Clarksville



**Inadequate Crossing  
Facilities**



# Sidewalk Issues for Clarksville



**Existing Maintenance Problems**

# Sidewalk Issues for Clarksville



**Americans with Disabilities  
Act (ADA) Issues**

## **Current Conditions**

- Estimated 74 miles of sidewalks along 705 miles of street in Clarksville urban area
- Some sidewalks non-standard design, some need maintenance, many obstacles
- Sidewalks not required by Subdivision Regulations or Ordinances
- Some existing City sidewalk projects (Red River District, school areas)
- Increasing citizen complaints and requests

# Existing Sidewalks Within Clarksville Urbanized Area

Street Type	Roadways (Miles)	Sidewalks (Miles)	Ratio (SW/RW)
Local	564	49	0.09
Collector	41	8	0.19
Arterial	100	18	0.18
Total	705	75	0.11

# **Key Factors in Selection of Local Sidewalk Projects**

<b>Sidewalk Priority Indicators</b>
<b>Central Business Improvement District</b>
<b>Elementary, Middle &amp; High Schools</b>
<b>Colleges &amp; Universities</b>
<b>Parks &amp; Greenways</b>
<b>Public Housing</b>
<b>Multi-family Development</b>
<b>Civic Centers (Post office, library, government offices)</b>
<b>Commercial or Mixed-Use Development</b>
<b>Single Family Development</b>
<b>Transit Routes</b>
<b>Senior Housing</b>
<b>Missing Segment (within ¼ mile of existing sidewalk)</b>
<b>Missing Segment (within ½ mile of existing sidewalk)</b>
<b>Damaged Segment on Existing Sidewalk</b>
<b>Available Right-of-Way</b>
<b>ADA compliance needs</b>
<b>Daily Traffic Volumes &gt; 20,000 vpd</b>
<b>Daily Traffic Volumes 5,000-20,000 vpd</b>
<b>Posted Speed Limit &gt; 40 mph</b>
<b>Posted Speed Limit 30-40 mph</b>

# Sidewalk Issues for Clarksville



Health, Fitness  
& Quality of Life



# How Does the Clarksville Area Compare?

City	Roadway Miles	Sidewalk Miles	Ratio
Clarksville, TN	705	74	0.11
Knoxville, TN	1,100	230	0.21
Johnson City, TN	400	130	0.33
Bowling Green, KY	234	85	0.36
Jackson, TN	425	198	0.47
Champagne, IL	220	240	1.09
Billings, MT	463	770	1.66
Riverside, IL	32	64	2.00

# **Steering Committee Recommendations for Sidewalk Policies & Standards**

- Provide on all roads and streets
- Provide on both sides of road
- Paved shoulders are not acceptable alternatives to sidewalks
- Keep utilities and obstacles out of sidewalks
- Consistent application and standards throughout urban area



# **Steering Committee Recommendations for Sidewalk Policies & Standards**

- **Construct with all City and County roadway projects**
- **Require of all development projects at subdivision or major building permit**
- **Construct sidewalks at time of development**
- **Obtain additional right-of-way or easement as required**
- **Exemptions allowed in industrial areas and for severe physical constraints**

# **Steering Committee Recommendations for Sidewalk Policies & Standards**

- **New installations should be prioritized based on safety and need**
- **All sidewalk maintenance by City or County**
- **Establish exemption and appeal process**
- **Develop new sidewalk Ordinance**
- **Establish minimum design standards**

# Suggested Responsibility for Sidewalk Improvements

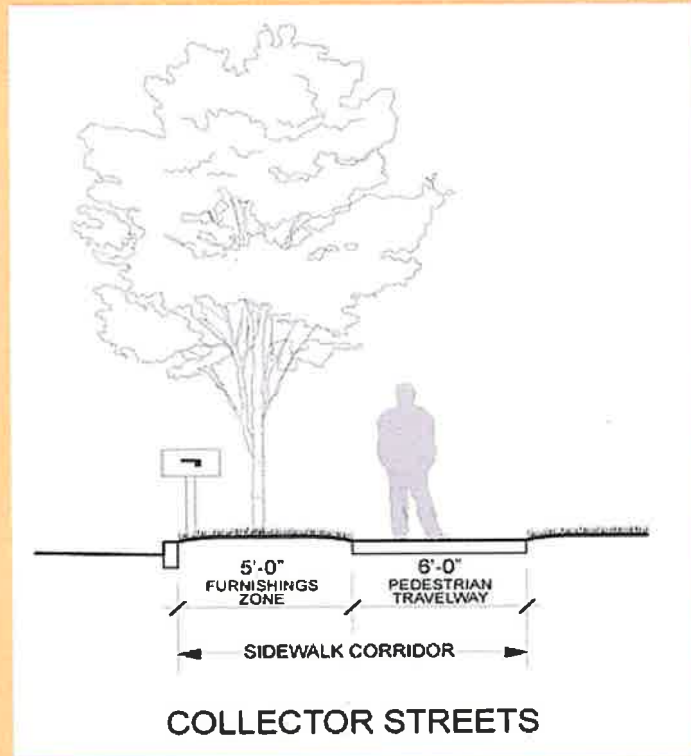
IMPROVEMENT TYPE	REPONSIBILITY
<b>NEW - Install new sidewalks with new streets</b>	<b>-With Development -With City, County, State projects</b>
<b>RETRO-FIT - Install new sidewalks on existing streets</b>	<b>-With Development -With City, County, State projects</b>
<b>MAINTENANCE - Maintain existing sidewalks, ADA conformance</b>	<b>- By City and County</b>

# Sidewalk Design Standards



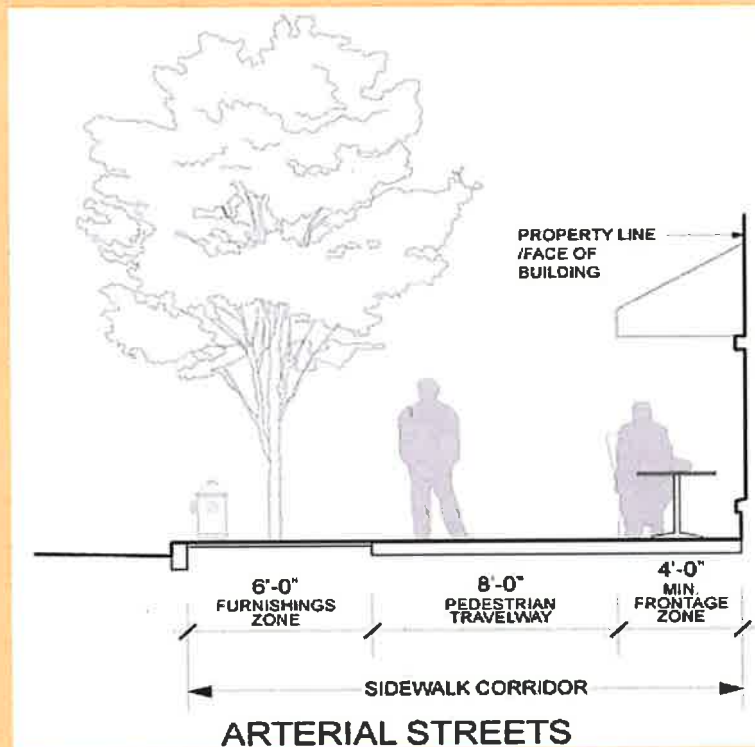
## Local Streets

# Sidewalk Design Standards



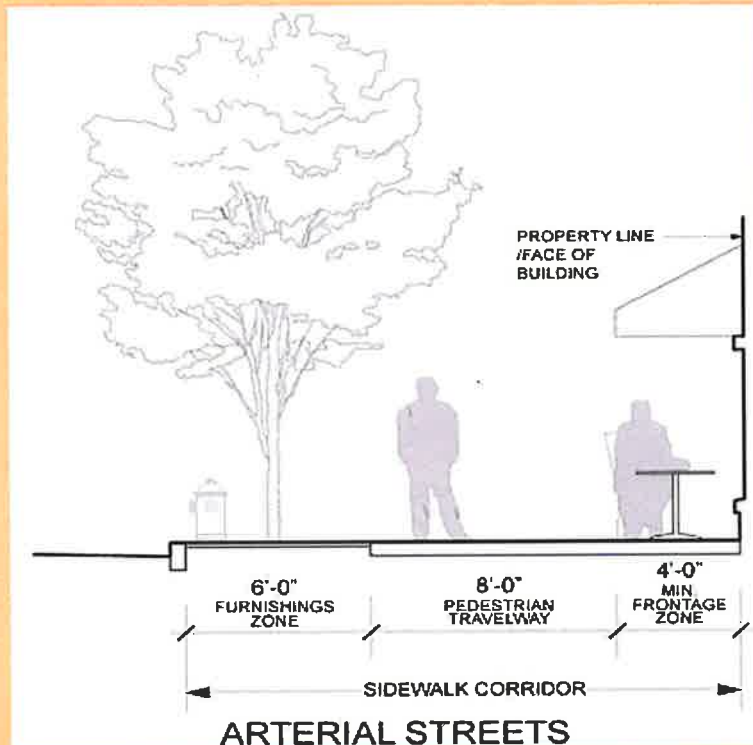
## Collector Streets

# Sidewalk Design Standards



## Arterial Streets - Suburban

# Sidewalk Design Standards



## Arterial Streets - Downtown

**What are the costs of new  
sidewalks?**



# Future Potential Costs

- Assume average \$50 cost per lineal foot
- 1 mile of sidewalk = \$264,000
- 1 ADA-compliant corner ramp = \$2,500
- To provide sidewalks on both sides for:

91 miles of arterial streets	\$48,050,000
37 miles collector streets	\$19,500,000
540 miles local streets	<u>\$285,120,000</u>
TOTAL	\$352,670,000

# **Conclusions**

- **Impossible to provide full sidewalk coverage in the urban area**
- **Confirms importance of prioritization and project selection process**
- **Urban area will build a better sidewalk system over time through additions by the City, County and development**

# **Next Steps**

- **Revise recommendations after today's input**
- **Receive more input at public meeting**
- **Make final revisions to Plan**
- **Bring to RPC, City & County for approval**

# Goal for Clarksville - A Walkable Community



**Questions?**

**Thank you!**