

Creating Safe & Walkable Communities for Older Adults



An academic-community partnership:

UNC Highway Safety Research Center

NC Healthy Aging Research Network

The Greater Hendersonville Community



Project Goals

- Create safer & more inviting neighborhood walking environments
- Use interviews & audits as catalysts for community action
- Evaluate strategies to improve senior pedestrian safety & walkability



Project Sponsors



- Supported by cooperative agreements & resources from:
 - National Highway Traffic Safety Administration
 - N.C. Governors Highway Safety Program
 - N.C. Healthy Aging Research Network
 - Centers for Disease Control and Prevention (*Healthy Aging Research Network, Prevention Research Centers and Health Care and Aging Studies Branch*)



NC Healthy Aging Research Network





Presentation Objectives

- List factors affecting older pedestrian safety & mobility.
- Identify key community partners in creating safe & walkable communities.
- Explore methods for assessing safety & walkability.
- Discuss strategies for improving routes.



Older Adult Safety & Mobility

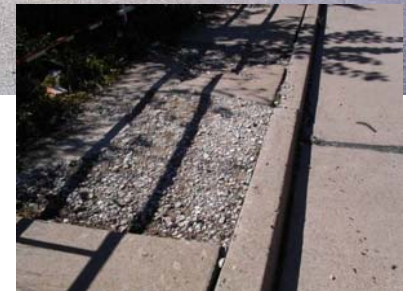
- Older adults encouraged to walk, but...
 - At increased risk
 - Falls
 - Injury from motor vehicles
 - Other concerns
 - Personal safety
 - Places to rest
 - Access to bathrooms



Addressing the Gaps

- More attention to urban settings
- Focus on destination-driven walking
- Little attention to user variation
 - Walkable for whom?
 - Safe for whom?
- Emphasis on new construction
- Lack of clarity about assessment

Hendersonville



Not all neighborhoods are created equal

Core Partners



Henderson County Health Department





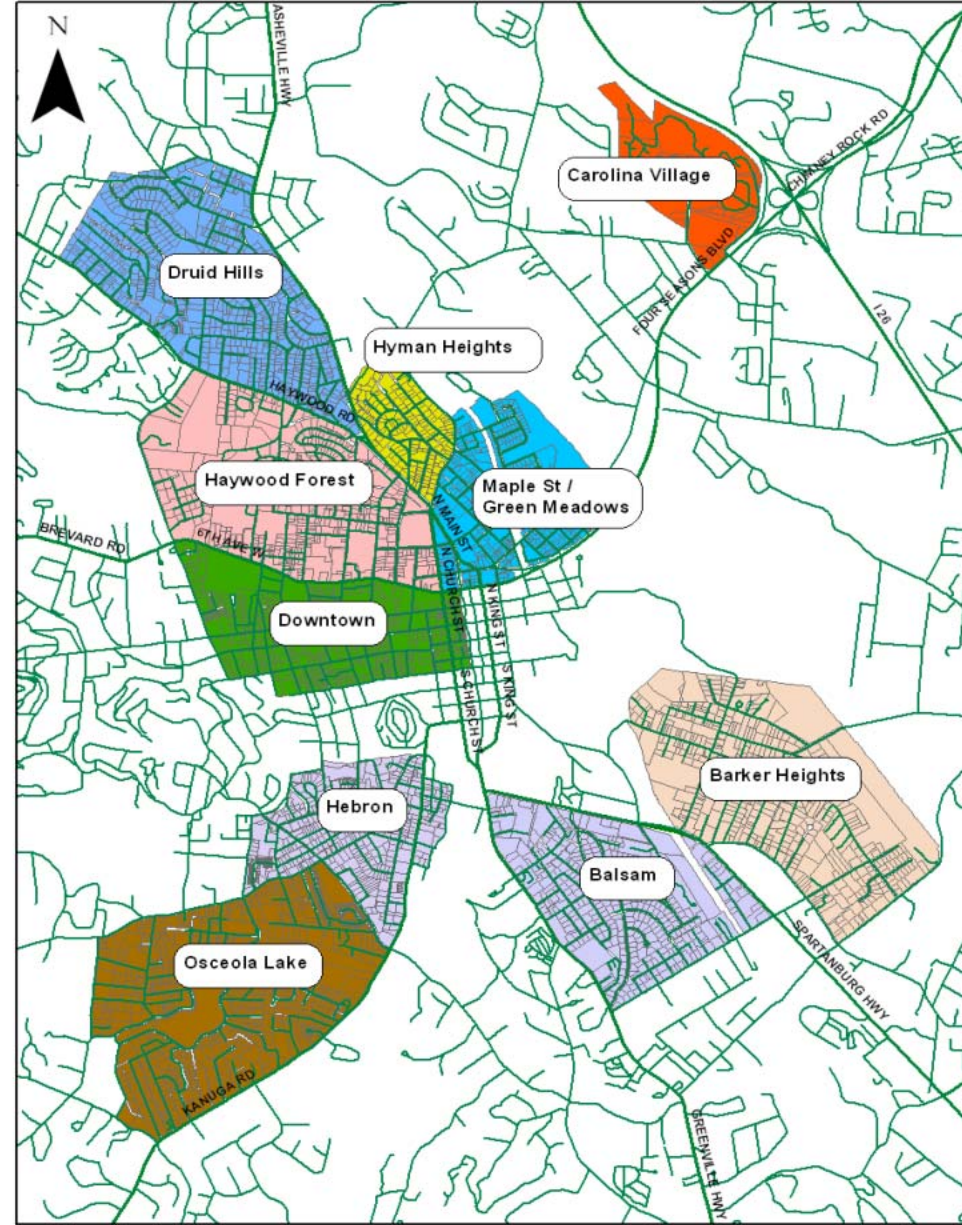
Engaging Partners

- Build bridges
 - Community advisory group
 - Various sectors/levels often strangers to one another
- Connect to existing initiatives
 - Livable and Senior Friendly Communities
 - Bi-Peds
- Ensure visibility of all
- Stress collaboration
- Evaluate progress

10 neighborhoods

- *High proportion older residents*
- Gather resident input
- Select routes
- Audit routes
- Identify needed changes

Hendersonville Neighborhoods





Assessing Neighborhoods

- Perceptions of residents
 - Interviews
 - Surveys
 - Neighborhood & community meetings
- Judgments of residents, officials & experts
 - Audits



Feedback from Residents

- Unclear who to call about problems
 - Garbage cans on sidewalk
 - Vehicles parked on sidewalks
 - Overgrown shrubs
- Lack of restrooms & benches
- Unfriendly or aggressive drivers
- Sidewalks not wide enough for wheelchairs or scooters
- Cut-through traffic in neighborhoods



Requests from Residents

- Tell us who to call for problems.
- Advise us how to have input into decision-making by the city.
- Help us create one safe route in our neighborhood.





Audits

- PRC-Healthy Aging Network Audit Tool

- Land use
- Destinations
- Walkways
- Street characteristics
- Aesthetic & social environment
- Intersection traffic & facilities

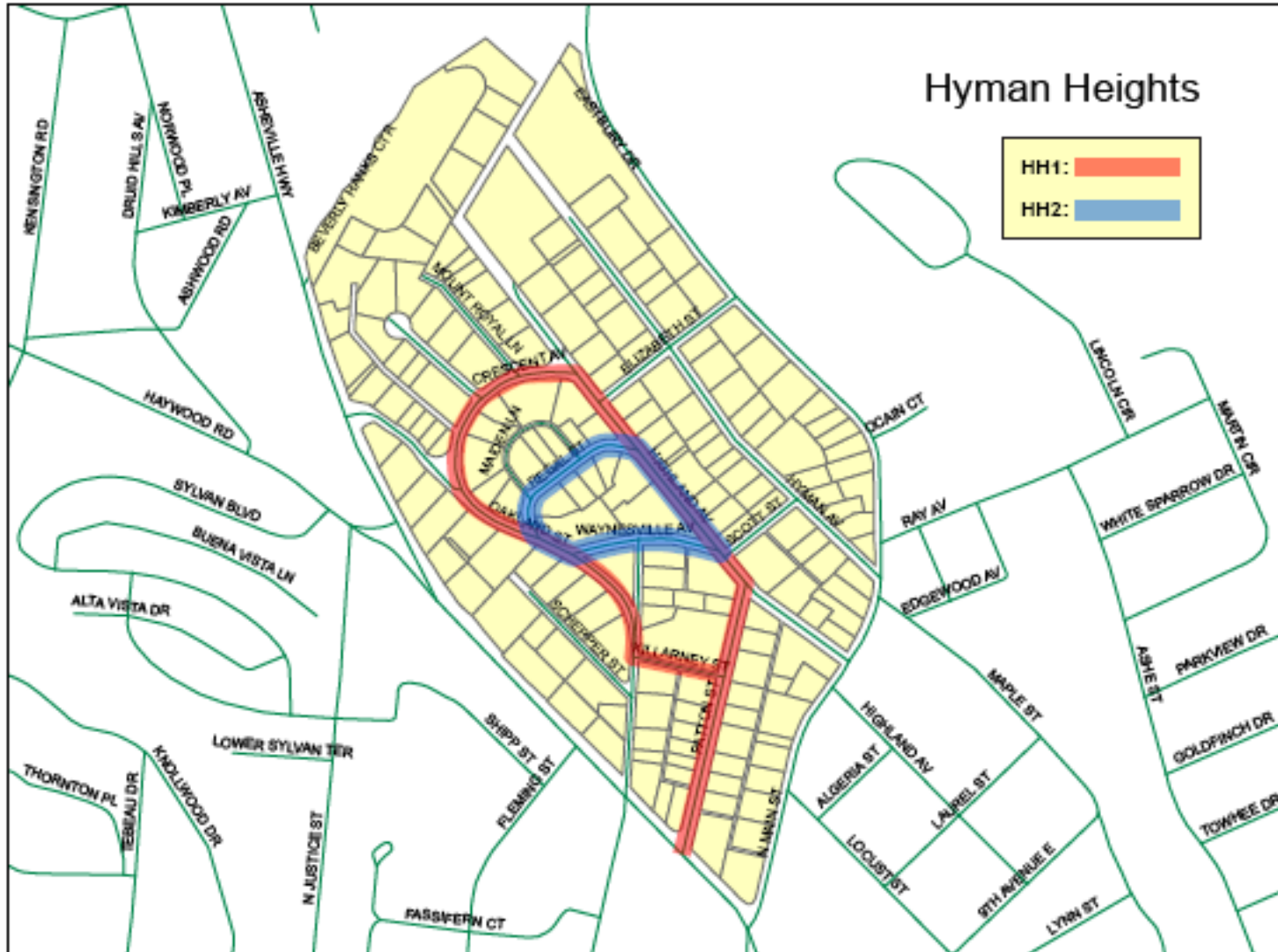


- Feet-First Neighborhood Audit

- Walk-Wise Photo Audit

- Street-level detail of all problems

Hyman Heights Neighborhood





HAN-PRC Healthy Aging Network Audit Tool

● Segment data

- Land use
- Destinations
- Walkways
- Street characteristics
- Aesthetic & social environment
- Intersection traffic & facilities

● Trained data collectors





Strengths & Limitations

- Useful for research
- Ignores walkability of areas without sidewalks
- May lack resident input
- Variable specificity for change
 - Intersection component suggests action





Feet First Neighborhood Walk

● Residents & knowledgeable leader

- Residents
- DOT
- City planner
- Public works director
- Transportation engineer
- Aging services

● Promotes discussion

- Relative importance of issues
- Potential solutions



Feet First Report



Issues & Action Items

Hendersonville, NC - Hyman Heights Walking Audit

Item	Location	Description	Category	Photo
3	NC 191 & US 25 Intersection	<i>Crosswalks missing.</i> This intersection provides no marked or signalized crossings across US 25. This is a legal crosswalk, but does not afford any facilities to make crossing here a safe option. Marking crosswalks and adding pedestrian signal heads (especially countdown signals) is recommended. Many other state highways would recognize every signalized intersection as a legitimate place for pedestrians to cross the highway.	Crosswalks	
4	NC 191 & US 25 Intersection	<i>Signal timing is inadequate for crossing on foot.</i> The fact that this intersection establishes legal (though unmarked) crosswalks does not mean that it is presently safe to cross here. We crossed US 25 departing from the pork chop island on the north side in a platoon, and waving at the waiting drivers who received a green before we could finish crossing. Large crosswalk spans are enhanced by the installation of ped-heads with countdown signals. New MUTCD recommendations under review will establish timing standards for flashing "don't walk" at a 3.5 ft/sec pace and the total time (with "walk" phase) at 3.0 ft/sec.	Signal timing Example photo --> (Courtesy Dan Burden)	
5	NC 191 & US 25 Intersection	<i>Crosswalk across 191 S/B entrance to S/B 26 appears unsafe due to driver behavior.</i> Drivers here were observed to completely ignore the requirement to yield. A curb extension, high visibility crosswalks, targeted enforcement, stop lines, advance educational signage, and other such treatments could improve compliance.	Driver compliance with yield to peds	
6	Oakland & Crescent	<i>Traffic speed & volumes on residential streets.</i> Residents of Hyman Heights note that speed, traffic volume, and one-way non-compliance problems are significant and attributable to cut-through traffic between US 25 and points to the east. There is poor connectivity and "permeability" due to the historic street grid and topography of the area. The current one-way streets was an initial attempt to mitigate this problem and further action may be warranted. This is an opportunity for traffic calming & citizen action.	Traffic Calming	







Walk Wise Photo Audit

Identify
problems

Assess risk

Recommend
action

Track changes

Location	Photo	Problem	Risk/Walkability Level	Recommendation
Patton 1020 Patton North side Segment #		<u>Grass over SW</u> Who maintains strip?	MODERATE Tripping hazard for walkers	<u>ASAP</u> – Trim Neighborhood ED
Patton		<u>SW discontinuity</u> ~ 2"	HIGH Tripping hazard	<u>Now</u> -Flag with paint <u>ASAP</u> - Repair
1104 Patton		<u>Garbage can in PW</u> Obstacle for people in scooters or walkers or with visual impairments	MODERATE Obstacle	Neighborhood ED e.g., flyers for cans; Public Works employee ED
Patton		<u>Overgrown shrub</u> ; unoccupied (?) house; <i>Issue</i> – how to ensure good maintenance on <i>Walk Wise</i> route?	LOW Problem for people with visual impairment	Neighborhood ED; public works, realtor, neighborhood swat team
1112 Patton		<u>Overgrown shrub</u>	LOW	See above
Intersection of Patton & Highland		<u>Paint fading on crosswalks</u> <u>No curb ramp</u> Not accessible to people with mobility impairments	LOW HIGH	<u>Future</u> – Paint <u>ASAP</u> – Install ramp



Hyman Heights Problems

- 16 segments & intersections
- Pavement issues
 - Sidewalk discontinuities – 31
 - Cracks, bumps, pits – 13
 - Bad or missing curb ramps – 4
- Crossing issues
 - Faded crosswalks – 2
 - No crosswalk – 2
 - Unsafe crossing – 1
- Obstacles - 16

Risks

- Highest – 1
- High – 28
- Moderate - 18



Information from Audits

- Numerous street-level problems
 - Sidewalk discontinuities
 - Poor curb cuts
 - Many places with no sidewalks
 - All especially problematic for people with functional challenges
- Most problems amenable to city repair
- Some dependent on homeowner education/action



Action Plan

● Education

- Educate professional & lay community about safety & walkability factors
- Broadly share information about pedestrian safety

● Enforcement support

- Discourage motorist actions that endanger pedestrians
- Monitor unsafe areas

● Environmental changes

- Make sidewalk & crosswalk improvements

● Encouragement

- Work with partners to increase walking in community



Kickoff

- Jackson Park: Saturday, May 13, 2006
- Media event
- Group walks for people of all levels





Educational Activities

- **Safe Routes for Seniors**
 - Pedestrian Bicycle Information Center
 - April 6, 2006, Library
- **Feet First Neighborhood Walking Audit**
 - David Levinger, President of Feet First
 - Apr. 10, 2006, Audit US 25 & Hyman Heights neighborhood
- **Community Forum- Walking Audit Results**
 - Apr. 11, 2006, City Operations Center

Educational Activities



- Safe walking & driving brochures
- Support of AARP/ASA Car Fit Events
 - April 2007 Trinity Presbyterian Church (with Park Ridge Hospital)
 - May 2007 Blue Ridge Mall

You can make a difference!

You are an important part of making our city a safe and enjoyable place to walk and to drive.

Walk Wise:

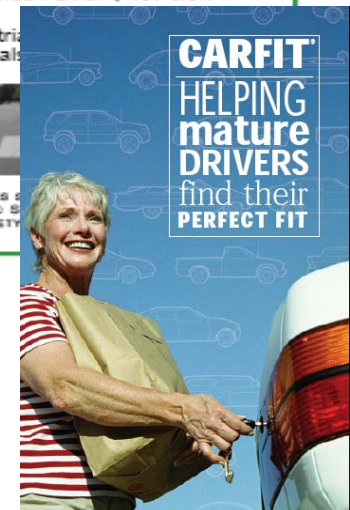
- Be sure you can be seen **BEFORE** crossing the street.
- Report dangerous or unsafe conditions to Public Works, 828-697-3084.



Drive Smart:

- Be alert for pedestrians. Keep in mind that some people may need extra time to cross the street.
- Do not take chances with a life. Red lights and stop signs mean **STOP**, not *slow down*.
- **YIELD** to pedestrians who do not have signals.

WALK WISE, DRIVE SMART IS A NATIONAL HIGHWAY TRAFFIC SAFETY COUNCIL AND GOVERNOR'S HIGHWAY SAFETY





Enforcement Activities

- Engage city police
- Use of speed trailers
- Increased monitoring of problem areas



Environmental Changes



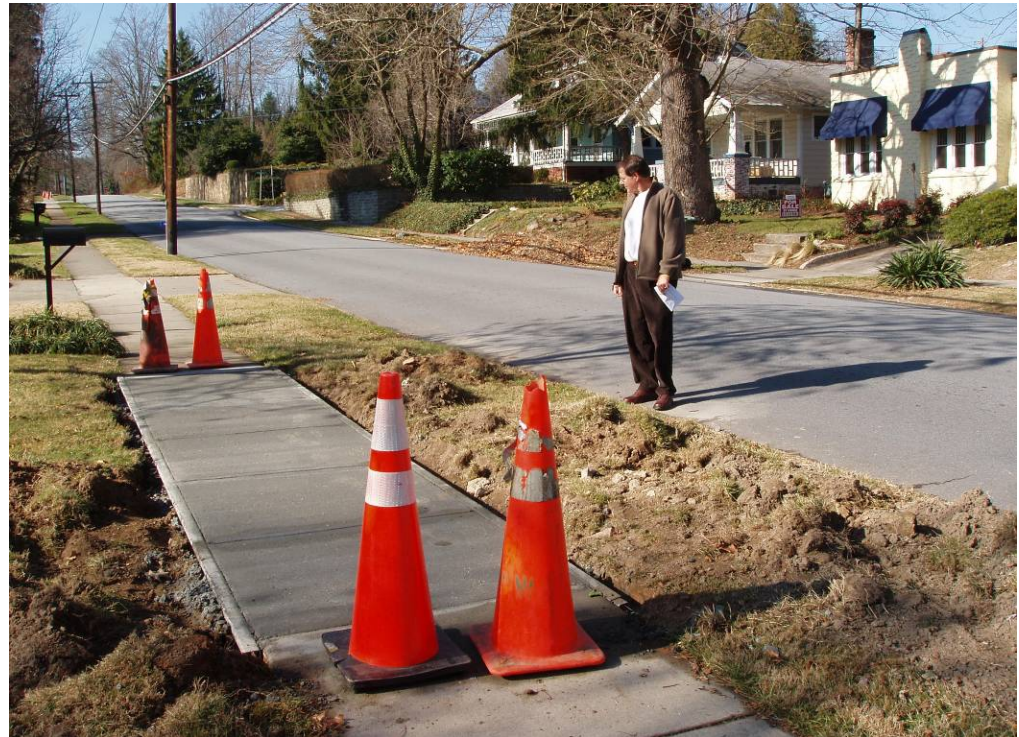
- Photo audits of routes in target neighborhoods
- Audits/recommendations sent to Public Works for repairs
- Routes to be stenciled when completed





Environmental Work in Progress

- Sidewalk improvements in “Downtown” neighborhood



Environmental Work in Progress



- New mid-block crossing signs
 - Main Street
 - Connecting parking lot & library





Changing Driver Behavior

- Yard signs
- Traffic rerouting



Changing Driver Behavior



- Incentives to motorists to drive carefully & courteously around pedestrians
 - Prizes
 - Postcards for drawing





Encouraging Safe Walking

- Incentives for safe walking
- Sponsored group walks
 - Parks
 - Trails
 - Neighborhoods
- Growing participation





Helping People Get Started

- Active Aging Week
 - September 2006
 - September 2007
- Opportunities to reach inactive people or who want to try something new
- Collaboration with AARP & Senior Center Walking Programs



Lessons Learned

- Tremendous community interest
- Great receptivity by City officials
- Good results from bringing key organizations together
- Everyone --old, young, people with special needs -- wins!



Evaluation Plan



- Analysis of pre and post:
 - crash and injury data
 - enforcement data
 - environmental audit data
 - NEWS surveys
 - Communications audits



Stepping Up to a More Walkable Hendersonville

- Home
- About Us
- Community Input
- Photos
- News Room
- Materials
- Events
- Project Partners
- Links

WELCOME!

Next to driving or riding in cars, walking is the most frequent mode of transportation for senior adults. *Walk Wise, Drive Smart* aims to create more pedestrian-friendly environments for senior adults within Hendersonville, NC, and surrounding areas.

Walk Wise, Drive Smart is a neighborhood-based project that is part of the Henderson County Livable and Senior Friendly Community Initiative. The program builds upon established community relationships and uses community input to guide improvements to the walkability of Hendersonville.

Walk Wise, Drive Smart combines educational, encouragement, enforcement and environmental activities to create a safer and more inviting walking community. The program seeks to develop and implement a model that can be replicated in similar settings in North Carolina and beyond.

[Click here](#) to read more about National Active Aging Week in Hendersonville.

[Click here](#) to read more about the *Walk Wise, Drive Smart* incentive program for motorists who drive courteously near pedestrians.

[Click here](#) to read more about the CarFit Event on May 17th, sponsored by *Walk Wise, Drive Smart*, NC AARP, and the Healthy Aging Coalition of Henderson County.

[Contact us](#)



Walk Wise, Drive Smart staff are now handing out postcards to motorists who drive courteously around pedestrians. The postcard allows the driver to enter a drawing for one of our monthly prizes. Here an award is made for stopping for a pedestrian at a mid-block crossing on Main Street.



A section of sidewalk at 4th Avenue West is repaired as a part of *Walk Wise, Drive Smart*. The sidewalk is part of the "Walk Across NC" walking route near the Sammy Williams Center for Active Living.

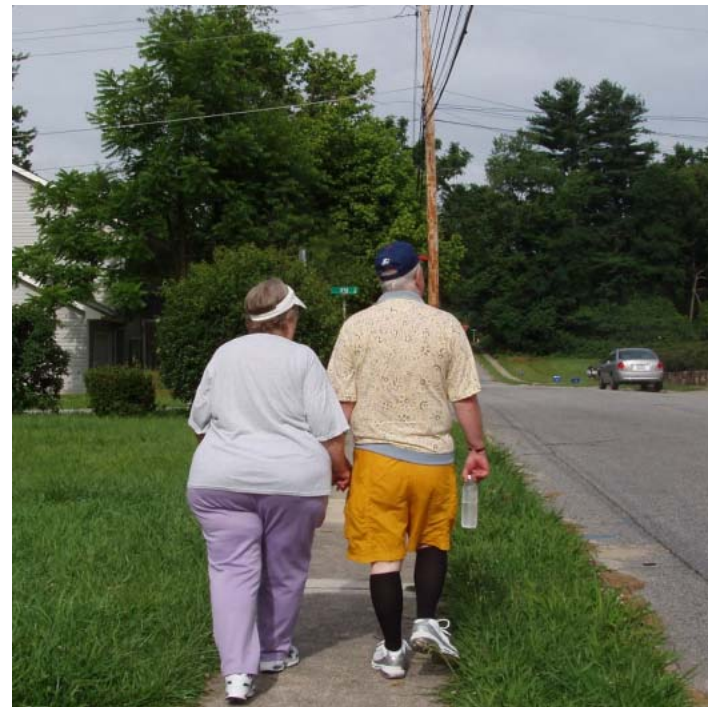


www.walk-wise.org

Contact Information



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One step at a time to safer walking!