



Helping Nova Scotians Achieve Better Health Through Walking



This publication is based on a report prepared by Mike Arthur for Heart and Stroke Foundation and the Nova Scotia Department of Culture, Communities and Heritage. To access the full report, send an email request to healthpromotion.ns@heartandstroke.ca



The Five C's of Walkability

An ideal walking environment should be:

- 1 Connected:** *few or no dead-ends, linked to key destinations in the community (housing, workplaces, community facilities, shopping and public transport).*
- 2 Comfortable:** *contains high quality path and pavement surfaces, adequate space, limited steep slopes or steps and includes pedestrian facilities such as seating and toilets.*
- 3 Convivial:** *(people friendly) — clean and well-maintained, safe and lively with mixed land use allowing space for relaxation, recreation and meeting people.*
- 4 Conspicuous:** *inviting and easy to use with good quality signs, information, lighting and maintenance.*
- 5 Convenient:** *direct paths and routes with priority given to pedestrians, providing effective alternatives to other forms of transportation (particularly for short distances).*



Successful walking programs have a clearly defined strategy supported by policy, actions and resources over successive years. A North Carolina study found that municipalities with community pedestrian/bike plans had higher rates of people walking or biking to work. The relationship was stronger in rural areas.

Introduction

This report considers how walking can contribute to solving the problem of physical inactivity in Nova Scotia. The following pages explore the direct and indirect benefits of walking to individuals and communities, and review some current walking trends in this province. You'll also find some key recommendations to increase walking and walkability that you can apply directly to your work. It's hoped this report will inspire and support you in helping Nova Scotians achieve better health through walking.

Physical Activity: How we're Doing Now

In both developed and developing nations around the world there is a significant and persistent level of physical inactivity. Unfortunately, this trend transcends to Canada and is very evident in Nova Scotia. The lack of exercise is an independent risk factor for cardiovascular disease, type 2 diabetes, and some forms of cancer. Inactivity among Canadians places an increased burden on an already overloaded health care system.

To obtain health benefits, current Canadian guidelines on physical activity for adults recommend the accumulation of 150 minutes of moderate to vigorous physical activity each week. The minimum standard for children and youth is 60 minutes each day.

Just over 50% of Nova Scotians aged 12 and older describe themselves as being active to moderately active, which is in line with the national average. Canadians living on low incomes, older adults, Indigenous people, newcomers, girls and women, youth, people with disabilities and the LGBT community tend to be less active and have been identified as population groups in most need of attention. Walking has particular value for the least active population group which may or may not include those population groups listed above.

People with access to green spaces tend to walk more. One study found that parks with walking loops had 80% more users and 90% higher physical activity levels.

Micro-design elements (like traffic calming barriers, cul de sacs and pedestrian crossings) matter. A ten year Australian study found that residents were three times more likely to walk over 150 minutes per week in areas with more cul de sacs and pedestrian links.

Research shows that Safe Routes to School programs result in more children walking and biking to school. And every additional year of a program increases the total number of people participating.

The Case for Walking: Direct and Indirect Benefits

Research has shown that walking and walkability provide an array of personal, social, environmental and economic benefits. Walking is convenient, can fit into a busy schedule and doesn't require a great level of fitness or skill. Walking as a physical activity has high rates of adherence: once people get started, they tend to stick to it. There are many aspects of walking that make it an appealing way to improve participation in physical activity.

Walking is Easily Accessible

- Requires no special skill, is free or low cost and is open to all ages and seasons.
- Can become a lifelong activity, done alone or in groups of family and friends.
- Is a great starting point for sedentary people to become more active.
- Presents low risk of injury—walking programs may even include strategies for injury prevention.

Walking is a Natural Fit for Busy Lifestyles

- Can be easily integrated into daily routines, errands and chores such as travelling to work or school, for recreation and relaxation, visiting neighbours or walking the dog.
- Engages people in self-managing their health, allowing them to monitor their activity with pedometers, stopwatches and other wearable activity trackers.
- Lets people work physical activity into packed schedules: health benefits can be achieved in 10 minute bouts of walking.

Walking Can Start Where You Are

- There are multiple and easily accessible venues for individuals to start this physical activity: neighbourhood sidewalks, local trails, parks, beaches, waterfront boardwalks, inside shopping malls, recreation facilities, community or church halls.

Walking Can Save Money

- Walking for transportation reduces vehicle use, saving money spent on gas and vehicle maintenance.

Walking and Walkability Benefits at a Glance

Personal	Enhances physical and mental health.
	Connects people to nature and green spaces.
	Improves cognitive development, creativity and academic performance.
Economic	Encourages residents and tourists to access local shops and businesses.
	Walker-friendly neighbourhoods are linked to increased property values.
Social Supports, Safety and Inclusion	Streets that are well designed and pedestrian-friendly can prevent injuries and fatalities.
	Streets filled with people have less crime and vandalism.
	Greater levels of social interaction and sense of community belonging.
	Allows greater mobility for seniors, children and people with disabilities.
Environmental	Walking for transportation reduces vehicle use, which helps cut down carbon emissions, noise and air pollution.
	Walkability improves the success of public transit by giving commuters greater confidence in/ control over making transit connections.

Walking in Nova Scotia: Current Trends and Challenges

In a series of community surveys conducted in Nova Scotia in 2014 and 2015, 38% of respondents reported walking every day. In the same survey, 83% of respondents said they walked about once a week.

Walking is Already a Favorite Physical Activity

24% of the survey respondents said walking was their top choice of physical activity and 36% placed walking in their top three favorite activities. Females (25%) rated walking slightly higher on the top choice list than males (22%). When the survey results were considered by age, walking emerged as an increasingly preferred activity among aging Nova Scotians.

Top Choices for Physical Activity by Age Group					
Ages 18–39		Ages 40–59		Ages 60+	
	%		%		%
Walk	12%	Walk	26%	Walk	34%
Swim	11%	Swim	11%	Swim	9%
Strength Training	8%	Bike	6%	Bike	3%
Team Sport	7%	Yoga/Pilates	5%	Aerobics Class	3%
Run/Jog	7%	Skate	5%	Team Sport	3%

Walking is a Means of Active Transportation (AT)

40% of Nova Scotians surveyed said they used walking as a means of active transportation to travel to a specific destination in the community at least once a week. People living in towns were much more likely to report AT. The majority of people responding to the surveys indicated they would like to walk more frequently.

Barriers to Walking and Some Proposed Solutions

Survey respondents identified a number of barriers to physical activity, including:

- Having no one to walk with.
- Difficulty fitting physical activities into daily schedules.
- Community sidewalks that aren't maintained.
- Cost of participating.

Citizens were asked to select and rate what conditions would encourage them to walk more frequently. The following items were identified as having “great or some impact”.

Factors Seen as Helpful in Getting More People Walking for Active Transportation

	% of people likely to walk more when these factors are present
Sidewalks, walking/hiking trails, better condition of roads.	60 – 71%
Crosswalks, pedestrian signals, better lighting, connected routes, enforced rules of the road.	50 – 59%
Access to indoor walking spaces, low traffic and quiet streets, maps, public transit, animal control.	40 – 49%
Walking groups and events, transit system, better animal control.	30 – 40%

Did you know? Health benefits can be accumulated in 10 minute bouts of walking!

Municipal Government Involvement in Active Transportation

In a 2014 survey, 7 municipalities out of 28 reporting stated they had an AT plan in place. By 2015, that number had increased to 15. At least one staff person in every reporting municipality is currently designated to work in some capacity on AT. Most responding municipalities have incorporated AT policy statements or components in their planning strategies, community sustainability plans and physical activity plans.

Barriers to Municipal Involvement

However, some barriers to municipal involvement in AT persist. Most municipalities identified the lack of funding as a major obstacle. Other barriers include the physical layout and distribution of residents within certain areas, and the rural driving culture.

Opportunities for Improvement

Municipalities see opportunities for improving AT through better infrastructure and connectivity, greater community support, enhanced regional partnerships and greater awareness and education about AT.



Maps make a difference! An Edmonton study measured the impact of mailing local walking route maps to community households. Almost half the research respondents tried a new walking route, and 64% said they would walk more often to get to destinations.



Some Key Points to Consider When Developing Walking Programs and Policies

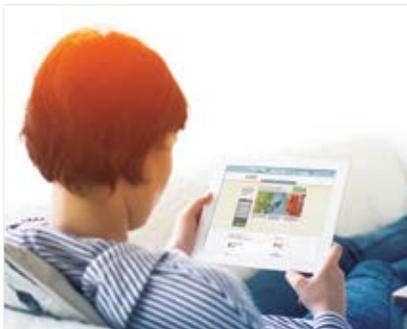
Planning is everything	Successful walking programs begin with a clearly defined strategy that is aligned with supportive policies and actions, resourced and implemented consistently over successive years.
Start with what you have	Assess and build on assets that are already available to you. Projects showing the largest increases in walking filled gaps in existing networks and then promoted the improved resources. Look for opportunities to link to relevant provincial and national programs and campaigns.
Use resources strategically	Resources are limited and some locales have focused on developing a few safe places to walk. Develop the connections that will be most important and useful to citizens, such as paths between schools and libraries, town halls and senior centres, commercial districts and parks.
Think creative partnerships	Cooperation between diverse agencies and sectors is a must. Look for opportunities to partner with local government, public and community health organizations, health professionals, school boards and educational institutions, transportation and land use planners and engineers, and parks and recreation staff and volunteers.
Face the barriers head-on	Address the very real barriers to walking, which include lack of time, disability, chronic disease and aging, safety concerns and community design.
Capitalize on the fact that Nova Scotians are already primed for walking	Many Nova Scotians are already walking and want to walk more. Community policies and actions can increase their intention to walk, their walking frequency, distance and speed, and broaden their choice of walking venues. Cities, small towns and villages are ideal places to promote walking because of their population density and proximity to destination points.
If you make it easy to access, they will come	Focus on enhancing access to walking places through information outreach, social supports, individual behavior change programs and community wide campaigns. The effects of one action may be small but multiple actions applied together can have a big impact.
Don't rely solely on built environments	Most research indicates that changes to the built environment are necessary but on their own are not enough to change behavior.
See the value in both kinds of walking	Both utilitarian and recreational walking can help people meet physical activity targets and add other benefits at the same time. The greatest psychological benefits of walking occur in social contexts combined with outdoor environment features like greenery and water.

What We Can Do to Increase Walking and Walkability

1. Become advocates for change in the planning, design and management of community spaces

Work with government and community partners to:

- Create a community action plan to promote walking and walkability.
- Implement the 5 C's of a walking-friendly community: Connected, Comfortable, Conspicuous, Convenient, Convivial (people-friendly).
- Make pedestrians a priority in land use and transportation planning.
- Implement land use policies that support connected, compact community design and incorporate walker-friendly features such as street trees, benches, and traffic-calming barriers.
- Lower speed limits.
- Promote and support opportunities for indoor walking.
- Locate schools and other community facilities within easy walking distances.
- Use universal and barrier-free design standards for seniors, wheelchair users and parents with strollers.
- Build a system of walking trails close to where people live with a variety of options for different users.
- Use way-finding signs to safely guide and direct walkers.



The Power of the People! Studies demonstrate that:

- *Lay leaders are just as effective as professional leaders.*
- *Walking clubs thrive when supported with newsletters, phone prompts and neighbourhood maps.*

2. Promote awareness of the benefits of walking and walkable communities

- Educate people through communication and media campaigns linked to community events and programs.
- Raise the profile of walking as a viable way to meet 150 minutes per week activity target.
- Engage health professionals in supporting and promoting walking as a healthy activity.
- Highlight existing opportunities and venues for walking.
- Incorporate behavior change techniques to support walkers like goal setting and self-monitoring.
- Provide high quality directional signage, maps, brochures and press releases.
- Promote walking in small towns and villages: recognize the opportunities present in higher population densities, sidewalks and proximity of locations people want to reach.
- Educate pedestrians and drivers about safety through campaigns, maps, promotional events and awards.
- Inform decision makers about the economic, social and environmental benefits of walkability in the community.

3. Develop programs and services in the workplace, schools and community

- Engage community mentors and leaders in developing, supporting and maintaining walking groups, buddy systems and another walking and walkability initiatives.
- Use pedometers as a tool to promote walking.
- Advocate for workplace policies that support walking (e.g. flex time, transit subsidies, walking meetings, maps and groups).
- Involve schools in supporting a variety of walking initiatives for students.
- Use technology and social media to promote walking.

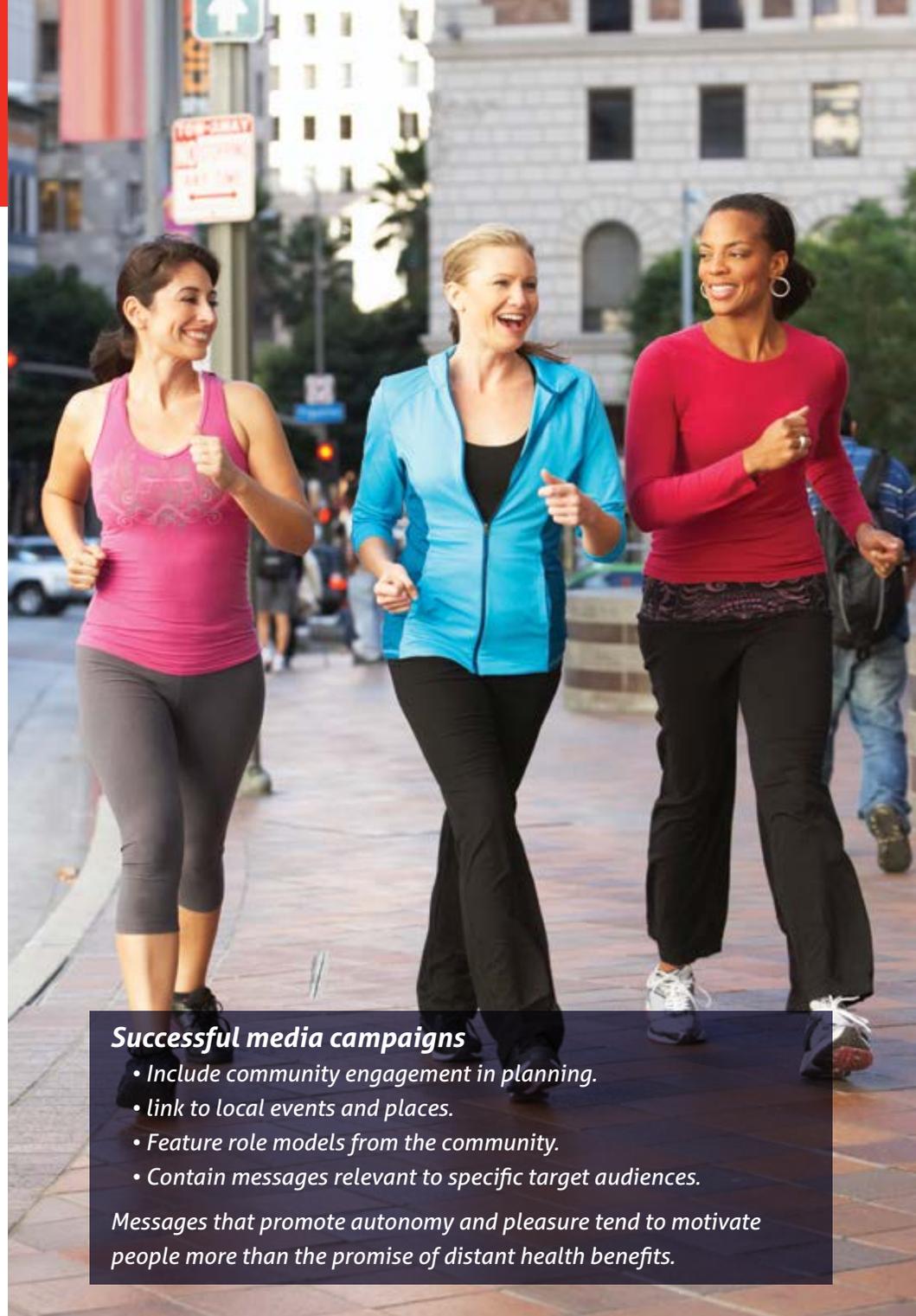
Employers may need some convincing about the value of workplace interventions. One study found resistance among some employers concerned their workers might lose focus on keeping business the priority.

4. Seek public input and strategic partnerships to develop community plans

- Urge municipalities to embrace their leadership role in promoting walkability and other physical activities.
- Employ a broad spectrum of tools to engage community and assess needs (surveys, focus groups, walking audits, etc.).
- Develop and implement pedestrian or combined pedestrian/bike plans.
- Be proactive in connecting with the construction and paving industries to get walkability built into development infrastructure.
- Fill current gaps in pedestrian networks; promote existing/improved resources.
- Identify and recruit effective community partners.
- Integrate walking into other community planning efforts such as sustainability initiatives, economic and tourism development, parks and recreation, age friendly communities, health, housing, and safety.
- Monitor and respond to trends and indicators (e.g. students walking to school, citizen satisfaction with walking opportunities, facilities with indoor walking paths, recreational trail usage).

Pedometers are an effective tool to promote walking

- *One review found step counters were associated with a reduction in sedentary time of about 23 minutes per day.*
- *Another study reported that pedometer use resulted in an increase of 2000 to 2500 steps per day .*
- *Pedometers are also effective when used as part of goal setting and social comparison activities.*



Successful media campaigns

- *Include community engagement in planning.*
- *link to local events and places.*
- *Feature role models from the community.*
- *Contain messages relevant to specific target audiences.*

Messages that promote autonomy and pleasure tend to motivate people more than the promise of distant health benefits.