

Greenways, The Next Step: Every Doorstep a Trailhead

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Introduction

Since their inception and popularisation, beginning in the 1970's, the vision, mission and function of greenways—especially urban greenways—has evolved offering: recreation; urban greenery; city shaping; flood plain management; non-motorized transportation; ecological conservation and health/fitness opportunities. There are also economic spin-offs including: tourism; real estate enhancement; and business promotion. Early on, most urban greenways emphasized shared-use bicycle and pedestrian corridors—often following rivers and streams. More recently, a number of trends, challenges and emerging directions suggest implications for greenways going forward:

- **A Growing Worldwide Greenways Movement**—With acceptance and implementation worldwide, greenways are a widespread international movement with many of the world's cities creating them. Greenways and kindred systems are broadly embraced, making communities more liveable.
- **Health and Fitness Concerns**—With an expanded awareness of the need for physical activity, policy makers and community leaders acknowledge the health and fitness benefits of greenways and the need to reshape cities to better accommodate non-motorized (active) travel. For example, the *U.S. Centers For Disease Control, Built Environment and Health Initiative* allocated \$3 Million annually to promote urban shaping more conducive to routine physical activity including better walking environments (U.S. CDC, 2015). While there is clear documentation of the adverse impacts of sedentary lifestyles and recognition of the ameliorating benefits of daily exercise, there is a substantial challenge of achieving daily participation across diverse populations (U.S. CDC, 2011).
- **Crowding and Conflicts**—As more users are attracted to greenway, there are increased conflicts especially between bicyclists and pedestrians. In addition, there is more user pressure and crowding (U.S. FHWA 1994) of outdoor recreation areas both in-town and in the backcountry—many from the ranks of a burgeoning retirement age population as growing leisure time and interest in trails activities increases user counts.
- **New Technologies**—Innovations, especially “singletrack” bikes, now enable more versatile trail usage. Unlike the “road bikes” of four decades

ago, these don't require a 3m-wide paved surface. Newer outdoor gear and apparel such as better walking shoes and lightweight all-weather clothing and other equipment add flexibility. In addition, there are accessible, popular digital tools such as: personalized route mapping (i.e. *Google Maps*); Web-based walking groups and meet-ups; and personal fitness tracking software. Devices such as *The Fitbit* now alter behavior by promoting walking.

- **Generational and Demographic Changes**—This includes the emergence of the *Millennial Generation*, many of whom are gravitating toward central cities attracted, in part, by green amenities (Tuffelmire 2013) and the *Baby Boomer Generation* who are leaving the work force but still want to remain active and need appropriate outdoor facilities to accommodate this (Brown 2016).
- **Solace and Spiritual Healing**—There is a growing recognition of the psychological, spiritual, and energizing benefits of trails and greenways. This has led to more walking and other trail activity as a way to find solace. In addition to local daily outings, tens of thousands are taking longer “pilgrimage” and contemplative journeys, in part, popularized by books and movies (Coelho, 1987, Macfarlane, 2013). They walk along routes including: the *Camino De Santiago* in Spain, the *Jeju Olle* in Korea, the *Kumano Kodo* in Japan and the *Pacific Crest* and *Appalachian Trails* in the U.S.
- **Infrastructure Costs in Tightening Fiscal Times**—Though the myriad benefits are recognized, the costs of building and maintaining these systems can be daunting.

Background/Literature Review

Considering these trends and challenges, there is potential for robust, more relevant, and timely scenarios that can expand and enrich the concept of greenways serving an even broader cross section of the population. Specifically, two concepts are suggested here—branded, quality urban walking routes and close-in trail loops along city edges.

Gold Medal Walks envisions measured (typically 5km-10 km) urban walking loops that meet predictable high standards of quality. They are mostly built on existing infrastructure (sidewalks, urban trails and in some cases, in low-traffic streets). Wherever feasible they interconnect and seamlessly integrate with existing greenways. The foundation is a 1.5m-wide sidewalk (adequate for two people to walk side by side) separated from the street by a landscaped tree median. Where adequate sidewalks are not available, or too costly to build, a buffered “pedestrian lane”, in the street, can be delineated. The walking

equivalent of a “bike lane”, these follow low-speed/low-traffic routes. The corridors are carefully planned to be pleasant and stimulating accessing parks, points of interest, transit routes, destinations, and “way stations” such as coffee shops or restaurants. The routes are “branded” with themed identities (i.e. the “Apple Blossom Walk”) with graphic medallions such as small placards placed in the pavement providing clear, unambiguous turn-by-turn directions. Note that while these could also be mapped on-line, *Gold Medal Walks* go a step further, because they are actually physically improved and delineated to assure a high quality experience throughout. This vision was inspired in part by Denver communities such as *Stapleton*, a *New Urbanist* mixed-use development that has a classic American rectilinear street grid, comfortable sidewalks, tree medians and a “front porch” environment (homes orient to the sidewalk) throughout. Walkable route networks in Melbourne, Australia (called *Laneways*) and in Matsumoto, Japan also add credence.

Frontcountry Loops imagines a primarily “soft surface” rim trail, typically with a 1-2 m wide tread, that encircles an entire urban area along its edge—following the urban/rural interface. The rim trail also links to the core city and neighbourhoods via existing and new greenway “spokes”. This was inspired, in part, by the Jeju Olle, a highly popular pathway that encircles Jeju Island, Korea as well as the more classic French *randonnees*. While the trail emphasizes walking, it could also serve “singletrack” bikes and equestrians and accommodate people with disabilities. While mostly consisting of a trail tread, in some locales, the route might follow low-traffic country roads. It is envisioned as a “knapsack” trail—not requiring a heavy backpack and camping gear. Instead food, water, lodging, toilet facilities and access to public transit are conveniently spaced along most of the route and/or provided by concessionaires with “food trucks” and even setting up temporary camping by reservation along the way.

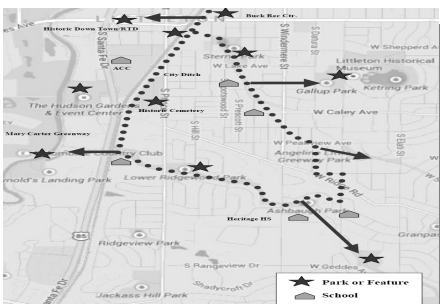


Figure 1. Gold Medal Walk Concept

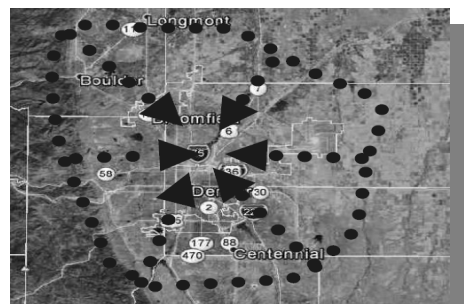


Figure 2. Frontcountry Loop Concept

Along with the two above concepts, this approach also looks at ways to close gaps in existing regional trail and walking networks. It considers potentials for affordable solutions enabled by the more flexible technology of “singletrack” bikes vs. the traditional 3m-wide hard surface once needed for “road bikes”.

Goals and Objectives

This paper is inspired, in part, by publications (Speck, 2013) and conferences, (World Trails Network, Jeju, Korea, 2012) that emphasize values of trail-oriented activity (especially daily engagement). Walking and walkability is particularly highlighted suggesting the need for more close-in quality walking corridors. The goal is to encourage researchers and communities to explore the feasibility of these ideas as a way to greatly expand public use and enjoyment of urban trails—striving to “make every doorstep a trailhead”. The key objective is to make the case for building prototypes over the next several years that can serve as proof-of-concept and, if workable, promote broad replication in communities worldwide.

Method(s)

There were three courses of investigation: field exploration (actually walking typical potential routes (joined by lay hikers); reviewing publications and research; and presenting the concept to public officials and community leaders, advocacy organizations, health-oriented non-profits and others with an interest to elicit reactions.

Metropolitan Denver, USA, a growing region of 2 million, is the study area. Beginning in the late 1960’s, Denver began to build trails along its primary waterways including *The Platte River Greenway* and *The Highline Canal Trail*. Building these ultimately catalysed a 1500-km-plus regional urban trail network. Initially conceived to accommodate “road bikes” and hikers, the system consists mostly of paved bicycle/pedestrian trails where riders and walkers share a 3m-wide paved surface. While Denver’s greenway network has been hugely successful, the challenges mentioned above have become increasingly evident—especially overcrowding and bike/pedestrian conflicts. Denver, a particularly health conscious locale, has seen a number of organizations launch programs aimed at promoting fitness by engaging more people in routine outdoor physical activity. This includes efforts to bring facilities closer to homes. *Great Outdoors Colorado*, a state-wide funding agency, noted this in its *2015 Strategic Plan* emphasising the desire to “connect people to the outdoors...better connect trails parks and open spaces...and places to enjoy the outdoors...that are close to home.” (Great Outdoors Colorado, 2015);

In 2013, using street maps, we walked five distinct 10-km urban and suburban corridors in varied locations to test the *Gold Medal Walks* concept. Routes were mapped and photo-documented with the sensory experience observed and gaps and challenges noted.

In 2015-16 we walked a 250km loop around Denver—a possible *Frontcountry Loop* corridor. That route was laid out to feature both foothills and high plains landscapes taking advantage of Denver's unique location at the foot of the Rocky Mountains. The loop also connects open space reserves, several state parks and a number of outlying town centers. It was mapped mostly using *Google Maps* and photo-documented. This trek took place over an 8-month period walking 10 to 15km segments in sequence each weekend. Walking conditions ranged from summer heat to winter snow. Several lay enthusiasts volunteered to make the walks and shared their thoughts as well.

To test agency reactions, we made *Powerpoint* presentations of the two concepts to: open space, parks and public works staff in a number of the communities where potential routes were identified; to local health and fitness advocacy non-profits; to *Great Outdoors Colorado*; to trails-oriented non-profits as well as to several professional and academic conferences around the U.S. and abroad.

Results

The *Gold Medal Walk* experimental routes suggest opportunities to create quality walks with relatively minimal modification. A cursory look at the *Denver Metro Area* suggests that a number of proof-of-concept routes could be created thus expanding public access. The routes were stimulating and pleasant and, with installation of wayfinding and other actions such as improving occasional difficult crossings of busy streets, they could be quite workable. Of course, the pilot routes were chosen for their desirability. Additional routes might be more difficult and costly to bring to a level of quality needed to encourage people to use them.



Figure 3. An Optimal Urban Walk



Figure 4. Walking a Low Volume Street

The *Frontcountry Loop* route appears even more promising. The walk revealed that much (perhaps 40%) of the potential trail system is already in place following existing trails through public open spaces and state parks. Where there were gaps, the route followed existing back roads avoiding traffic and unpleasant places. There was a surprising array of spectacular vistas, points of historic and culture interest and places in town centers to dine or take a rest. The biggest challenge is closing gaps to minimize the need to walk on roads. From an institutional standpoint, while there are challenges in launching a new paradigm. Presentations were almost always well received and one non-profit was so attracted to the idea that they officially adopted the *Frontcountryway* as their flagship project and will work to fund the effort and coordinate efforts.



Figure 5. Walking the Potential Frontcountry Loop

Discussion

The field observations suggest that these new types of greenways address emerging challenges and opportunities: adding more miles of trails, adding routes that promote walking; reducing conflicts, bringing quality spaces to neighbourhoods; and providing more incentives for exercise. They can, and should be, multi-modal, integrating with transit routes and with bike-sharing stations (where bikes can be conveniently rented for short durations). There are myriad economic spin-off benefits with opportunities for new businesses such as trail guide/outfitter services, lodging and dining places as well as food trucks and mobile campsites. There are opportunities for volunteer engagement and healing places for: troubled youth—France and Korea have explored walking as an alternative to detention for delinquents (Jung, 2012). War veterans and others can also find solace in walking, building and caring for these trails.

Gold Medal Walks, as they expand and replicate, will foster urban reshaping promoting better walking infrastructure and related neighbourhood liveability.. *Frontcountry Loops*, readily accessible to the public for convenient enjoyment will increase public awareness of the landscape as people walk these routes. By expanding awareness, this can also promote more profound spin-offs

including the conservation of open spaces around cities—in the tradition of the classical Ebenezer Howard’s *Greenbelts* and Olmsted’s *Emerald Necklaces* (Little, 1990)

There will be challenges: funding, securing rights-of-way, property owner resistance and competition with other urban infrastructure priorities. Reluctance by public works officials is also anticipated in the areas of safety, accepting new street designs and signage and other new concepts such as in-street pedestrian lanes. There will also be concerns about costs of upkeep and other neighbourhoods demanding similar improvements. And, *Frontcountry Loops*, a regional scale concept, will cross multiple jurisdictional boundaries. Competition for funds, parochial priorities and lack of communication amongst multiple entities will be a challenge in building a metro-wide system.

The good news is that these kinds of challenges have been overcome in the past as exemplified by many successful greenways. Citing existing relevant models including those Korea; Japan; and Europe will also help. It will take persistence, patience and most importantly effective leadership. In many cases an NGO might be the unifying and non-threatening way to by divergent entities together.

Conclusion

There is a place for *Gold Medal Walks* and *Frontcountry Loops* in the evolving Greenway movement. Properly planned and executed to be appealing and sustainable, they offer a new iteration. They are marketable to the public and to community leaders as an exciting and practical way to expand urban networks as well as to broaden and diversify user engagement in routine physical activity. Traditional urban greenways mostly follow existing “natural” threads in the urban fabric such as rivers, streams and canals, *Gold Medal Walks* and *Frontcountry Loops* can significantly expand and enhance these networks.

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