

# Health Elevations

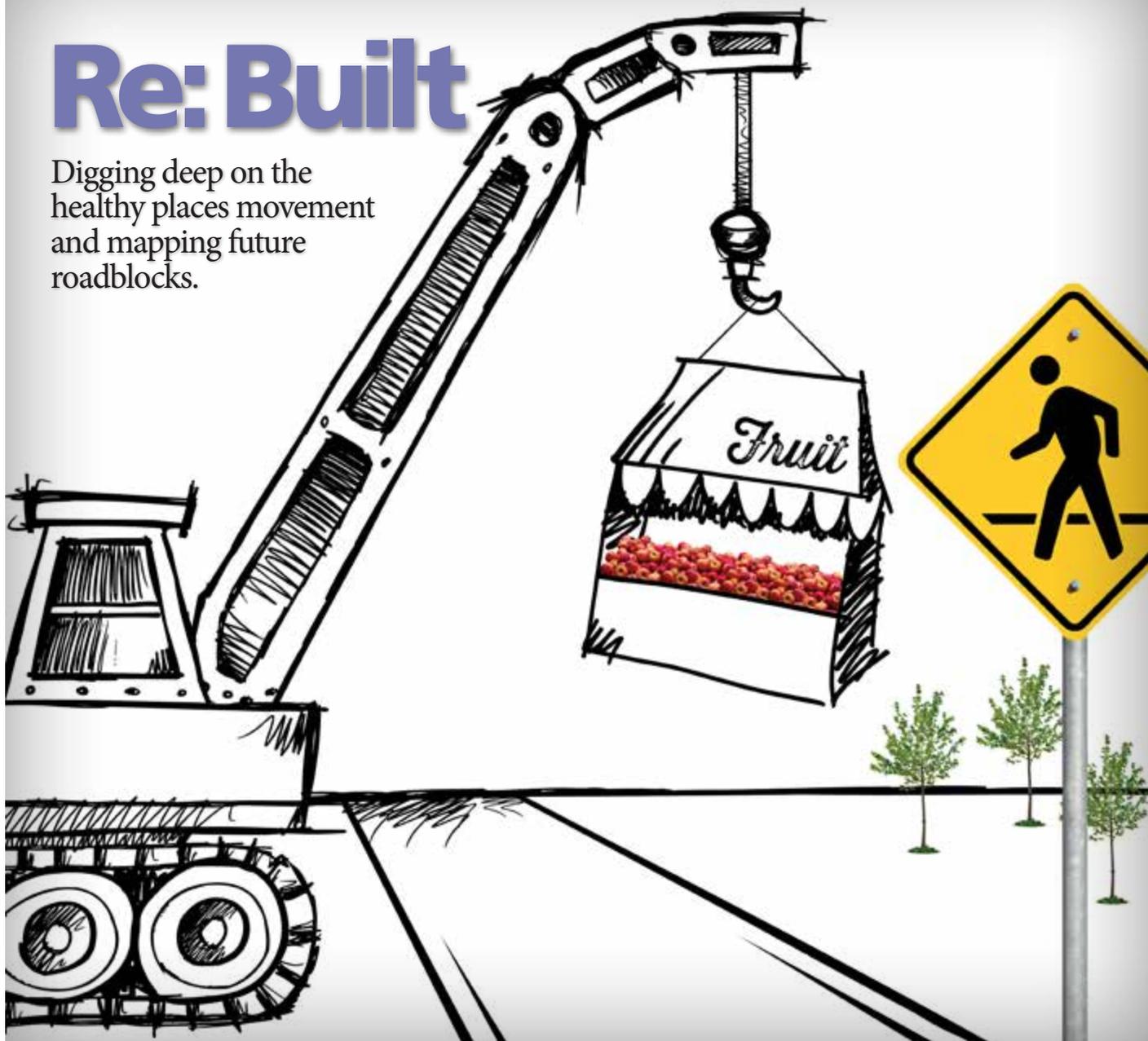


A Quarterly Journal on  
Health Policy in Colorado

Summer 2014

## Re: Built

Digging deep on the  
healthy places movement  
and mapping future  
roadblocks.



### **Back Away from the Car Keys**

How hard is it to give up your car in Denver?

### **Designing a Better Walsenburg**

Can a small park pump life into a town and its people?

[www.ColoradoHealth.org](http://www.ColoradoHealth.org)

# Cartoon Corner *by Mike Keefe*



There is a growing library of commentary and research about how to design more human movement back into daily life. A good place to start is the Urban Land Institute's thoroughly researched "Ten Principles for Building Healthy Places," available at <http://uli.org/report/ten-principles-for-building-healthy-places/>. The winter 2013 and spring 2014 issues of the National Civic Review ([www.ncl.org](http://www.ncl.org)) collected extensive looks at the 25-year healthy communities movement.

# Health Elevations



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Summer 2014

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## Online Bonus Content

VISIT [WWW.COLORADOHEALTH.ORG/JOURNAL](http://WWW.COLORADOHEALTH.ORG/JOURNAL) FOR THESE STORIES:

- Watch the "10 Principles" of building healthy places come to life in an explanatory video.
- View animation by Mike Keefe on the "risks" of building a healthier world.
- Follow us on Twitter at @COHealthFDN and @MBoothdenver.

# About the Colorado Health Foundation

**HEALTH ELEVATIONS SEEKS** to further the goals of the Colorado Health Foundation by highlighting problems that can be solved, illuminating the people who are making progress in solving them and provoking a new way of looking at complex health issues. The journal will report on and synthesize a variety of sources to provide information that can further the work of policymakers, grantees, providers and the engaged public in advancing better health care, health coverage and healthier living. Useful information presented in a memorable way is indispensable to the complex field of health policy.

**THE COLORADO HEALTH FOUNDATION** works to make Colorado the healthiest state in the nation by ensuring that all Colorado kids are fit and healthy, and that all Coloradans achieve stable, affordable and adequate health coverage to improve their health with support from a network of primary health care and community services. To advance our mission, the Foundation engages the community through grantmaking, public policy, investing in evaluation, private sector initiatives and strategic communications. For more information, please visit [www.ColoradoHealth.org](http://www.ColoradoHealth.org).

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# Walking the Talk



## Colorado's Future is Now

**W**e are at a rare moment in public life that allows us to put our heads together and create things for Colorado that will make us healthier for 10, 20, 50 years to come. We've reached consensus that obesity is one of our biggest health challenges, while policymakers, designers and developers appear poised to do something about it.

It would be a terrible waste for us to fail to recognize that moment and let a healthier future slip out of our grasp.

A movement is building across the state – and across the nation – to create buildings, neighborhoods and towns that help people live healthier lives. Sometimes these designs encourage, sometimes they nudge, sometimes they push a little harder. But from the placement of desks near a window, to easy access for a ground-floor bike locker, to sidewalks that run all the way through a block and on to a school, to a park with Ultimate Frisbee demonstrations and free discs, we are thinking harder about how the built environment can get us moving.

This is the time to literally set these healthy changes in stone, a welcome era for the economy where developers from apartment builders to Trader Joe's vie for our cities' best locations. And in the Front Range's neglected neighborhoods or rural areas struggling to stay afloat, the nonprofit sector can join with for-profit companies on the best practices.

The Foundation has teamed with the Urban Land Institute to help define the main tenets of this movement, and we have funded major "Healthy Places" efforts, from the Eastern Plains to Denver's Westwood. This issue of *Health Elevations* illustrates the principles and offers concrete examples, without sugarcoating the challenges of rebuilding a core more than 50 years in the making.

We built America based on the off-ramps of the Interstate system and the parking requirements of a "drive alone" society. It's time to design human-scale movement back into our lives by making health the defining principle of homes, buildings, neighborhoods and whole communities.



*Anne Warhover*

Anne Warhover, President and CEO  
The Colorado Health Foundation  
@AnneWarhover



## A Fresh Look for *Health Elevations*

This edition of *Health Elevations* represents a visual rebuilding of the journal, coincidental with the magazine's theme on the "built environment" movement. Our purpose at *Health Elevations* is to make thoughtful discussion of health policy interesting and engaging for everybody, from policy wonks to working families with kids. We'll continue to strive for in-depth health policy discussion in a more reader-friendly format. We hope this edition's updates are both an invitation to join the conversation and an incitement to get involved. Please send your Twitter thoughts to @COHealthFDN or @MBoothdenver.

# Re: Built

*By Michael Booth, Editor in Chief  
Photography by James Chance  
Illustrations by Alicia Varga*

Deep inside the healthy places movement, a primer to build the future.



“Seventy percent of health is dependent on behavior and environment. We’re at the beginning of recognizing this need for bringing choice back into people’s lives, in how they move about the environment.”

Christopher Smith, senior program officer  
Healthy Living, the Colorado Health Foundation



**M**odern society has designed human movement out of daily life. We’re overweight because we eat too much, no doubt about it. And we eat too much of the wrong things.

But we’re also bigger as a result of long-term, pervasive, systemic pressures that make daily living a largely sedentary experience for the average Coloradan.

We take elevators for one-story rides to work cubicles that tie us to a video screen for eight hours straight. The kids ride in our cars to school. Exercise means moving our smartphone thumbs more rapidly on Candy Crush. We can’t even be bothered to walk through the drugstore to pick up diabetes medication or Lipitor – prescription drive-thru windows are everywhere.

Reversing the momentum toward collective stasis is going to take a lot of hard work. One startling measure is simply the steps we walk in a given day. The Swiss walk 9,650 steps daily. Japanese citizens, even in the narrow confines of urban spaces like Tokyo, fit in 7,168 steps.

Americans? Just over 5,000 steps a day. The difference amounts to 30 to 40 fewer minutes of plain walking, every single day. The results – 35 percent obesity in American adults – are as well-known and shame-inducing as the Broncos’ Super Bowl score. Coloradans can’t duck the dangerous trend, even in stretchy yoga pants. Our adult obesity rate of 22 percent is the best in the nation, but it has doubled in 20 years.

We are Mississippi in the 1990s.

Doug Linkhart, Denver’s executive director of Environmental Health, finds numbers that trouble him even more about the near future: 31 percent of Denver Public Schools children are overweight or obese.

“We’re trending in a bad direction,” said Christopher Smith, an architect and senior program officer, Healthy Living, with the Colorado Health Foundation, and a former housing and economic development official with the City of Denver. “Seventy percent of health is dependent on behavior and environment. We’re at the beginning of recognizing this need for bringing choice back into people’s lives, in how they move about the environment.”

There is a movement of thought that promises to lead to more physical movement for us all: the “healthy places” efforts by nonprofits, health leaders and government – also referred to as “built-environment” policies – are off and running in the right direction.

In this edition of *Health Elevations*, we’ll explain the principles of the healthy places and built-environment movement – even some of the architects and city planners rolling up their sleeves to work on these ideas aren’t aware there is a common language and a detailed battle plan.

And because detail is always more illuminating than an abstract discussion among policy wonks, we will highlight projects that employ the principles. We will also highlight efforts that tried to employ some of the high concepts, but ran into real-world problems – problems that healthy places advocates need to consider.

In late 2013 the Urban Land Institute convened thought leaders and codified the healthy places principles. We’ll go through all 10 principles and see how they play out on the ground in Colorado and other states eager to get people moving again.

## 1. Put people first

*In other words, stop thinking of a car’s needs first when designing a street, a sidewalk, a building front, a neighborhood plan or a new housing development.*

Bill Swalling is a Colorado developer trying to put people first in two residential projects he is proposing for empty nesters: one in Fort Collins, another in the red rock formations of the Jefferson County exurbs. He has seen that his buyers don’t want big backyards or three-car garages – they would rather see smaller dwellings pushed to one side of a landscape, with trails linking their front door to the open space, a walking-distance community center for yoga classes and continuing education, and a homeowners association or municipal district to clear snow from their sidewalks and mow lawns.

What developers will need from policymakers, Swalling said, is increased density in some reluctant suburban areas. Many neighbors resist density for fear of increased vehicle traffic and parking problems, he noted.

“But empty nesters travel about half as much as those living in traditional single-family homes, so the idea of density bringing too much traffic doesn’t really happen,” he said.





At left and right, “activated” staircases become a focal point to restore movement to a community at Denver’s Mariposa public housing. Below, Denver City Councilman Paul Lopez walks Westwood with neighbors seeking healthier ideas. (File photo)



## 2. Recognize the economic value

*Designing a healthier building or streetscape shouldn’t always be seen as creating a wishful landscape with expensive doodads. Millennials are gravitating to cities where they can give up cars and walk to their favorite restaurant district, pushing up apartment rents and making development attractive. Light rail stations integrated into a healthy transit network are some of the biggest economic development draws in the nation.*

Governments that spend taxpayer money on healthy, attractive open spaces are also likely to see the investment pay off economically as well as medically. Sale prices of homes within 1,500 feet of a park in Portland, Ore., were \$845 to \$2,262 higher than other homes (in 2000 dollars). The larger the nearby park, the greater the increase in property values, according to a report by the Robert Wood Johnson Foundation.

In Colorado, the same report noted that a greenbelt in Boulder raised the value of neighboring homes by \$5.4 million, which in turn generated as much as \$500,000 in new city property taxes.

Public amenities are so attractive to some Colorado developers, said Linkhart, that the city should consider asking them to contribute to improving or expanding those amenities. Apartment builders are flocking to the South Platte River and Cherry Creek confluence, he noted, in large part because of a well-designed Commons Park. “Can we capture some of those benefits?” Linkhart asked.



## 3. Empower champions for health

*Engage the community in all phases of a project or redesign. What are the chances of creating something the community wants if residents aren’t asked what they want? How much will the new streetscape get used if it never accounted for local character and desires?*

Planners in communities like Arvada have learned some of these lessons the hard way. (See What’s Working, page 10.) Not surprisingly, announcing at a community meeting that “You’re fat, and we’re here to help” is not a promising opening line.

Even residents who welcome the idea of healthier amenities can worry about the long-term results, including gentrification that will push out the very modest-income residents who could benefit most from a healthier built environment. Arvada real estate agent Mimi Tugaoen said some residents fear Olde Town improvements will further divide the suburb along its northwest/southeast contrasts.

“The southeastern part of Arvada that was previously inexpensive will now become more desirable, and cost of living might skyrocket,” Tugaoen said. “Where affordable housing will be, I don’t know.”

## 4. Energize shared spaces

*A city’s residents may seem tightly packed into commonly used spaces, but bad planning can lead to neighborhoods cut off from transit, parks and other services or amenities. Towering public housing projects of the 1960s and ’70s were great examples of how not to build a healthy space.*

Chicago researcher Frances Kuo and colleagues found that residents who lived without views of or access to green space, in notorious projects like the since-demolished Robert Taylor Homes, had higher incidents of aggressive or violent conflicts with neighbors. A “barren” landscape was linked to children outdoors without supervision, higher rates of illegal activity, property crime, graffiti and other problems, noted Kuo, a professor of natural resources, environmental science and psychology at the University of Illinois.



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Denver planners promoting healthy living design ideals point to a before-and-after study of City of Axum Park in northeast Park Hill. After extensive renovations, including new play equipment and flowing walking paths, a 2011 assessment found a fivefold increase in park use compared to the 2009 baseline.

## 5. Make healthy choices easy

*If you want more people to bike to work, you need many miles of safe bike lanes on popular streets or dedicated paths through parks. If you want children to walk to school, you need to finish sidewalks through the neighborhood, keep them clear of snow and provide safe crossings at scary intersections.*

Denver architect Yong Cho and many other local designers have employed many of these principles at the redevelopment of the former Lincoln public housing project in central Denver, just southwest of downtown. Designs include appealing public corridors that seniors can use for exercise-walking in winter and a “beautiful, inviting stairway” with wide treads for sitting and talking. The stairway also acts as an observation point for a courtyard where children can gather and play, bringing the generations out at the same time, and has art integrated into the climb to draw people up and down.

“Basic, dull utility areas of a building are becoming destinations,” Cho said.

## 6. Ensure equitable access

*Obviously it’s a matter of fairness – extend the benefits of a healthier lifestyle to as many people as possible, regardless of their race, creed, religion or “birth ZIP code” status. But it’s also a practical matter: Many unhealthy developments in American life, including obesity rates, affect minorities and low-income communities disproportionately. That includes high rates of obesity among Colorado Hispanic communities as well as intense rates of poverty and obesity in whites and blacks in the Bible Belt states.*

Kaiser Permanente’s community benefit spending asks grant applicants to prioritize schools with high reduced- and free-lunch needs, and also to seek out underserved populations for “Walk & Wheel” alternative-transit funding.

The Urban Land Institute’s study of Denver’s Westwood neighborhood mapped stark inequities that block healthier communities, including the map on page 12, showing how much more green space the neighborhood would have if it rose even to the Denver average.

Addressing those gaps can mean very practical, basic steps, said Lois Brink, a professor of landscape architecture at University of Colorado Denver and a founder of the Learning Landscapes program of healthier designs at Denver Public Schools.

“Sometimes you actually have to teach kids and parents how to ride a bike. Seriously,” she said.

## 7. Mix it up

*When a big space opens for development, design offices and retail near residences in livable ways. Make sure residents are within a half-mile of attractive open space. And “mix up” everything – housing and exercise for young and old alike, dads with strollers and grandparents with canes. Provide affordable housing near middle- and high-income housing, as Stapleton and Lowry and parts of LoDo have tried to do.*

Susan Powers and other developers of the Aria project in northwest Denver put all these ideas in a blender and mixed it up at high speed. On 17 acres purchased from an order of nuns, Aria is building low-income housing near \$450,000 homes, large community gardens, a production-size restaurant garden, an on-site medical and wellness clinic, walkways connecting Regis University to Zuni Park, and intergenerational cohousing.

Aria is also “mixing up” the development process itself: While Aria’s investors are a for-profit venture, they must work with nonprofits and foundations to build trails and other health amenities, and with city and state agencies on streetscape and other infrastructure.

Along the way, Powers said, Aria hopes to be a pioneer in a part of the city where the healthy places movement hasn’t yet taken hold in a big way.

“North of I-70 has been forgotten, and we’re a small part of what can happen there,” she said.

Urban rooftop gardens like the one at left can improve employee health and well-being. Below, Denver Parks officials see Stapleton's Central Park playground as an innovative first step, but they seek even more radical designs for health.



The City Loop playground rebuild in City Park had grand ambitions to better activate one of the crown jewels of the open space system in Colorado.



## 8. Embrace unique character

*Don't design away the interesting bumps and quirks of a neighborhood that give it character. Integrate existing natural systems in more useful ways, whether a city drainage ditch or a pocket park with old trees. If neighbors sun themselves on an impromptu creekside beach, connect the beach to walking and biking paths.*

In an ethnically influenced neighborhood like Westwood where brightly colored buildings reflect an international tradition, encouraging more brightly colored buildings will promote walking and calm drive-by traffic.

Westwood has the kind of good news/bad news example that can be a challenge for city planners, said UCD's Lois Brink. Weir Gulch winds through the neighborhood, beckoning redevelopment as a more attractive green space as has happened in other neighborhoods cut by the gulch. But according to Brink, some residents tell developers, "We don't like gulches! They're deep and scary." Neighbors need to be involved in the redesign and see examples of how urban trails have worked elsewhere.

## 9. Promote access to healthy food

*Attacking two problems at once can leverage the results: Create more outlets for healthier food to fight obesity, and speed up the battle by encouraging healthier paths to that store.*

Colorado's burgeoning Fresh Food Financing Fund is one of the first well-financed, cooperative programs to take on food deserts in a practical way. Launched with \$7.1 million in seed money from the Colorado Health Foundation, CO4F has since gained more investors for its goal of removing "financial barriers from the construction, expansion and renovation of grocery stores in underserved areas."

Since the launch, CO4F has added \$1 million for loans from Kaiser Permanente, \$1 million from The Piton Foundation and another \$300,000 from The Colorado Trust.

## 10. Make it active

*Put multiple activities in the same place to attract the most diverse participants possible. Plan housing, work and retail so that each trip can begin with a walk. Work on that "last mile" of a commute, making it easy to put a bike on a light rail train or rent transportation for the final mile to home.*

The City Loop playground rebuild in City Park had grand ambitions to better activate one of the crown jewels of the open space system in Colorado. City Park looks crowded to families who only try to use it on the free zoo day, who run the Boo at the Zoo in October, or try to find parking for a peak-hour IMAX film at the Museum of Nature & Science. But in between the big events, City Park is largely empty, said Gordon Robertson, director of planning at Denver Parks and Recreation. The quiet green space is a respite to a few regulars, but not an effective or healthy use of precious land for 25,000 surrounding residents.

City Loop meant to bring innovative climbing and movement equipment for children right next to a knee-friendly walking path for seniors. A kiosk to check out sports equipment would sit near a plaza for demonstrations, including cooking hours employing goods from an on-site community garden. It was to be the city's first "outdoor recreation center," Robertson said.

And it was all too new, too fast, at least for that pocket of Colorado. (See Observations, page 18, for an extensive Q&A deconstructing the fate of City Loop.)

Reversing 150 years of design trends in a sprawling built environment is not always smooth or swift, as you will see throughout this summer's edition of *Health Elevations*. Advocates of healthy places ideas often have to take a deep breath and look at the long view, Powers said.

"These are generational projects," the Aria developer said. "They seem like they can take forever." •

# Serving Up Healthy Places



Arvada seeks a more fit community by activating all generations, including growing “pickleball” leagues sharing park space with skateboarders and other users.

By Michael Booth  
Photography by James Chance

What's Working

There are likely a hundred ways for a community to launch itself down a path toward becoming a healthier place to live.

But Arvada leaders can also think of one way not to do it.

“You’re fat, and we’re here to help,” is not a great conversation starter.

In an earlier neighborhood improvement effort, Arvada planners said, they opened a meeting with a message to that effect, “and we’ve been backpedaling with that group ever since.”

Spending more time listening than dictating is a vital lesson in a diverse, sprawling older suburb like Arvada.

The city of 108,000 on the northwest edge of Denver has new housing developments in the wide-open vistas toward Golden and Boulder married to smaller old homes, duplexes and aging strip malls on the southeastern edge abutting Wheat Ridge and Denver. City kids will ride the bus lines north to skateboard in Arvada’s innovative concrete roller mazes, while local elderly competitors have made the area a hotbed of pickleball (a cross between tennis and badminton). Arvada will soon be home to three highly sought commuter rail stations – yet fears of gentrification and the lingering “canyon” effects of wide car lanes on Wadsworth Boulevard and I-70 complicate healthier transit.

The chocka-block nature of Arvada’s layout can lead to a resigned shrug among residents, said Jessica Prosser, sustainability coordinator for the

City of Arvada. “When they have a place to go,” she said, “they think about their route and say, ‘It may not be far, but there’s no easy way to get there.’”

Health experts and built-environment planners excited about healthy places also need to remember that not everybody shares their enthusiasm – at least at first – for grand designs. To skeptics of big government, healthy planning may look like “social engineering,” leading them to ask “What is the government doing? This is not its job.”

Arvada is one of three communities in the state selected to receive the Colorado Health Foundation’s Healthy Places: Designing an Active Colorado initiative grants. To concentrate the effort where planners can have an impact, Arvada’s study focuses on the older southeastern neighborhoods, generally east of Kipling Parkway and south of 64th Avenue. That section is home to about 22,000 of the city’s residents.

At community meetings and in interviews, people quickly arrived at wish lists with common elements for activating parks, easing walking and biking for commuting or exercising, and providing recreation that could lead to a measurable “healthy places” result:

- While the Apex recreation district has a massive, popular complex in the northwest and other useful locations, none are in the older southeast area. The lack of municipal recreation is compounded by retail quirks, residents note: Arvada doesn’t have a big, enclosed mall for strolling in long winter months.

- The charm of Olde Town beckons to the thousands of residents living to the southeast of the fast-renovating “downtown,” but they find it hard to get from here to there. Wadsworth, skirting cars around Olde Town while also hosting massive Big Box retailers like Costco, feels like an impenetrable barrier to kids on bikes or a senior citizen not up to sprinting at a crossing. Southeast Arvada also needs infill of sidewalks on aging blocks that never required them, and better code enforcement of weed-strewn lots and other hazards that intimidate walkers, said neighborhood activist Rose Seavey.

- Arvada is nearing its goal of developing enough parks so that every residence is within a half-mile of open space. Ongoing construction issues, though, such as light rail stations and lines, can temporarily cut people off from their traditional commute or their biking path to the parks. Arvada brainstorm sessions have included campaigns to let residents know where their closest park is, even a smartphone app with the shortest routes. Given the wide economic diversity in Arvada, park enthusiasts also need to develop more free or low-cost programs for kids, such as the NFL-backed flag football leagues or sponsored entries into youth soccer.

And once park space is open, the city and its partners can’t rest, Prosser said. “Planners assume it’s intuitive, how people use parks,” she said. “It’s not. You need programming to get people engaged and started on activities.”

# SMALL TOWN BIG ISSUES

Lamar seeks new paths to leaving the car behind.

By Michael Booth

**T**he bad news about small-town life is that everybody knows everybody's business.

Yet the reality of life under a microscope can also be the good news, when everyone knows exactly where the problem blocks are and what needs to be done about them.

A "healthy places" review of the small farming hub on the Eastern Plains of Colorado quickly zeroes in on a list of specifics that seem graspable and doable:

- Get some light poles at the Escondido Park ball fields complex so that residents who waited out the hottest parts of a Plains summer day will have enough light to see during late-evening games.
- Connect existing parks and trails with fill-in biking and walking trails to create a "Lamar Loop" that is both a draw for recreation and a realistic alternative to commuting by car for some users.
- Create a youth movement in health with leadership training. Lamar's kids are being armed with cameras to snap examples of the good and the bad in healthy living in their town. A kite festival included designs around the "5210" theme of health goals: five servings of fruits and veggies in a day, two hours or less of screen time, one hour or more of exercise, and zero sugary drinks.

*Community leaders and outside consultants brainstormed with sketches in Lamar for ways to tame the Plains heat and draw residents out of their cars and homes. The Lamar Loop for walking and commuting by bike is a prime goal.*



A long menu of suggestions came easily for Lamar leaders when they joined the Urban Land Institute (ULI) and the Colorado Health Foundation Healthy Places initiative to get the community of 8,800 people moving. The ULI outsider assessment of where Lamar is starting from can be brutal.

"Facing a perfect storm of a deteriorating physical environment, poor access to affordable healthy food and streets that discourage any travel other than by automobile, low-income residents will continue to be at risk for chronic health problems" concluded a weeklong study session in April 2013.

Many of the initial ideas start with what Lamar already has, drawing on the frugal roots of a long-surviving farming and ranching community. Lamar has already been a draw for baseball players, and a sports field complex at "The Sports Hub" provides a focal point. Community leaders want to link academic programs at Lamar Community College to the activity space available at the Hub.

A Cinema in the Parks series is another way to get people outdoors and remind them of backyard parks they may have neglected.

Encouraging a return to the streets on foot and on two wheels is not a simple lifestyle change, and the healthy living activists had to acknowledge that upfront. Changing a massive urban area like Denver may seem daunting, but there are everyday human examples to point to as models: bicycle commuters streaming down the Cherry Creek bike path toward downtown at 8 a.m.; joggers cramming the gravel path around Washington Park every evening at 5:30 p.m.; B-cycle hipsters checking out one of the red roadsters for a taproom crawl at 11 p.m.

Healthy examples are not quite so evident in all Eastern Plains towns. "Everyone drives in Lamar," the ULI's study panel members were told frequently during their field trips.

The initial list of action items in Lamar, therefore, is aimed at enticing and coaxing the walkers and the bikers, while making their lives simpler. The pedestrian and bike lanes near the Civic Center area of downtown Lamar should have better paint striping, for example. A new stoplight in an area of downtown that sees 1,300 large trucks a day would help calm traffic and encourage more families to walk with their kids to school. Walking and jogging through-paths at the "crown jewel," Willow Creek, should be more obvious and make closer connections to Main Street and the sports field complex. A trail should extend south from Willow Creek to the golf course.

An early success in Lamar's transformation has been encouraging to town leaders. When it was time to rebuild a popular park playground, 297 people signed up to work on the project.

"We got that playground *built*," a city official said. •

At right, during a study panel's meetings, a map of Westwood was altered to show its aggregated park space (small square) vs. recommended park space (large square). Below, a mural represents character Westwood residents want to keep.

You can't tell everything about a vibrant community with just numbers. But there are times when it's a good place to start.

# Westwood WANTS A CHANCE

By Michael Booth

What's Working

In the Westwood neighborhood of southwest Denver, a few statistics sharpen the picture quickly.

A healthy community that encourages residents to get outdoors and get moving should have about 10 acres of park land for every 1,000 residents. Many of Denver's most livable neighborhoods have 10 to 15 acres of park land for that many people.

Westwood, with 15,500 residents, should have about 155 acres of parks and public green space.

It has 24.2 acres, or about 1.6 acres for every 1,000 residents – far, far below the 10-acre standard.

It's a deficit best understood visually: The Urban Land Institute produced a dramatic map (above) showing just how much of Westwood civic leaders would have to green up to make the open space look like City Park, Washington Park, Country Club and other shaded spots.

The numbers are not disconnected from the population. Westwood is 80 percent Latino and much younger as a percentage than Denver as a whole. Latino youth, meanwhile, are among the most vulnerable groups in America to the obesity epidemic, with 30 percent or more of Latino children already meeting obesity thresholds.

"Westwood is a victim of poor planning from the get-go," said Denver City Councilman Paul Lopez, who represents the district and does not hesitate to throw a spotlight on pieces of the neighborhood that have lost out on funding to more vocal portions of the city.

It takes a mix of forcefulness, creativity and humility to fill such deep holes, Lopez acknowledged. That's why he would be happy to take a "leftover" parks project rejected by some City Park residents – the City Loop multigenerational playground that Denver Parks and Recreation spent years on before the project was killed.

"If they don't want it in City Park, we'll take it in West Denver," said Lopez, who keeps an artist's rendering of the vibrant proposal on his desk. "We want more activity in our parks!"

Other goals outlined by community leaders in the ULI and Colorado Health Foundation Healthy Places initiative in 2013:



Source: Ralph Nunez, Design Team Plus



Photo courtesy of BUCU West Development Association

- Transforming the car-centric popularity of Morrison Road, which cuts an inviting but troubled diagonal through the heart of Westwood, into a stopping point. This will require traffic-calming measures and a "marketplace" urban center for retail, civic services and gatherings.
  - New indoor recreational space on a 5.4-acre site identified at Morrison Road and Kentucky Avenue. The location would fill in a city-recreation desert between Barnum to the north and Harvey Park to the south.
  - Safer paths linking homes to schools, workplaces, retail and transit.
- The city is now catching up on paving unsightly alleys, but more work is needed on completing sidewalk connections, removing intimidating graffiti and filling in lighting. ULI and others also recommended a circulator bus that would link transit-savvy residents to the nearest light rail station, which is currently three miles away in Barnum. Lopez has also called out B-cycle bike-sharing planners to add stations to the south and west of its current footprint.

Early "wins" for the healthy places movement in Westwood include the construction of the Cuatro Vientos pocket park at Alameda and Osage; talks with Denver's Office of Economic Development to demolish abandoned buildings on Morrison Road; and Denver Parks and Recreation pledges to activate Weir Gulch as more usable green space. Denver's Planning Department will run a neighborhood planning process for Westwood in 2014-2015, putting ULI principles into an official city document, said Rachel Cleaves, LiveWell's Westwood coordinator.

Lopez has heard the arguments that change should come from the inside first, creating demand for things like B-cycle. Or that market forces will provide more fresh produce stores when they see public demand. Progress doesn't always work that way, he said. Sometimes the power of the city can push change down from the top.

"It is a chicken-or-the-egg thing sometimes," he said. "Frankly, I like chicken better than eggs." ●

# SKETCHING HEALTH

Selling a picture of better health to developers, community leaders, zoning officials and others requires an artist's touch combined with a clear sense of neighborhood realities. Here we present a gallery of healthy building ideas.



## **Aria Multigenerational Apartments** Northwest Denver

An early bid for success at the massive Aria redevelopment of a former Catholic nuns' retreat, these apartments by OZ Architecture are "green" inside and out. Doorways set close to each other encourage community and provide interesting pedestrian streetscapes. An interior courtyard draws residents outdoors and provides relaxing views for those less mobile. Overhangs on these west-facing views cut solar heat and helped achieve LEED Platinum status.

# SKETCHING HEALTH



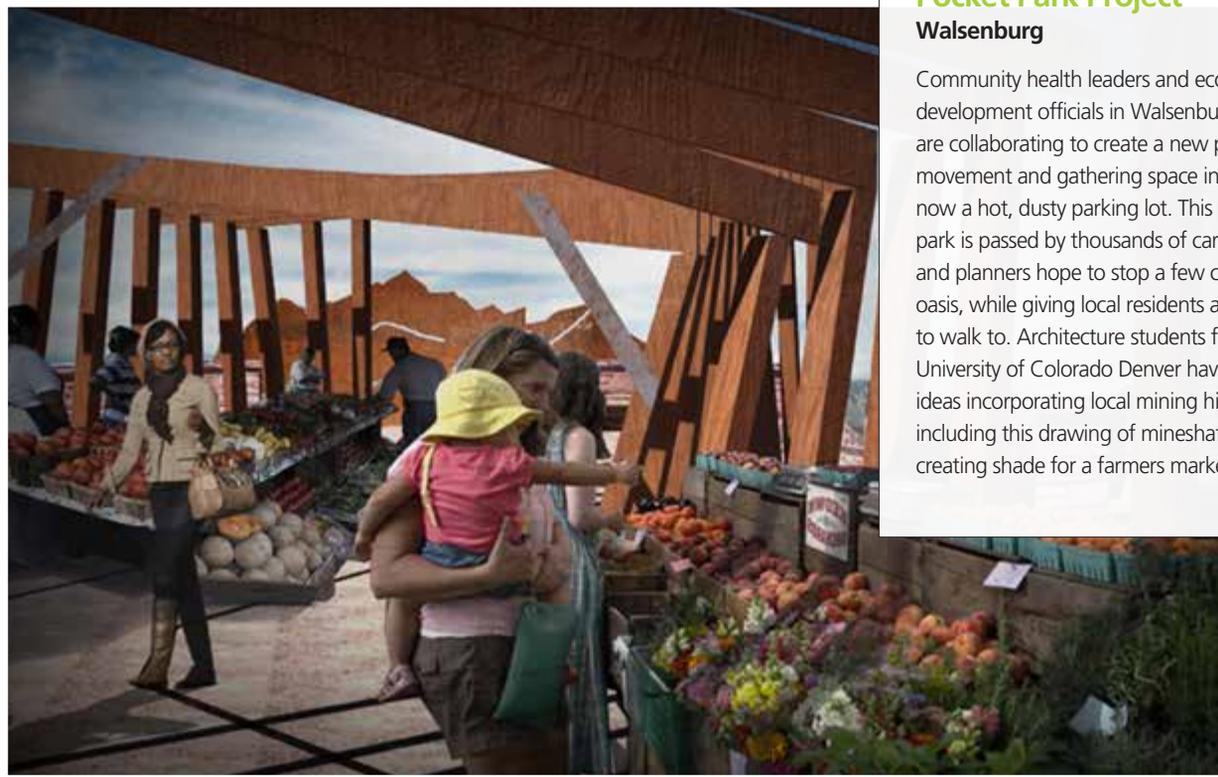
## Boulevard One Lowry

“Making car travel almost unnecessary” is one of the slogans offered by the Lowry Redevelopment Authority about its last major new neighborhood on the former air base. Boulevard One’s layout puts homes at many economic levels within walking distance of shops, offices and recreation space. Bike and pedestrian routes are highlighted throughout, with clear paths to green space and gathering commons. Design Workshop is the urban planning firm on the project.



## Cherry Creek North Streetscape Denver

Architect Chris Dunn of Dunn + Kiley has helped write guidebooks that illustrate the “10 Principles” of healthy building emphasized by the Urban Land Institute. This piece of Steele Street makes walking inviting by providing a “ceiling” of trees and umbrellas, a “floor” of sidewalk and lawn, and “walls” from tree trunks and patio walls. The mix is visually appealing and draws the pedestrian along.



### Pocket Park Project Walsenburg

Community health leaders and economic development officials in Walsenburg are collaborating to create a new public movement and gathering space in what is now a hot, dusty parking lot. This pocket park is passed by thousands of cars a week, and planners hope to stop a few cars with an oasis, while giving local residents a new gem to walk to. Architecture students from the University of Colorado Denver have sketched ideas incorporating local mining history, including this drawing of mineshaft timbers creating shade for a farmers market.

### Aria Denver Northwest Denver

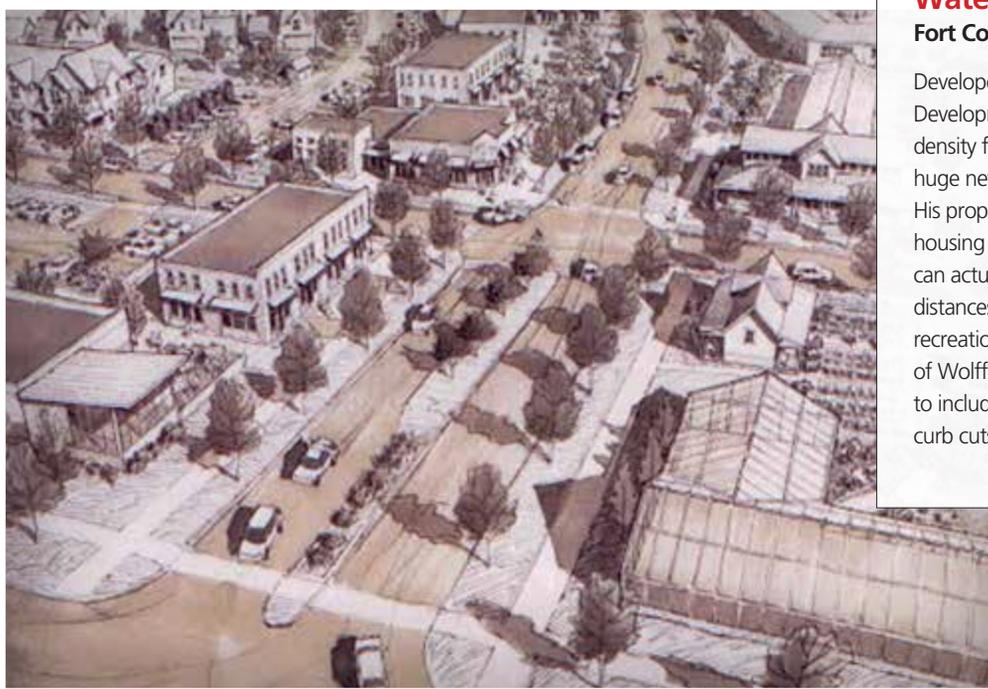
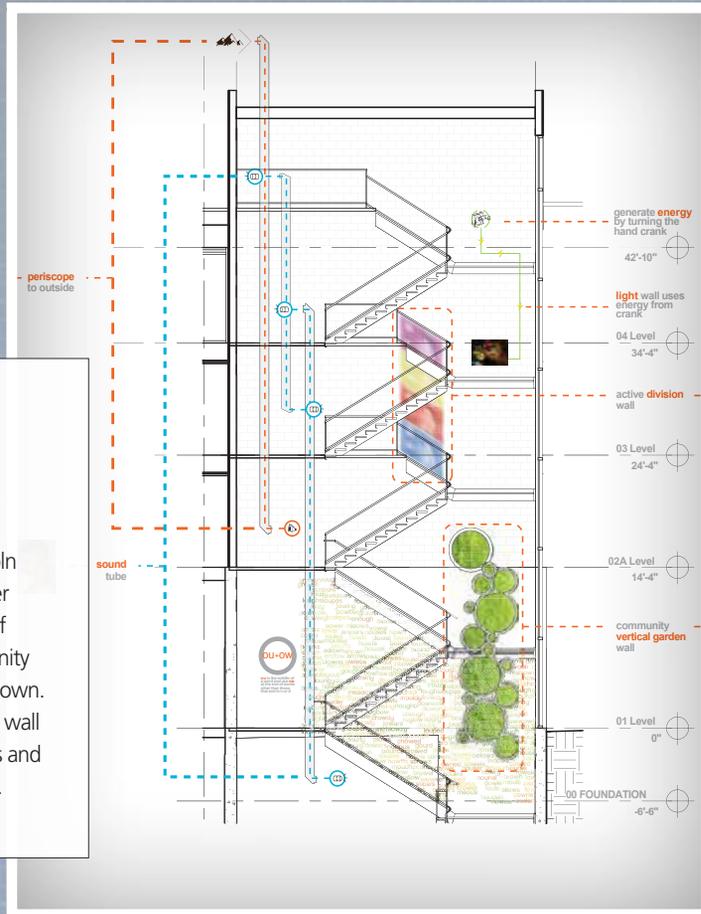
Aria, on the former Sisters of St. Francis property near Regis University, is a chance to bring to a new area some of the same thoughtful master planning used at Stapleton and Lowry. Susan Powers of Urban Ventures LLC co-leads the project with Perry-Rose LLC. Mixed levels of affordable and luxury housing, large urban gardens and farm-to-table production space, community education areas and a walkable layout headline the concepts.



# SKETCHING HEALTH

## Mariposa IV Staircase Studio Completiva

Other pictures in the magazine illustrate a carefully designed “active staircase” at the third phase of the Mariposa/Lincoln Denver housing redevelopment. Another active staircase is planned for Phase IV of the rebuild, incorporating more community features to get people moving up and down. This early design brainstormed a garden wall with usable growing herbs, sound tubes and colored lights activated by a hand crank.



## Water's Edge Proposal Fort Collins

Developer Bill Swalling of Skyland Meadows Developments argues that winning more density from city planners doesn't mean huge new car traffic for a neighborhood. His proposal for a multigenerational housing community claims the right design can actually reduce traffic with walkable distances to community education centers, recreation, shops and open space. Tom Lyon of Wolff Lyon Architects says designers need to include shade for sidewalks and the right curb cuts for bikes.

# Imagining an ■ Oasis

By Michael Booth

In the heart of Walsenburg, as the Spanish Peaks loom to the south and La Veta Pass beckons to the west, there is a bend in the road well known to cars as they pass on through to the glorious Rockies.

The trick for this small town now is to make the bend in the road a little more welcoming to humans, as both a destination and a pause on a longer walking journey.

“They want a visual speed bump,” said Cindy Campbell, a local LiveWell coordinator working with town leaders on a plan for a dusty, sun-baked former parking lot sitting at the spiritual core of a scrappy community.

The scorched parcel at 6th and Main streets has now become a rallying point for both economic development interests in Walsenburg and the burgeoning healthy places movement. What if the town could transform the rectangle of dust into an oasis for both passing drivers and town pedestrians? Activating the space – and cooling it off with some desperately-needed summer shade – could get people out of their cars, but also get residents out of their storefronts and homes on a longer ramble to the courthouse and a bigger park up Main Street.

“It’s kind of cool because we come at it from different perspectives,” said LiveWell’s Campbell. The town leaders “are primarily concerned about economic development. And I am primarily concerned about healthy eating and living. But our roles cross with this pocket park.”

Their focus is on a literal, not just metaphorical, pivot point. The spot where Main Street, better known to outsiders as Highway 160, turns west toward the mountains and north toward Pueblo, is passed by hundreds of thousands of cars in a summer. The drivers are

## For Walsenburg, a small park could lead to a greener life.

usually intent on speeding toward the Great Sand Dunes, Mesa Verde, Durango, Taos or the bustling Front Range cities to the north.

“It used to be a small mom and pop grocery until it burned,” said Gaye Davis, a grant writer for local schools and a member of Walsenburg’s economic development leadership. “It’s so central to the entire community.”

The partners worked with the state Department of Local Affairs to find design money, then brought in the University of Colorado Denver architecture school for technical assistance. UCD’s Jeffrey Wood brought a team of students down to Walsenburg for everything from resident interviews to a scan of local history. Surveys were included in town utility bills asking more questions about what residents wanted to see in the popular space.

Walsenburg is rich in mining history, and residents still feel close to it. In another town park sits a sculpture of the “miner’s tags,” the identifiers the diggers would hang around their necks as they went down in the shaft, then hang back up when they came out safely. History buffs still visit to touch the ground of the Ludlow Massacre, when about two dozen miners, women and children were killed during a 1914 strike as state troops and company goons attacked a protest camp.

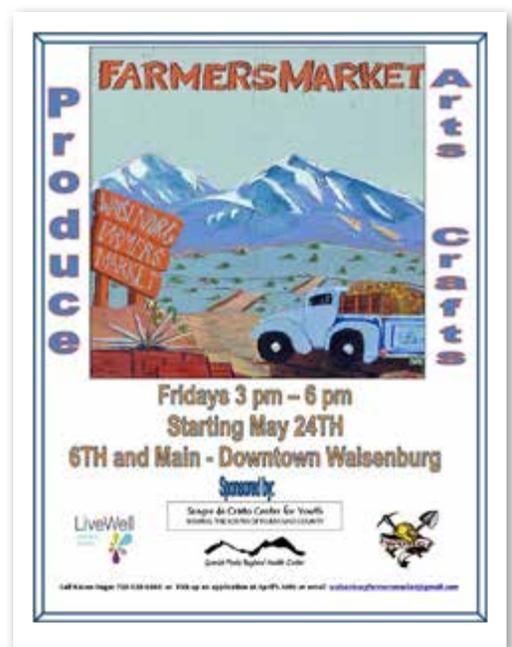
Early design ideas include: a pocket park with mining ore carts as planters; and mine shaft elements such as miner’s tags embedded in the sidewalks to lead walkers toward the main city park. Walsenburg experimented with a farmers market on the site and found much more shade was needed on summer days that can easily reach 100 degrees.

Residents have liked what they’ve seen so far from UCD, Campbell and Davis said. They have been burned in the past, though – a sculpture

out on busy I-25 meant to represent the iconic Spanish Peaks looked more like a dinosaur and a boondoggle. UCD and the students have worked hard to avoid “the dinosaur problem,” officials said.

Locals have also seen a lot of promising studies “sit on the shelf” without ever coming to life. In this case, there are real drawings they like, and a fundraising plan with reachable cost goals, Campbell said.

“It’s about developing the momentum for the park and that sense of community ownership,” Campbell said. “And once it’s developed, people walk there and buy fruits and veggies and go on historic walking tours that can originate from that park.” •



While it debates designs for a new “pocket park” on an old parking lot, the town of Walsenburg has staged farmers markets in the underused space. Artist Kenny Martinez created this iconic poster showcasing the area’s Spanish Peaks.



# THROWN FOR A LOOP

Observations

## Community opposition ensured Denver’s ambitious City Loop playground redesign never got off the ground.

By Michael Booth  
Photography by James Chance

**Editor’s note:** A spongy, forgiving walking path for ramblers of all generations. Fountains to run through. A kiosk to check out Frisbee golf discs. Outdoor cooking classes demonstrating tasty uses of zucchini from the public garden. All these and more were the ambitious goals of City Loop, an innovative playground redesign at Denver’s vital City Park. But in the spring, the city announced City Loop was dead, at least at City Park, because of community opposition. We sat down with two of the main designers of City Loop to talk about what went wrong, what was still right about the idea and whether its cutting-edge approach to fitness and public space could be revived elsewhere. Following is an edited conversation with Gordon Robertson, director of planning at Denver Parks and Recreation, and Michael Bouchard, senior landscape architect and manager of the City Loop project.

### What problems were you trying to solve with City Loop?

We did a playground master plan – the only one I know of nationwide – that looked at how to do playgrounds in a different way, so it wasn’t all steps and platforms and slides. Get people moving in new ways and get all generations moving. As City Park’s Dustin Redd playground was aging past its lifetime [about 20 years], we thought, what a great place to implement this new way of doing play and getting all generations interested in active living.

### What does that park represent for the neighborhood and the region?

A lot of cities that invested 100 years ago in the Olmsted model of parks now have new generations of folks with younger families moving in looking for new ways to utilize these park spaces. A long time ago when they were built, the open meadow was a way for people in petticoats to drive around in carriages and admire the open view.

### Was there ever an option of not putting a big playground in that particular area of the park?

This is a regional park, even though people don’t like us to say that. To them, it’s their neighborhood park. But it needs a regional playground. So we

scale it a big playground, appropriate for the size of the park. The existing Dustin Redd is 1 acre, and it was already vastly undersized for the population it was intended to serve. So the initial redesign was a regional playground at 3 acres. We did later split the difference after getting feedback and go to 2 acres of impact.

### What’s the difference in budget between these scales?

The neighborhood park playground is 1 acre and typically budgeted at \$250,000; the next size up in a larger park is 2 acres at \$400,000 to \$600,000, and a 3-acre regional playground is over \$1 million. And this was going to be above that regional standard.

### The design you did come up with, there was already quite a bit of collaboration and input before it became controversial?

We have 500 acres at City Park, and 150 acres of it is still in passive meadow green space. The project site is in a meadow that’s 14 acres of that 150 acres, and within that 14 acres the impact is about an acre with Dustin Redd. So we developed this 3-acre play design, which is spread out, but it’s 3 acres of impact – not what you might have heard that it impacts the whole 14-acre meadow.



Denver Parks planners say they erred by emphasizing bright colors and amusement-park-style attractions when they tried to sell City Loop to the neighborhood. Renderings like this one will be revised if the plan gets a second life.

**What are you trying to do overall in the way that people use the park space? What's different?**

The biggest thing, frankly, is the distributive play around the loop. The loop was envisioned as a rubberized walking track much as you'd see in a high school athletic track; there is no access to those in [Denver Public Schools] because they are locked behind fences, and we don't have any in the park system. Older folks love to walk on them and run on them; they are very gentle on the knees. It was going to attract older groups and moms groups that come in the morning to exercise, very intergenerational. The plaza space was a unique feature – a kiosk with play blocks packed inside that people could pull out and play with. It would have kites, hammocks, Frisbees, soccer balls, take a book/leave a book, and it would have a college student making \$9 an hour hanging out there at the busy times of the day to check out equipment. It was going to be a very social gathering area. And the path leads you from one thing to the next.

Here's one lesson learned: Our consultants were terrific, and they really pushed the edge on these graphics they created. And while that works for someone like me who appreciates that kind of excitement and graphic detail, I think for people who ended up hating this project,

it's exactly what they didn't want to see: super bright, super colorful. If we did it again, we'd use watercolors.

**They thought you were making the park fluorescent?**

People really honed in on the blue of the tubing, yellows and oranges and blues. If you saw it in a real landscape at a real scale, it wouldn't look anywhere as vibrant and crazy as that.

**Too Disney?**

Disney, Elitch's, we heard a couple of different references.

**So later, you changed the scale somewhat?**

We were supposed to receive our 60 percent design, and frankly, already we had told the architects it was too much and we needed to scale back some of the built design. Unfortunately the 60 percent design got out, and people got hold of it and said, "You can't do this in our park."

**What happened in those earliest public meetings?**

We appreciated people's input, and we had 80 people show up at one meeting but they were almost all from one age group and demographic. They all had the exact same opinion; much of what they said I couldn't disagree with, and they were things we were already doing. I think there was middle ground we could have achieved.

• • •

**"We appreciated people's input, and we had 80 people show up at one meeting but they were almost all from one age group and demographic. They all had the exact same opinion."**

*Gordon Robertson, director of planning, Denver Parks and Recreation*

• • •

**How did you arrive at the point of saying, "We're just not going to put it here."**

There was such coordinated opposition from a segment of folks. While we know there is as great, or frankly, greater support from people who wanted us to pursue it, they were not as vocal and as coordinated. What they will tell you is they have lives and young kids and very demanding jobs, and while they'd love to come to meetings on weekends and coordinate an Internet campaign, they just didn't have time. It's definitely a bit of a struggle. The mayor's office was receiving letters daily, we were receiving letters daily ... and in a meeting of 200 people, where 10 of them were supportive of finding common ground, the majority wouldn't even give us the common courtesy of listening. There are 200 people who hate it, clearly; there are how many thousands of people living near the park? The demographics show that those 200 do not represent the people living around the park.



This promotional material for City Loop showed Denver's hopes for both passive and active uses of City Park space.



**I walked into Councilman Paul Lopez's office to talk about the Westwood neighborhood, and there were plans for City Loop sitting on his desk. He said, "If they don't want it over there at City Park, we'll take it!" Are there plans to go there?**

We have said we are looking at the west side of the city. We've heard that sentiment from Paul and we know there are underserved communities in that area. We went through a lot of work to get this design, and we owe it to the city to move forward somewhere if we can.

**Looking back on this, would you say this is a loss, a victory or something else altogether?**

Definitely not a loss. What we've accomplished is fantastic and we knew we had a longer way to go. A lot of people are struggling with public process right now. People don't like to come to meetings – unless there's a crisis. If we called a meeting about trash in Washington Park, nobody would show up. If we called a meeting about the trash that's a result of alcohol use in parks and talk about banning alcohol, that's a crisis and people show up. There were 50 different touch points where City Loop was on display and many times, no one showed up.

*Denver Parks planners Gordon Robertson, right, and Michael Bouchard, left, are open about mistakes and misperceptions that helped doom an innovative playground in City Park. They plan to revive it elsewhere.*

City Park is a collection of problems: the zoo, the museum, the events. Parking is an issue on a handful of days only; 94 percent of the time you can drive in and there's only one guy sitting in his car reading the newspaper. This plan was to get people to come to the park at all different times of the day and the week.

**So what happens at City Park?**

We'll be repairing Dustin Redd playground to the best of our ability and hope to keep it going for two or three or four years until the dust settles and we can return to planning. We need to find better ways to communicate the problem we're trying to solve – ways of activating the other side of the debate, not just one group of opponents. •



**W**hen you mention to some City Park neighbors that the Denver crown jewel has whole green sections that are largely empty most of the day, they have a sarcastic but effective response:

"And the problem with that is?"

Tom Morris, a retired architect, was among those at South City Park Neighborhood Association who vehemently opposed the City Loop "activation" area with responses like that one.

The "Disney-fication" proposed by a new generation of parks planners tries to solve a problem that doesn't exist, and creates new problems in the bargain, Morris argued. City Park is already busy with the zoo, an enormous museum and other visitors. Quiet green space offering leisurely strolling or picnics – without crowds – is also a primary function of city land.

"The Loop was not in keeping with the historical character of City Park," Morris said. "The people in charge did no evaluation of what effect another regional attraction would have on the park. No parking study, no maintenance plans, no traffic studies."

As for Loop proponents' claims that a project beneficial to multiple generations and tens of thousands of neighbors was killed by a few dozen cranky old folks, Morris made no apologies. A similarly vocal group had stopped past egregious City Park land grabs such as a fire station and an aquarium, he noted.

"The coalition opposing the Loop was started by older people who had experience defending the park from thoughtless intrusions. The recognition that changes have effects are apparently lost on the millennials who believe more is always more," he said. •

Is there proof  
greener spaces get  
people moving around?

# Measuring Motivation

By Michael Booth  
Photography by James Chance

A skyscraper with an oasis rooftop meadow sounds like a wonderful place. But does it make any difference in the health and happiness of the people who work there?

A public housing project with a shady walk to a community vegetable garden is much more inviting to most people than an asphalt playground or a stoop overlooking hard-packed dirt. But does the green space really get people outside and moving around?

It might be a logical assumption that wide, well-kept sidewalks and guarded road crossings would lead more children to walk to their local school and begin to make a dent in childhood obesity rates. But does the neighborhood truly change its behavior, or is it just wishful planning?

As the healthy places and built-environment movements grow more popular, the desire to measure the impacts grows apace.

Angela Loder, a Denver researcher on green space and the urban environment, collects examples of what has been observed so far and points to the most promising areas for study in the near future. Results are imperfect, her short summary goes, but the challenges are intriguing.

“We haven’t had enough time yet. It’s a very broad subject, and we’re still understanding the broad impacts of many factors on human health,” Loder said. “We now have ‘green buildings’ touted as health-promoting ... so there’s a lot of desire to quantify that.”

One statistic Loder uses to prick up the ears of architects, developers and real estate planners is this: \$745. That’s purportedly the annual direct cost of an unhealthy work environment on employee health, in the form of illnesses ranging from headaches to sore throats and stress that lead to lost time, doctor visits and rising insurance premiums.

While she is the first to acknowledge the need for wide-ranging, well-designed studies quantifying built environment and human health, Loder mentioned a few reports that point in intriguing directions:

- A 1980s study of gall bladder patients on inpatient stays in hospitals compared those randomly assigned to different rooms. Those enjoying



windows letting in natural light and a pleasant view stayed eight days in the hospital and reduced their need for pain medication; with similar medical complications, those without a view or natural light stayed nine days. Multiply that one day by thousands of patients and savings could be enormous.

- One of the most intriguing office space studies was conducted by the U.S. General Services Administration using volunteers from its extensive Lakewood Federal Center offices. The volunteers agreed to periodic biometric scans using heart rate monitors and saliva tests for the cortisol indicating stress. In a major complex renovated over 17 months, researchers could study effects of widely varied office space.

The study, published in the *European Journal of Cardiovascular Prevention & Rehabilitation*, found workers in older office space with poor lighting, bad ventilation and no views had less-healthy heart rates and higher stress levels than those enjoying better space. The study claimed a “clear association between overall workplace physical environment and stress response.”

- Loder’s own studies of “green roof” office spaces in Toronto and Chicago showed varied reactions to wilder, meadow-style roof plantings and more sedate but less engaging sedum roofs with short grass and subdued succulent plantings. Workers’ initial reactions to the “prairie” style may be less positive – a “go mow that” reaction, Loder described it. But smart presentation and education programs about the need for wilder green spaces can change that reaction, she found. People can learn to appreciate things if they learn they were done for a reason, and response to designed spaces is not limited to an innate, “gut” reaction, she said.

The lingering questions at the end of Loder’s talks are, “So why not do this? Is there any good reason not to try?” Even if the designed environment can’t solve significant employee health problems, the employer still winds up with a thoughtfully planned building that has more inviting spaces. The winning message is that the company has tried hard to put people first.

“The drawback of doing it is that it costs more money,” Loder said, bringing listeners back to brick-and-mortar reality. “For those interested in building, you have to sell them on the idea that it’s worth it.” Will the better design fetch a higher rent? Will tenants flock faster and stay longer? Will cities or other governments offset the costs with incentives?

And, Loder added, many developers aren’t willing to confront those cost questions “without serious research” to back them up. •



# B-CYCLE

## ROLLING ALONG THROUGH FAST GROWTH, A FEW BUMPS.

By Michael Booth  
Photography by James Chance

**Editor's note:** *Those clunky-fun red bikes with the silver baskets have quickly become one of the most visible symbols of urban revitalization and healthy living in Colorado. B-cycle grew out of a brainstorm to get visitors at the 2008 Democratic National Convention in Denver to move around downtown on loaner bikes. The bike party never stopped, and enthusiasts like executive director Nick Bohnenkamp have built B-cycle into a thriving, multimillion dollar nonprofit. Health Elevations sat down with Bohnenkamp to talk B-cycle's origins, growth and new challenges.*

### Why does Denver need a formalized bike system?

To us, it's about more mobility options. When you think about why it's needed, Denver is still fairly car-centric. It's still cheap to park downtown. When you talk about things like active living, bike sharing fits right in. When you talk about first and last mile connections to RTD stops, for instance, bike sharing fits right into that model. It sort of fills in the niches in public transportation or people's personal lives.

### Is B-cycle meant to be a commuter system, a citywide fitness aid or something else altogether?

When we originally launched, we thought it would be largely a commuter-based system. Now that we've been operating for four-plus years, we see at least two very different user types. We have about 4,000 annual members who use the system mostly for commuting purposes, and we see that in the Monday through Friday ride patterns. Their rides spike morning, afternoon and lunch rush-hour periods. We have a second user type: the casual user – the person who buys a 24-hour access pass at the kiosk. This is somebody who might use it for a recreational ride from REI to the Cherry Creek Mall; they might use it as a utilitarian form of transportation to get to a Rockies game, for instance. And we have people who flat out use it as a work break – pop out for a 20-minute ride and come back to work re-energized.

### Let's talk about the budget and finding sustainable funding.

Operational funding – our budget is roughly \$1.4 to \$1.5 million a year to operate. All of that comes from a three-legged stool: membership fees, usage fees and that third leg is the sponsorship fees we generate by associating people's logos with bikes and our stations. Grants would be a fourth leg. In 2013 and 2014, we won a grant from Kaiser to do some research and programming, and to sustain us when we didn't know how the growth would

bring in enough revenue. In the first couple of years, we found at least half of operational funding came from sponsorship revenue. As we've grown, and in particular in 2013, that was the first year when membership revenue outpaced sponsorship revenue.

**What have been the biggest surprises along the way?**

When we launched, we thought we might generate 5,000 memberships in the first year. But we had 1,700, while we had a surge in the casual user. We overanticipated membership and underestimated the importance of the casual-user revenue. Because most of the fees come from casual members, it helps us with cash flow throughout the year and shows us how important that casual base is. That was a pleasant surprise and something we've learned to market to. One thing we've learned through ZIP code analysis is that about half of our casual-user base comes from out of state; we have a large number of tourists who use the system throughout the year. So it's apparently a great way for people who don't live in Denver and maybe don't want to rent a car to get around.

**At one point you had some criticism from city council and other quarters that you were focused too much on relatively wealthy parts of the city, not all pockets of the city. Has that changed anything that you have been working on?**

We planned our system based on things like residential density, population density, co-location with transit. Initially it's about getting a system that's going to be financially stable. But to address those criticisms, a couple of things happened: One is our founding funder, Kaiser, was generous to also fund a two-year grant; first phase is a research phase we are wrapping up to study

barriers of entry from low-income populations, minority populations and understand the things we can do to program or develop a more diverse ridership base. So in 2014 and 2015, we'll work on how to program a more inclusive system, whether that's working on a reduced membership price, working more with the unbanked, working to reduce cultural stigmas surrounding biking and increasing the safety aspects of biking in Denver.

**How B-cycle Works**

**Access to a bike costs:**

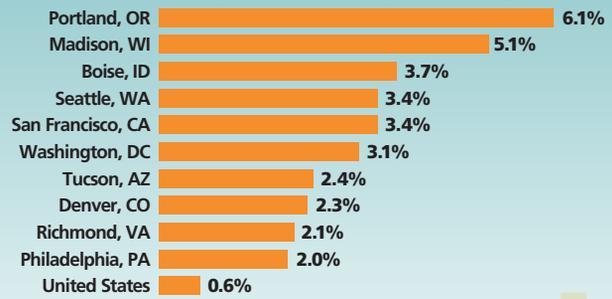
- \$8 for 24 hours
- \$20 for 7 days
- \$30 for 30 days
- \$80 for a year

**Then, actual time used on the bike costs:**

- First 30 min. = free
- 31-60 min. = \$1
- Each 30 min. after = \$4

**Bicycling to Work**

**10 Large Cities with High Percentages**



Source: U.S. Census Bureau

**Are you feeling good that there are some ideas out there or is it a real head-scratcher?**

I think the first phase of research has shown us some things we can work on. We've been working with Denver Housing Authority to provide free memberships to people in low-income housing. They have social workers on-site who can identify people in need who might also be a good fit for our program. Denver Housing Authority has also helped provide us capital for stations near some of their new developments, such as 1099 Osage. And we have about 160 members in that subsidized program with them. We want to open it up to a larger public and program it in a larger way, where anyone who makes X amount of dollars or less, or anyone that lives in a certain area, can have access to our system at a largely reduced rate.

**Are there policy questions outside of your control that could make your life easier? Could expand the program?**

There are a lot of good things happening already. We see a lot of high-density housing units going in. That ultimately is great for our system. You need a large group of people to justify what is, in our case, essentially a \$50,000 piece of equipment going into the ground. Second, the city and Denver Public Works are being very progressive with plans like Denver Moves, getting people to use anything other than cars; looking at the right of way as spaces to move people. We have permitted, and we will be installing, our first bike-share station in a street, below the curb. Until now, all of our stations were above the curb, between the sidewalk and street.

**Why do you need that – bike stations on the street level?**

If you think about where bike sharing fits well – high-density urban areas – that's also the place where right of way space is most competitive: trees, benches, bus stops – all above curb. So the ability to go below curb and potentially take some parking for bike sharing is very progressive. So kudos to Public Works for allowing that. •

It's not easy to live in Denver without a car,  
but it isn't as complicated as you might think either.

# Hard 2 Go

without your car?



By Claire Martin  
Photography by James Chance

I used to drive a Subaru. Then it died a few weeks before our oldest daughter began her first year of college, which explains why I didn't get a replacement car. Instead, I drove the rusting 1987 BMW that my husband, who loved that car, assured me was increasing in value every year. He was kind of right, if the phrase "increasing in value" referred to the amount of money I had to pay mechanics to keep it drivable. When the last instance of increased value hit \$1,600, I looked for another way to get around town.

Because the RTD bus that goes from my neighborhood to downtown doesn't start running till 6:30 a.m., long after I need to start teaching a morning exercise class at the downtown YMCA, the bus is not a contender. (Sometimes I'll take it home, though.)

Moving beyond RTD, I found two options that worked best for me: the Denver B-cycle and the car-share car2go program. Each has its own charms and foibles.

Let's start with Denver's B-cycle program. An annual membership costs \$80 but various promotions usually bring that down \$10 or more. (You can skip the membership and rent a B-cycle with a credit card; but for a frequent user, it's more cost-effective to buy a membership.)

Members can rent a B-cycle free for up to 30 minutes, \$1 for an hour and \$4 for additional hours. If you wonder why you're basically penalized for renting a B-cycle for more than 60 minutes, the answer is that renting a B-cycle for more than 60 minutes is punishing in itself.

A B-cycle is designed for short point-to-point commutes. Its handlebar basket and headset make it as graceless as a pregnant bison and so top-heavy



Trying to get by in Denver without your own car involves a combination of buses, light rail, B-cycle bikes and car-share services like car2go. Left, Claire Martin pulls out her swipe card to activate her car2go rental.

that it takes a fair amount of upper-body strength just to keep it pointed in the right direction. (Bonus: Free core workout with B-cycle rental.)

A B-cycle has three gears: fast, for climbing; slower, for flat roads; and slowest, for downhill.

But in downtown Denver, where I work, a B-cycle is a pretty good way to get around. There are 82 B-cycle stations, mostly between LoDo and City Park, but some as far south as the University of Denver, with the current western outpost at 32nd and Julian in the Highlands.

Usually, each station has at least one bike. But if all the bikes are gone, the next B-cycle station (with a few exceptions) is a short walk away. Once or twice, I'd get to a B-cycle station and find all the slots full, requiring a ride to the next B-cycle station so I could park the bike and clock out. Most of the time, there were free slots, giving the B-cycle an enormous advantage over trying to find a parking space on the city's crowded streets. (Or fishing out enough change, once you find a space, or calculating how much time you'll need if you use a credit card.)

So far there are no B-cycle stations east of the Denver Museum of Nature & Science or southwest of Federal and Colfax – sorry, Park Hill, Stapleton and Westwood! But maybe that will change.

For trips that require a car, I signed up with car2go, one of several car-sharing programs in the Denver area. Zipcar and OccasionalCar were options, but members must return the car to a handful of specific locations, while car2go allows members to pick up and drop off cars anywhere within its home range. That works better for me because I need a car at 5:15 a.m.

So I joined car2go for \$35. I use one of the 300 Smart cars in the Denver fleet. car2go

charges by the minute (currently, 38 cents), or about \$14 for an hour and \$73 per day.

A car2go membership covers insurance and includes a blue card that unlocks an available car when the card is pressed against a solar-powered reader on the vehicle's windshield. Through a car2go app, I can use my computer, tablet or smartphone to look up available car2go vehicles nearby and reserve one up to 30 minutes ahead.

• • •

**“Moving beyond RTD, I found two options that worked best for me: the Denver B-cycle and the car-share car2go program. Each has its own charms and foibles.”**

*Claire Martin*

• • •

When I get to the reserved car, I scan the car for any scratches or dents, then hold the card over the reader. When I hear the doors unlock, I get inside and log in to a touch screen on the dashboard that includes a prompt to report new damage before releasing the key (which stays in the vehicle) and sending me to a GPS map.

Once I reach my destination, I log out on the same touch screen and hold the card again over the card reader, formally ending my trip. (Don't skip that step. You'll be charged.)

car2go immediately taught me that trips take longer than I'd thought. It costs me around \$6 to drive from my house in Park Hill to downtown Denver. (Yes, that's much more expensive than paying \$2.25 to take the bus – but again, that's not an option for me at 5:15 a.m.)

Here's a definite bonus of using car2go: Once I've reached my destination, I don't pay for parking. car2go made a deal with Denver, so members can park free at metered parking,

which feels especially rewarding in LoDo and the Cherry Creek North business district. (You still pay if you use a private lot.)

There are downsides to car2go.

You can't reserve a car more than 30 minutes in advance – a significant factor for me because of that 5:15 a.m. commute. If I park a car2go near my house in the evening, it might not be there the next morning.

When that happens, I use that car2go app and look for the nearest car. Usually, there's one within four blocks or so. That's fine this time of year, less fine during a January freeze. I walk a lot more than I did when I owned a car.

Using a car2go during rush hour is expensive because you're paying for every minute that you idle in traffic. If I have to travel during rush hour, I've found it more practical to ride a B-cycle to a station closer to my house, then look up the closest car2go vehicle and drive that home.

Another factor: The car2go home territory – the area where you can pick up and drop off a car without incurring extra fees – seems huge, with I-70 on the north, Santa Fe Drive on the west, Central Park Boulevard/Yosemite Street on the east, and Alameda Avenue with a jog at Colorado Boulevard to East Yale Boulevard on the south.

But that eliminates most of West Denver. In the spring it still excluded Glendale, Aurora, Sheridan, Littleton and other cities that haven't yet struck a deal with car2go. That means if you park outside the home territory, you're automatically charged the stopover fee (38 cents per minute). That adds up quickly.

I'd like to see car2go expand its range, just as I'd like to see Denver B-cycle move east of Colorado Boulevard and west of Federal. That expansion needs to happen if bike-sharing and car-sharing programs are going to significantly reduce air pollution and traffic congestion. Right now, there just aren't enough of us to make a difference.

On the plus side, car2go's limited home territory has had a positive effect on my bank account. I indulge in far less retail therapy these days. Driving a Smart car makes me think hard about nonwork-related trips. Do I really need the cool dress or backpack I saw at that shop? Definitely not, if the shop's out of the home territory.

Is it really necessary to go to Sweet Action for a cup of chocolate sorbet? Well, actually, yes. Yes, it is. But it's probably a good idea to find the closest B-cycle station and burn off some of those calories instead of driving. •

*Claire Martin is a features writer for The Denver Post.*



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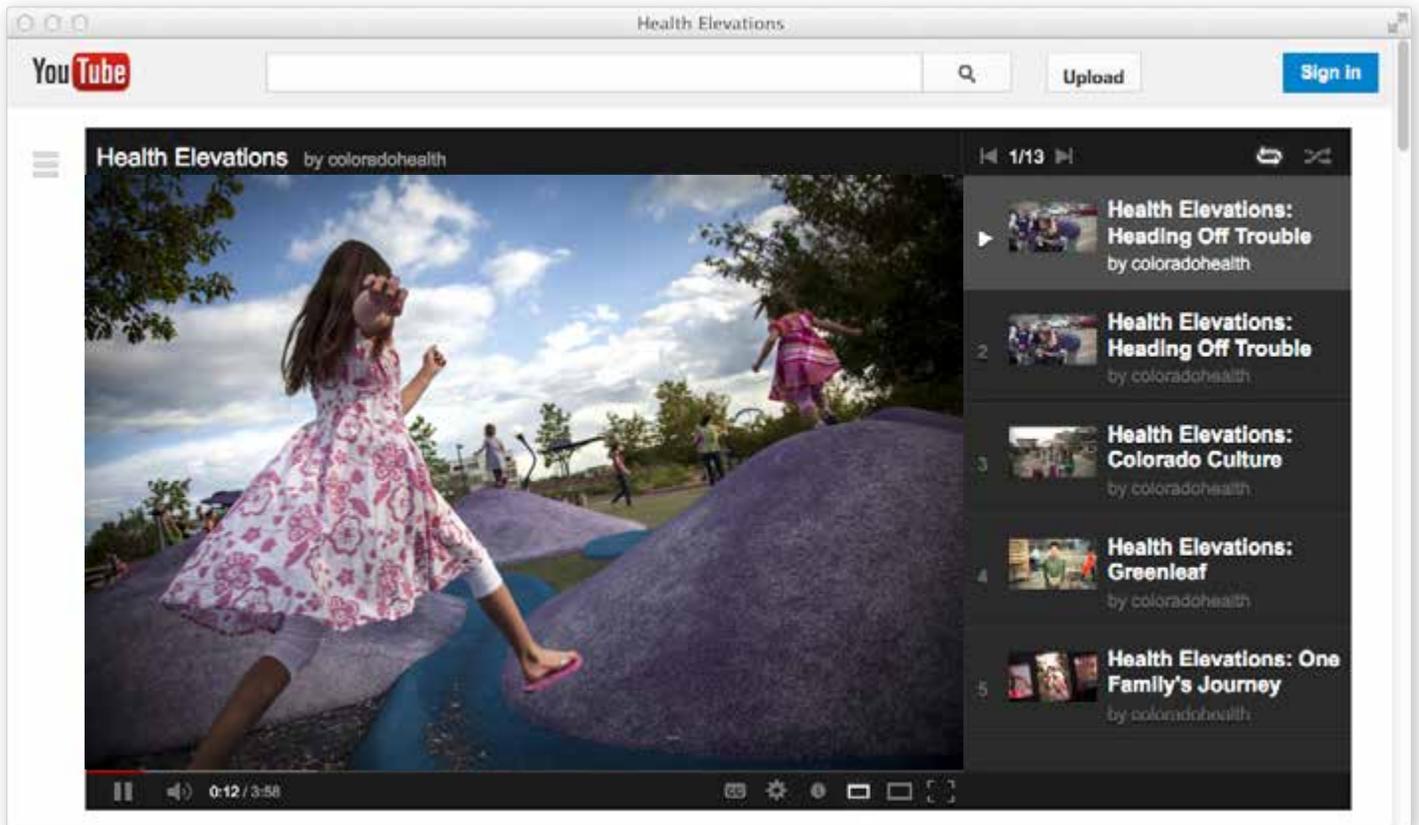
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