

DENVER DATA CHALLENGE

Engaging Community in
Local Data Collection
and Active Living Projects

Published February 2018



DENVER • COMMUNITY
ACTIVE LIVING COALITION



DENVER
PUBLIC HEALTH &
ENVIRONMENT

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Engaging Community in Local Data Collection and Active Living Projects

A documentation and case study of a city-wide challenge to collect sidewalk data, which led to three community-led neighborhood walkability projects in Denver in 2017.

Published February 2018

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ABOUT

DENVER • COMMUNITY ACTIVE LIVING COALITION

The **Community Active Living Coalition (CALC)** is a diverse group of community members who believes that all Denver residents, including kids, older adults, the disabled, and the disadvantaged, should have equitable access to safe, vibrant places to walk, bike, ride transit, and play. CALC's mission is to promote healthy lifestyles and active transportation, collect data and community input to prioritize community needs, and advocate for health and equity in all policies throughout Denver.

The CALC program is administered by Denver Department of Public Health and Environment (DDPHE), in partnership with WalkDenver and Denver Public Health. This program is sponsored by the Colorado Department of Public Health and Environment (CDPHE) through the Cancer, Cardiovascular and Pulmonary Disease (CCPD) Grants Program. Learn more: www.denverCALC.org



As Denver's nationally accredited local public health agency, the **Department of Public Health and Environment (DDPHE)** is dedicated to advancing Denver's environmental and public health goals. DDPHE works collaboratively with city, state and community partners to conduct education, community engagement, and enforcement to ensure healthy people, healthy pets, and a sustainable environment.

Our mission is to empower Denver's communities to live better, longer. DDPHE's divisions include Animal Protection and Shelter, Community Health, Environmental Quality, Office of the Medical Examiner, and Public Health Inspections. Learn more: www.denvergov.org/publichealthandenvironment



WalkDenver is a non-profit founded on the idea that people are pedestrians by design. WalkDenver's vision is that in 2040, Denver will be the most walkable city in the United States. WalkDenver advocates for policies and practices that lead to a more walkable Denver, and is the go-to resource for creating safe, comfortable, and fun places to walk. Learn more: www.walkdenver.org

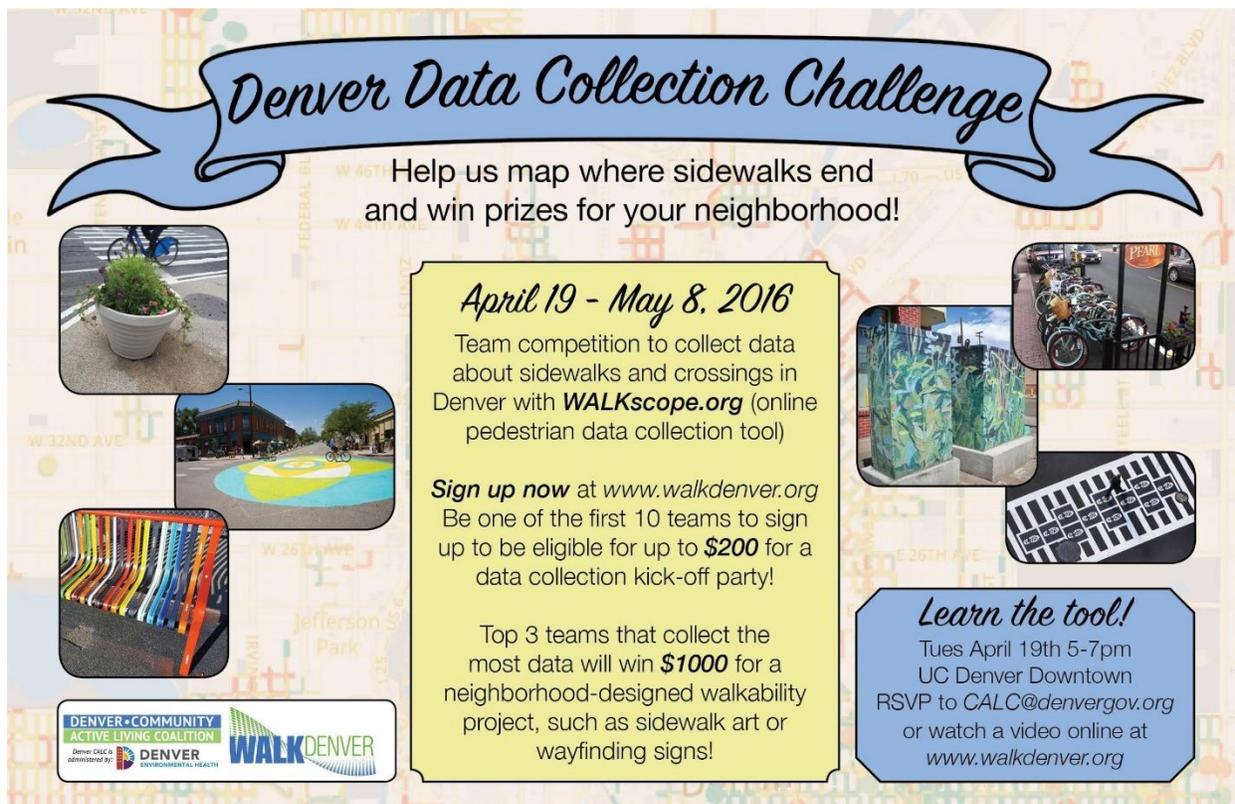


Denver Public Health (DPH) is an innovative, nationally recognized health department that collaborates with DDPHE and many other partners to inform, educate, offer services, and promote policy change to make Denver a healthy community for all people. Learn more: www.denverpublichealth.org

INTRODUCTION

The Community Active Living Coalition began in July 2015 with a three-year grant to increase the quality and quantity of safe places for families to walk, bike, and take transit. In the first year of the grant (through June 2016), staff, partners, and community members were tasked to assess built environments around more than 120 schools and recreation centers in the City of Denver. The assessment included inventory of sidewalks and crosswalks (through WALKscope.org online tool), as well as bike lanes, transit stops, and the school and recreation center outdoor facilities (through paper surveys). The goal of collecting this data is to help the City of Denver understand barriers to active transportation and prioritize community health and mobility improvements.

THE DENVER DATA CHALLENGE



The flyer features a central blue banner with the title "Denver Data Collection Challenge" in a cursive font. Below the banner, the text reads "Help us map where sidewalks end and win prizes for your neighborhood!". The flyer is decorated with several images: a potted plant on a sidewalk, a colorful mural on a wall, a bicycle rack, a street scene with a bike lane, and a close-up of a keyboard. A central yellow box contains the dates "April 19 - May 8, 2016" and details about the team competition, including the website www.walkdenver.org and prizes of up to \$200 for a kick-off party and \$1000 for the top 3 teams. A blue box on the right provides information about the "Learn the tool!" event on Tuesday, April 19th, from 5-7pm at UC Denver Downtown, with an RSVP link to CALC@denvergov.org and a video link at www.walkdenver.org. Logos for the Denver Community Active Living Coalition and WalkDenver are at the bottom left.

Above: flyer for promoting the Denver Data Challenge

As a last big push to finish data collection, CALC and WalkDenver teamed up to host the **Denver Data Challenge**, a team competition to collect data about pedestrian conditions in Denver neighborhoods. Community members were called to action by WalkDenver:

“Denver residents know from their daily lives that the lack of consistent, well-maintained sidewalks makes walking difficult, unpleasant, or even unsafe in many neighborhoods. City Council is currently considering changes to Denver’s sidewalk policy that could help ensure every neighborhood has the basic infrastructure it needs. You can help demonstrate how important the need is, by collecting data on sidewalks and other pedestrian infrastructure in the neighborhoods where you live, work, go to school and play.”

To participate in the Challenge, residents were encouraged to form a team with neighbors, schoolmates, or co-workers, and sign up to collect data over a two-week collection period in one of Denver’s neighborhoods using the WALKscope online pedestrian data collection tool (www.WALKscope.org). A training video and in-person presentation and workshop were provided for residents to understand the parameters of the project and how to use WALKscope.

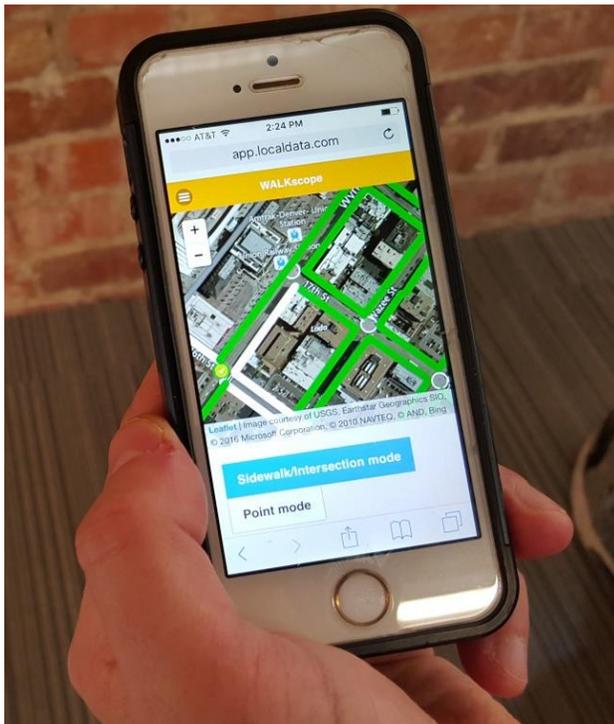
Prizes and Incentives

The first 10 teams that signed up received a \$200 ‘signing bonus’ to purchase supplies or support a neighborhood party to kick off the data collection effort. This incentive was to encourage participation. The top three teams that collected the most data were granted \$1,000 for a neighborhood-designed walkability project (and technical assistance). Teams were given a list of potential projects, such as sidewalk art, intersection murals, or wayfinding signs.

Schedule

- March 19, 2016: Save the date / promotions start
- Early April: Sign up teams
- April 19 - May 8, 2016: Teams participate in data collection, leaderboard updated weekly
- May 11, 2016: Winners announced

*Below left: WALKscope.org on a mobile device.
Below right: A flyer from the East Colfax Neighbors team.*



WALK FOR BETTER SIDEWALKS

The WalkScope Challenge is on, and East Colfax Neighborhood's team is walking together to collect sidewalk data. The Data Challenge is hosted by WalkDenver & Environmental Health's Community Active Living Coalition. The top 3 teams that collect the most data between May 31 and June 14 will win \$1,000 for a neighborhood-designed walkability project, such as sidewalk art or wayfinding signs!

Join the East Colfax Neighbors for a walk around the neighborhood



Saturday, June 11



Meet at Quince Essential
1447 Quince Street



noon-2pm

Can't make it but want to help?

Enter data at walkscope.org through June 14, using the name "East Colfax Neighbors." To learn more about the Data Challenge and using WalkScope to help East Colfax Neighborhood, check out <http://ow.ly/5v4Z300R2Qe>

Process of Selecting Winners

Teams earned “points” for collecting data under their team’s name within the data collection period. The data could be collected anywhere in Denver, but Denver CALC specifically prioritized sidewalks and intersections within a half-mile of target schools and recreation centers identified by the Denver Community Active Living Coalition.¹ A query was done with GIS to calculate the prioritized data.

Each data point (either a sidewalk line or intersection point) entered into the WALKscope tool was assigned points as following:

- 1.5 points each - sidewalk or intersection data point WITHIN priority areas
- 1 point each - sidewalk or intersection data point OUTSIDE priority areas

Data Challenge Outcome

The amount of data collected during this two-week Challenge period was staggering. More than 7,000 sidewalks and intersections were assessed – nearly doubling the amount of data that the tool had collected over several years’ time. Denver CALC and WalkDenver believe this is in large part due to the fact that this opportunity included funding and incentives.

Below were the final points assigned for each registered team in the Data Challenge:

Team Name	Points
Athmar Park	1,930.5
Sunnyside Sidewalk Champs	1,451.5
Barnum Bulldogs	1,290
MileHighSoles	1,135.5
Park Hill Pedestrian	929
CPNGT	242
Westwood	229
BVDG-D4	226
East Colfax Neighbors	196
RNLWalks	152
Baker Neighborhood	76
South Broadway	35
StreetBeat	19
Waterside Walkers	17



¹ See Appendix A for the CALC Priority Areas map. This prioritization method has since evolved into DDPHE’s Denver Neighborhood Equity Index Map, which can be found in Appendix B, or in an [online storymap here](#).

Method of Funding Dissemination

The \$200 signing bonus was provided by WalkDenver through gift cards to the first 10 teams that signed up. This was to encourage participation and quick action. There were some qualifications to this funding: Each team was asked to submit preliminary date, attendance, and budget information for the kick-off party and funds. The funds could also only be used for a kick-off party (food, non-alcoholic beverages, plates/napkins, etc.), data collection supplies (purchase of a tablet, internet or data service costs, pens/printing for paper data collection, etc.), or other uses subject to approval. Funds could not be used for alcohol, marijuana, or illegal drugs or substances, or personal supplies not available to the whole team and/or not used for data collection. The teams were also asked to spend at least four hours total engaged in data collection on www.WALKscope.org between the period of April 19 – May 8, 2016, and to spend all funds or return excess funds to WalkDenver as soon as possible, no later than June 30, 2016. There were issues with compliance on these items, and most teams used the funds in the form of grocery gift cards for food and supplies for a team party.

The small project funds of approximately \$1000 each (\$3-4k total) were spent directly by DDPHE on behalf of the winning teams, managed by the program administrator, and to be spent by June 30, 2017, in accordance with the grant year cycle. DDPHE also applied for and paid for associated permits, such as street closure plans and road occupancy permits. Once planning began on the project, Denver CALC acknowledged that projects would go slightly over \$1000 each (but \$1000 at minimum), but set forth a full budget for all three projects at \$4000. Most of this overage went to extra or reusable supplies like paint and smocks which will continue to be used by other partners for related projects.

Below: CALC volunteers collect data with WALKscope and paper survey forms.



PROJECT DEVELOPMENT

Project Criteria

With three winning teams determined, Denver CALC and WalkDenver began meeting with the captains and members of each team to discuss what project they would like to work on, using several criteria/guidelines given the limited timing and funding available:

- Project must be around \$1,000 (cannot close major streets, no major infrastructure changes such as pouring concrete)
- Must include community outreach on design and implementation
- Project should have a community component in installation
- Installation must be complete by June 30, 2017
- Community groups can identify and pursue additional funding to support larger or enhanced projects
- CALC may pursue additional city partnerships to enhance projects

Project Teams

Each neighborhood team identified a couple leaders who committed to meeting with grant staff and helping to develop and implement the project. Project teams consisted of: Kayla Gilbert (DDPHE), Jill Locantore (WalkDenver), and the neighborhood team leader(s). Additional colleagues and community members were brought in throughout the process, especially toward project implementation.

*Below: Core Project Team for Athmar Park.
From left to right: Kayla Gilbert, Ian Harwick, Jill Locantore, Michele Brown.*



Project Timeline

2016	
March	Word-of-mouth promotion to groups, save the date to start 4/19
Week of March 28	Finalize promotional materials, website, etc.
Mon April 4	Kick-off for team signup (1 st 10 teams get \$200 for their kickoff party)
Tues April 9	Data Collection Challenge starts Data Captain Training (in-person)
Week of April 20	Team kick-off parties
Sun May 8	Data Collection Challenge ends
Tues May 10	Update Top Teams list, soft announce winners
May - June	Work with winning teams, Public Works, etc. to identify final project and budget
June 23	PhotoVoices Expo/CALC party at Webb Municipal Building, announce winners and projects, photos, etc.
July - December	Identify other community partners, collect community input with at least 1 community meeting per project
2017	
January - February	Prepare final permitting for projects
March	Submit permitting for projects
March	Community outreach and volunteer recruitment begins
March - April	Notices of project out to community (45 days before install)
April	Finalize permitting, design and plans
May	Install projects
June	Backup dates in case of inclement weather
July - December	Evaluation and documentation

Planning Meeting

Each of the neighborhood project teams held an initial planning meeting. Community team leaders were invited to bring along anyone else who wanted to be a part of the project planning process. Project teams brainstormed potential projects and discussed and explored feasibility within the timeframe and budget. For example, Athmar Park's original ideas included a running/walking path at Huston Lake Park. This idea was explored with Denver Parks & Recreation, but ended up being not feasible within the timeframe and budget. While ultimately this idea did not fit the scope, it was important to still look into the process and find creative solutions for what could be done quickly in the community. Through this collaborative process, the project teams each settled on an idea to pursue: Athmar Park and Sunnyside neighborhoods wanted intersection murals and Barnum wanted to beautify its Weir Gulch trail with wayfinding.

Community Input

With some basic ideas in mind, each project team developed materials to collect community input from each of the neighborhoods about their potential projects. For example, Barnum's neighborhood association collected input at one of their community meetings about their project: wayfinding art along the trail using an online form and paper survey.

Below: Survey for Barnum trail project, asking about destinations in the area.

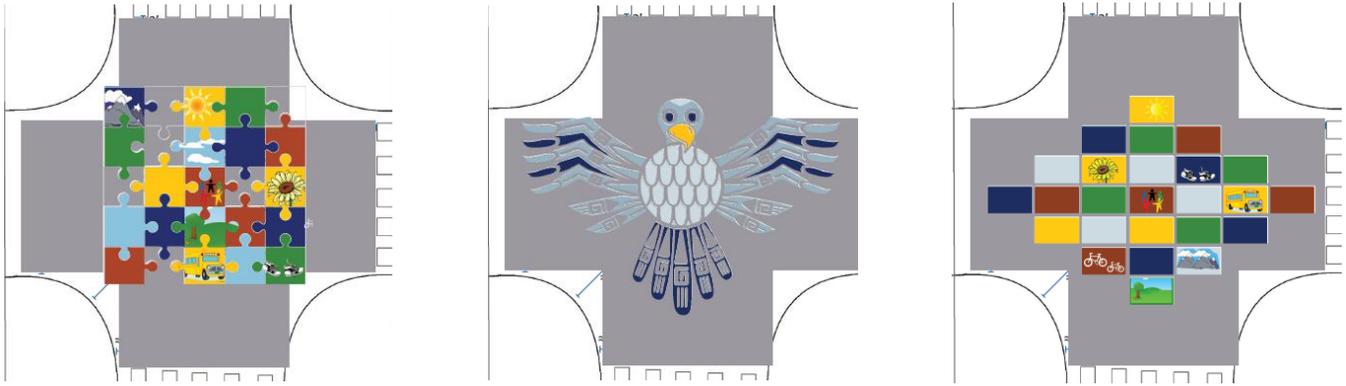


Potential Weir Gulch Wayfinding Overview Map

Please circle the TOP THREE most important destinations to include on the map. You may also suggest additional destinations.



For the Sunnyside project at Trevista at Horace Mann, the project team attended a PTA meeting to collect input from parents on what they'd like to see and also drafted an online survey. Since there is a large Hispanic population in this community, all materials were translated into Spanish and the PTA meetings were also held in Spanish. Based on public input, three potential designs were drafted for the Trevista mural and then voted on by students (over 180 votes collected), where the design of the school mascot, Frankie the Falcon, came out clearly on top.

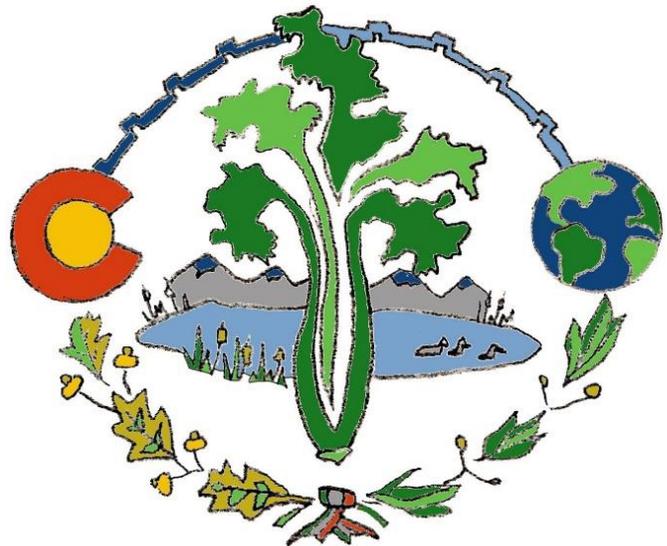


Above: Three draft designs for Trevista mural voted on by students.

Messaging & Visual Development

Each team took feedback from the community to create the messaging and visual components of the project. Athmar Park brought in a local muralist from the community to design the mural and lead the creative process. Barnum connected a local graphic designer who created the wayfinding map and paw print decal designs. These local artists put a lot of time, effort, and care into their work, and also provided their services free of charge for their community. While this was an amazing resource to maximize project budgets, Denver CALC and WalkDenver ultimately decided to dedicate more funds to paying artists for future projects.

Below left: Draft design for Athmar Park intersection mural.
 Below right: Draft design for Barnum Weir Gulch Trail wayfinding decal.



Final Projects

Athmar Park's final project choice was an intersection mural at one of their neighborhood schools, Valverde Elementary, located just off Alameda Avenue (officially a state highway) and Tejon Street. The intersection mural would be painted at the three-way intersection of Nevada and Tejon, one block south of Alameda in front of the school. Two other schools are also located at this block – a charter middle school and high school.

The community chose diversity/culture, the local treasure Huston Lake Park, and community as its top three values. The final design from muralist Michele Brown incorporated Huston Lake in the center, with mountains in the background. The celery stalk in the center represents the history of the community, as the neighborhood was once a large celery farm. There are also elements of the Mexican flag incorporated along the bottom of the mural, since the neighborhood has a long Hispanic heritage. The cog along the top represents the community working together, connecting the "C" element of the Colorado state flag on the left to the globe on the right.



Above: Muralist Michele Brown's finishing touches on Athmar Park's mural.

Sunnyside's final project choice was also an intersection mural at a neighborhood school, Trevista Elementary, located at 41st Avenue and Navajo Street. The mural would be painted at that same four-way intersection, also adjacent to a large community park.

The community chose diversity/culture, children, and community as its top three themes. Frankie the Falcon, Trevista's school mascot, is inspired by Native American art and representative of the historical context of the community. Frankie had only been the school's official mascot a few years, but had a long-term connection to the community. The color blue represents excellence (corresponding to Denver Public School's School Performance Framework). Frankie will now greet Trevista students as they walk to and from the school and through their neighborhood, encouraging kids to soar and excel.



Above: Youth paint Frankie at Trevista Elementary.

Barnum's final project choice was wayfinding along a community trail, the Weir Gulch Trail. The project team chose a combination of vinyl decal maps and painted paw prints to help users find their way along the pedestrian and bicycle path that frequently disappears and reappears throughout the community along a sometimes-buried gulch. Much of the land that became Barnum neighborhood was once owned by and named after P.T. Barnum of the Ringling Bros. Barnum & Bailey Circus, so the community chose a variety of circus animal paw prints as the design for the "breadcrumbs" that will help people walking and biking to follow the trail. The wayfinding can be found along the path (which merges with several sidewalks) from Weir Gulch Park at Bayaud & Utica to the 6th Avenue bridge that connects Barnum Park and the new BMX park.



Above: Volunteers pose with stencils at a Weir Gulch trail crossing.

Community input showed that the unique circus history as a value, which determined the paw print designs. Community members also provided input on their preferred locations to highlight on the vinyl decal maps, as well as the top locations that they felt needed wayfinding.

PERMITTING & APPROVALS

DDPHE and WalkDenver provided technical assistance on the implementation planning, including necessary approvals and permits, street closures and budgeting.

Intersection Mural Permits

For the intersection mural projects, each team went through the new [Community Streets](#) application process from Public Works. This program permits community organizations to install temporary projects on City of Denver streets to promote community building, enhance aesthetics, and create an enriched pedestrian environment.

Applications for intersection murals must include:

1. Community Streets Permit Application [Form](#):
 - Simple form with location and contact information, as well as a maintenance agreement.
2. Location of Proposed Intersection Mural
 - Included details about the location (including names of intersecting streets, presence of crosswalks, etc.) and a site map.
3. Material and Color Specifications
 - Type of paint that will be used, including a screen capture of the exact colors being ordered.
4. Design Drawing
 - Included the draft design for each project. Both designs were later updated with small notifications in an amended packet to Denver Public Works.
5. Traffic Control Plan
 - An external contractor, Colorado Barricade, created a traffic control plan for the street closures. This same company also provided the barricades for the street closures. The traffic control plan was requested approximately four months out from project implementation dates, but had a very quick turnaround.
6. [Street Occupancy Permit](#):
 - The Street Occupancy Permit Application is an entirely separate permit application, but its requirements are fairly simple and have some overlap:
 - a) Application: The application form [linked here](#) (or found through denvergov.org Permit Operations) must be completed.
 - b) Traffic Control Plan (same as in Community Streets Application)
 - c) Art Work Draft (same as “Design Drawing” in Community Streets Application)
 - d) Installation Plan & Volunteer Safety:
 - Including how the art will be installed and how volunteers will be managed to ensure safety in the right of way, i.e., using chalk or stencils, having a volunteer coordinator to supervise, and any safety precautions.
 - e) Neighborhood Notification:
 - Notifying neighbors of the closure so residences & businesses are aware of the closure and can plan accordingly. Each project team created a flyer with event details, day-of contact information, a project website, and a map and information about which streets would be closed and when. This flyer was two-sided with both English and Spanish language versions. Notifications must be distributed at least one week prior to the planned installation date.

The Community Streets application must be submitted 45 days before the planned installation to communitystreets@denvergov.org, however, the Street Occupancy permit application is due 60 days before the planned installation to the assigned right-of-way inspector in the project area ([see this map](#)). Long before project teams even started pulling together the permit applications, project teams contacted both the Community Streets program lead and the area inspector, who allowed Denver CALC to submit one combined application for each project. Planning to install in May 2017, project teams submitted applications at the beginning of March and both projects were approved within a week. Both applications had some small updates, which were sent as updated packages at the beginning of April.

Example Application Packets

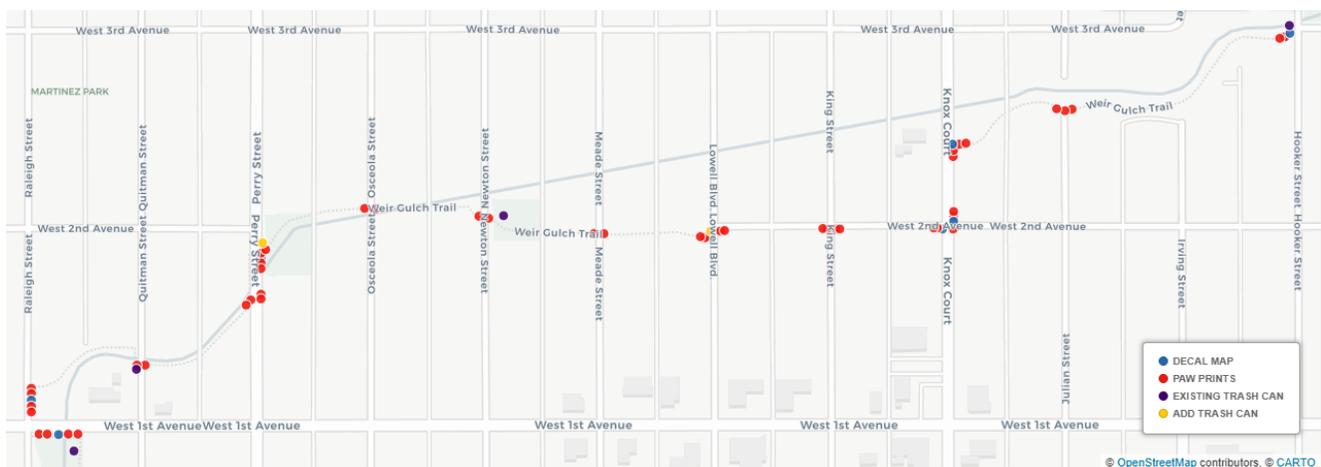
Intersection Mural at Trevista Elementary (Sunnyside) [Final Application Packet](#)²

Intersection Mural at Valverde Elementary (Athmar Park) [Final Application Packet](#)³

Trail Wayfinding Approval & Partnership

There is no formalized process for creating trail wayfinding in Denver. The project team started with a warm connection through existing partners at Public Works, eventually connecting the project team with a supervisor of the Weir Gulch trail and met for a site visit. That supervisor was excited about the opportunity to make the park and trail more beautiful and usable, and confirmed that he would notify maintenance operations that the wayfinding would be going in and was sanctioned. Additionally, the partnership created an opportunity for the project team to bring up and address additional community concerns about a lack of trash cans along the trail.

Below: Digital mapping of locations of wayfinding decals, paw prints, and trash cans (existing and opportunities).



² See Appendix C for Sunnyside Intersection Mural Permit Application

³ See Appendix D for Athmar Park Intersection Mural Permit Application

PROJECT PLANNING

Project Budget

Though the initial goal was to have each project be under \$1,000, project teams quickly realized that might not be feasible and identified extra funds available for small projects through the grant. Overall, all three projects cost around \$7,000 in total, but resulted in about \$2,000 worth of leftover or reusable materials.

Total Projects Cost (All Three Projects)			
Item	# Items	Avg. Cost/Item	Total Cost
Paint (5-gal bucket w/ color)	19	\$206.05	\$3,915.00
Materials	-	-	\$800.00
Road Closures	2	\$439.73	\$939.45
Traffic Control Plan	2	\$70.00	\$140.00
Design Decals & Installation	10	-	\$855.62
Artist Thank You	3	-	\$220.00
Food/Drink	-	-	\$150.00
TOTAL			\$6,950.07

Paint

This was the largest part of the budget. Denver CALC purchased [ColorPave](#) paint, which is formulated for use on streets and has a grittiness to maintain traction and safety. This paint comes in 5-gallon buckets of a 'neutral base', and a 1-gallon bucket of 'tint' which is mixed into it. This paint is listed with a coverage of 60 to 70 square feet per gallon. Coverage could be less for more porous street surfaces - a lot more paint was required in portions of the street with large cracks.

The average cost for each 5-gallon bucket of paint (including both the base and color tint) was \$206. The pricing of the color tint ranged depending on color (for example, the Tournament Purple color is the most expensive). Each intersection mural used approximately five 5-gallon buckets of paint. However, it was beneficial for cost savings to share paint across three projects, since leftover partial buckets could continue to be used. For instance, at Athmar Park, eight colors but less than five buckets worth of paint were used.

The estimated cost of the paint used for each intersection mural was around \$1,000. This paint will be used by upcoming projects in the upcoming fiscal year. These costs did not include taxes, as DDPHE purchased with a tax-exempt certificate.



Above: Paint supplies at Athmar Park mural.

Traffic Control Plan, Street Closure, & Barricades

Project teams requested traffic control plans from a local contractor, Colorado Barricade, which developed the travel control plans for \$70 each. The cost of the barricades for the street closure depends on the quantity and types of signs, which hinges on the street type and complexity for a closure. For example, closures of neighborhood streets (two lanes, existing four-way stops) were just under \$500 each. [Here is a sample](#) of the quote from the Sunnyside intersection mural project.

Materials

A number of materials were purchased for the projects, including paint brushes, smocks, knee pads (foam mat for gardeners), additional 5-gallon buckets, a paint mixer drill attachment, a tarp, traffic cones, paint rollers and trays, stir sticks, trash cans, a chalk reel snap tool, gloves and more. [Find the full supply list with links here](#). The cost for these items was around \$800 in total for all three projects; however, around three-fourths of the supplies were reusable. The thickness of the paint made it next to impossible to wash brushes to be reused, but items like smocks, tarps, ladder, and knee pads were all easily packed back up to be reused. Some items have already been loaned out to partners to assist in their own community projects, and Denver CALC will keep these supplies on hand to continue to support community efforts where possible.

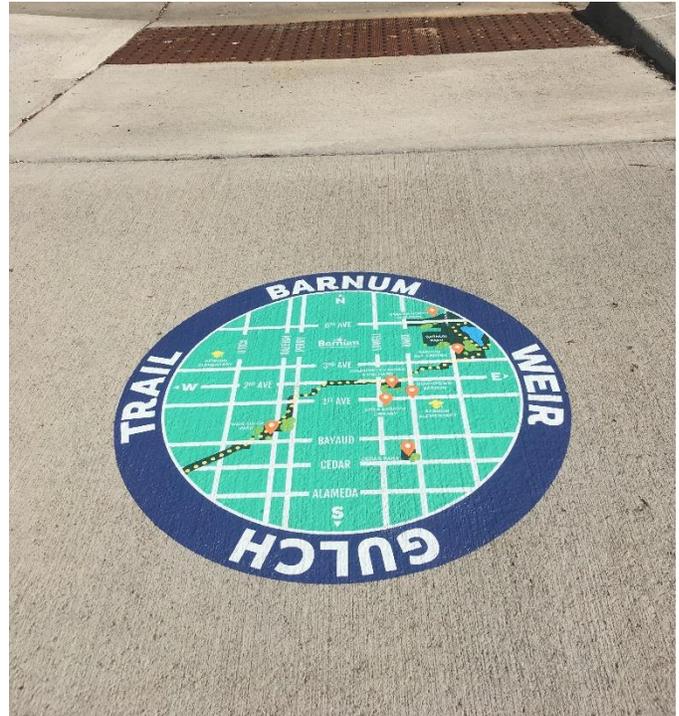
Below: Trevista mural in progress. Notice the street barricades in place, and the assortment of materials being used by various teams of volunteers.



Wayfinding Decals

The wayfinding map decals were printed and installed by a local vendor, Ink Monstr. The design was printed on vinyl and laminated for resistance to sun exposure. For installation, the vinyl decal was heated and pressed into the texture of the concrete. [See a video of the installation here.](#) The project team purchased 10 decals in total, each a 25-inch-diameter circle of the map graphic. With installation, this cost \$856 in total. Unfortunately, Denver was hit with some very rough hail less than a week after installation, and a few of the decals were torn by the intense weather. Luckily, the vendor graciously agreed to offer a discount to replace those, and four decals were fixed in early August.

Below left: Barnum's wayfinding decal getting installed. Below right: The finished installed decal.



Artist Thanks

As a token of appreciation, the project teams also purchased Meininger's gift cards for each artist that volunteered their time and energy. In future efforts where Denver CALC works with artists, some project funds will be dedicated as artist fees wherever possible. While that was not an option considering the limited funds in this project, project teams still provided gift cards to say thanks.

Communications & Promotion

Much of the promotion for the projects was done by the community and through volunteer recruitment. Some events were pushed out through local resources like the City Council District newsletter or neighborhood newspaper. WalkDenver, Denver CALC and neighborhood partners did promotion through their social media and networks. Neighbors who lived within the vicinity received the paper notices on their doors, and some notices were also left at neighborhood spots like coffee shops. DDPHE staff worked with their internal communications team to recruit Mayor Michael B. Hancock to highlight the installation at Trevista Elementary in Sunnyside. The Sunnyside team developed a [photo opportunity press release](#), which was sent out the week of the installation to news and media outlets. [Denver 8](#), [9News Denver](#), and [Denverite](#) all came out to Trevista's installation and produced great stories. Denver CALC paid a professional photographer to come to each installation and take photos, which is where many of the beautiful photos you see in this document came from. Denver CALC also set up a GoPro and recorded a time lapse of Athmar Park's installation, which can be viewed [here](#). After each project, Denver CALC posted a write-up blog with photos from the installation.

Below: Trevista Principal Jesús Rodríguez, Councilman Rafael Espinoza, and Mayor Michael B. Hancock (left to right) paint Frankie's head together.



Volunteer Planning

Each project team planned the day of festivities, and the community leaders solicited local businesses for donations of breakfast, lunch and dinner. This helped save a few hundred dollars in food costs for each of the project installations.

On each project's installation day, there were three main shifts of volunteers. Each shift was accompanied by a few folks to provide volunteer check-in and support as well. See the example simple volunteer sign-up schedule for intersection murals below.

Shift	Time	Max # of volunteers
Volunteer check-in and support	7:45 a.m. - 10:45 a.m.	2
Volunteer check-in and support	10:45 a.m. - 1:45 p.m.	2
Volunteer check-in and support	1:45 p.m. - 5 p.m.	2
Install Mural	8 a.m. - 11 a.m.	12
Install Mural	11 a.m. - 2 p.m.	12
Install Mural	2 p.m. - 5 p.m.	12

All three projects ended earlier than anticipated, and the last shift was mainly final touches and clean-up. Particularly in the cases of the intersection murals, there was a lot of interest on the street and several walk-up volunteers. Because of this, it was important to always have a volunteer coordinator on site responsible for on-boarding new volunteers and getting them involved. At Trevista, for instance, between 25-30 volunteers painted in the morning shift (this was also when the mayor came to speak and join in the painting). At Athmar Park's intersection mural, the work was complete before the third shift even began, and the volunteer coordinator was able to contact the last few scheduled volunteers. Luckily, with weather and schedules, the morning was the most popular shift for volunteers.

Below: A few detail-oriented volunteers put the final touches on Athmar Park's mural.



Planning Mural Designs

Colors were one significant consideration in design preparation. Since the ColorPave only comes in certain colors (and some don't show up brightly on pavement), project teams had to keep the artwork simple. For instance, Trevista Elementary School's mascot Frankie the Falcon is a beautiful design in shades of blue and purple which featured black outlines and white elements, which needed to be simplified. The black lines and white elements were removed and treated as negative space, and the colors were translated to the available color palette, resulting in a very simplified design compared to the original.

Below left: Original Frankie the Falcon logo. Below right: Re-colored Frankie for the street mural.



For both intersection murals, project teams had to put some thought into how a small drawing or design would be mapped out and completed over a huge intersection in just one day, while also considering the moving parts of volunteers and photo ops. Trevista's Frankie the Falcon mural, for instance, had a wingspan of 60 feet! To determine the process and how much paint to purchase, project teams began with measurements of the intersection, a buffer of 2 feet between artwork and crosswalk markings per the Community Streets Guidelines.

Knowing the dimensions of the street, project coordinator Kayla Gilbert used Adobe InDesign to make important measurements. A screen capture of the intersection from Google Maps was placed into Adobe InDesign and sized proportionally such 1 foot or 12 inches (on street) = 1 pica (in the program), with 1:1 grid overlay. Frankie the Falcon (re-colored, simplified version) was then placed on top and centered into the intersection and within the buffered area. This was then printed on DDPHE's large format plotter printer, and then a to-scale "ruler" was created by photocopying a section onto 11 x 17-inch paper. Important points were measured to guide Frankie's layout—particularly with a symmetrical design, it was crucial to get the grid right. These measurements included location of the center point, diameter of Frankie's body, head, and eyes, edges of the design, lengths of each wing portion, and a length from the curb to measure onto the street.



Right: Measuring artwork dimensions (Cat support is cute but not overly helpful)

Paint Estimations

These measurements were helpful in estimating how much paint to purchase for each project. Calculations were based on square footage for each shape by color. Paint calculation assumptions for the Trevista intersection mural as budgeted:

- Paint coverage is listed as 200-300 square feet per 5-gallon bucket. Project teams assumed 240 square feet to be on the safe side. (Actual coverage was estimated around 340 square feet; this will be covered later in this documentation.)
- $240 \text{ square feet} / 5 \text{ gallons} = 48 \text{ square feet/gallon}$; $48 / 2 \text{ coats} = \mathbf{24 \text{ square feet/gallon coverage}}$
- $\text{Total \# Square foot coverage needed per color} / 24 = \text{\# gallons needed}$

	Yellow	Light Blue	Ice Blue	Tournament Purple	Total Square Footage	Total Gallons Needed
Square Footage to Paint	24	385	207	301	917	
Gallons Needed	1.00	16.04	8.63	12.54		38.21
5-Gallon Buckets Needed	0.20	3.21	1.73	2.51		7.64

Below: A volunteer finishes painting in the stenciled area of Frankie's belly at the Trevista mural.



Stencils and More

Stencils were used for several of the projects, including the paw prints for Barnum's wayfinding and several large stencils for the Sunnyside mural. Whenever a design can be somewhat repetitive and/or detailed, stencils can help make the process go smoother. Other creative solutions were found as well – use measured string, a plunger or cone, and chalk as a giant compass to create a perfect circle of any size (two

people recommended). This was used for Frankie’s head, body, and eyes, as well as the globe, “C” icon and overall circular shape of the Athmar Park mural.

For the Sunnyside mural, the artistic leads — Kayla Gilbert, DDPHE, and Sedona Allen, DPH — created stencils which included the ‘U’ shape in Frankie’s body and some of the larger shapes within the wings. This was where simplification came in again; for instance, one stencil was used for all side wing tips, even though in the original design, the shapes were similar but slightly differed in size. The squared spiral shapes were also simplified to one-size-fits-all.

Stencils were created for:

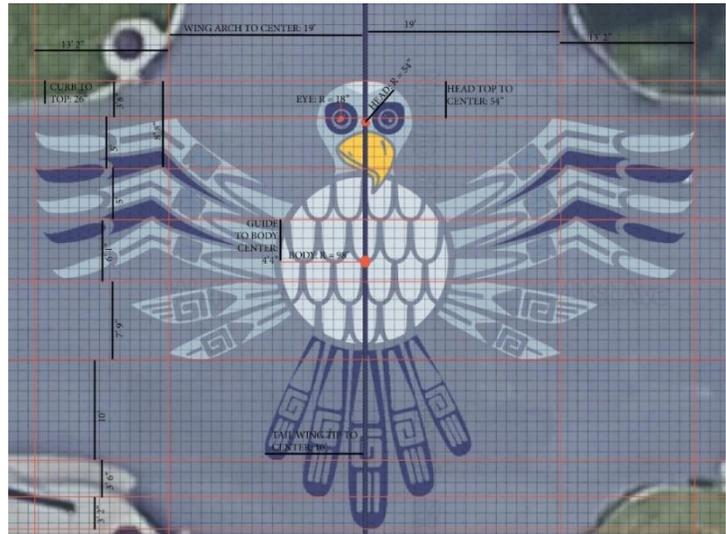
1. ‘U’ shape within Frankie’s body
2. Triangular shape of most inner side wing
3. Teardrop shape of most outer side wing tip
4. Squared spiral shape within wings
5. 3-foot and 4-foot lines for interior lines on side and top wings

Planning for Frankie the Falcon

Sunnyside’s mural of Frankie the Falcon featured a 60-foot wingspan, so scaling him up correctly was critical. Symmetry was also key, or Frankie would end up lopsided.

Using the same Adobe InDesign file for estimating paint, Kayla Gilbert updated Frankie’s gridded design plan with important measurements listed, such as the stencils to be cut, center and border lines, and radii of circles. This updated graphic was re-printed on large format plotter printer, as well as a few smaller copies, to have on hand to refer to on the day of installation.⁴

The artistic leads made a plan in advance for quickly mapping out the design on the pavement, considering a couple extra factors: that 1) volunteers would arrive by 8 a.m. ready to paint, and 2) special guests (Mayor Hancock, Councilman Espinoza, and Principal Jesus Rodriguez) and photographers would arrive at 10am, meaning that for great pictures, the mural would need to be partially completed but with a little space for the guests to jump in.



Above: The final updated gridded design plan for the Trevista mural of Frankie (See Appendix E).



Above: Councilman Espinoza and Mayor Hancock paint Frankie’s head for the cameras.

⁴ Find the full-page version of the gridded design plan for Frankie the Falcon at Trevista Elementary in Appendix E.

Frankie's Implementation Process

Below follows the detailed implementation process, which can provide ideas for how to install other murals. Despite a few small hiccups, including running late and spilling paint, ultimately, the project team succeeded in its goals. This is largely due to the fact that the process was well planned and communicated, with great team leaders who kept community members busy and motivated. Chalk was used to draw the guide grid and the design, which were then painted in by volunteers with a 'paint by number' approach.



Above: Youth check out the gridded design plan for Frankie.

1. Starting at 7 a.m., use Chalk Snap Reel tool to lay out a guiding grid of the red lines shown on the gridded map, starting at the curb and measuring out each line. To keep the design square, carry down parallel lines from the crosswalk bars on the north end of the intersection. Make sure to re-measure the width of the intersection to keep Frankie centered.
2. To create circles, use a plunger with string tied to it and cut or measured to length, and a piece of chalk. With one person holding the plunger in place, another person carries the chalk and string around with steady tension to create a large circle.
3. To create Frankie's body, measure string to 98" (radius) to create the circle for his body, starting from Frankie's body center point. Volunteers start stenciling in the 'U' feather shape of Frankie's body, then paint inside.
4. To create Frankie's head, create another circle with 54" radius, measuring up from Frankie's body center point to the head center point. Create two more circles with the same tool for Frankie's eyes, with 18" radius. Artist leads freehand remainder of head — including the neck, beak and eye shapes. Once outlines are chalked, volunteers begin to paint it in (but ultimately leaving a small portion to be finished by special guests on camera).
5. To create Frankie's side wings, lay out the pre-cut stencils for each of the light blue wing shapes on Frankie's sides, one wing at a time (3 total each side) in the following order: triangular inner wing, squared spiral, 3-foot line connecting to 4-foot line at an arch (at red guide), teardrop wing tip. Trace all stencils with chalk. Freehand the wing outline, using the guiding grid. For the dark blue wing shapes (2 total per side), use the teardrop wing tip, and freehand the inside of the wing. For the two lower light blue side wings (2 total each side), lay out stencils as follows: 4-foot line, [squared spiral used as spacing and placeholder for triangle], squared spiral, 3-foot lines as needed for wing tips. Free hand outlines and triangular shape. Once outlines are chalked, volunteers begin to paint them in.
6. For Frankie's tail wings, start with the longest center tail wing at the bottom edge (red guide), lay out stencils again of the 4-foot line (x3) and then the squared spiral. Freehand large triangular shape inside the middle 4-foot line, freehand the wing outline. For the next adjacent tail wings, starting from appropriate red guide, lay out stencils of the 3-foot line (x3), squared spiral. Freehand large triangular shape and wing outline again. Repeat on other side. For the edge tail wing, starting from appropriate red guide, lay out the 3-foot line (x3) and squared spiral. Repeat freehand and repeat on other side. Once outlines are chalked, volunteers begin to paint them in.
7. Overall, team leads supervise painting and make sure people are using correct colors. Direct volunteers to new spots to paint as they finish areas. Use chalk to mark areas for final touch-ups.

Planning Trail Wayfinding

Barnum’s wayfinding project was an entirely different project than the intersection murals from planning to implementation, and this was largely due to its geographic scale. With community input, the project team determined the priority locations for wayfinding, but still needed to pin down the details of exactly where the decals and paw prints would go. To this end, the project team hit the pavement and walked the trail with a replica of the draft decal (printed and mounted to poster board) to capture the locations with notes and mock-up pictures, which were then transferred into a GIS map and used in communications with vendors, Denver Parks & Recreation, and more.

*Below: Project team on the Weir Gulch Trail with the draft decal mock-up.
Left to right: Jill Locantore, Kayla Gilbert, Kaye Boeke, Tiffany Huisenga.*



Wayfinding Implementation Process

The project was implemented in two stages; first, the vinyl decals were installed by InkMonstr, and second, the paw print “breadcrumbs,” were installed by volunteers with stencils. The stencils were designed by Tiffany Huisenga, a graphic designer in the neighborhood, and laser cut by Donna Diddit, another local vendor. Eight copies of each paw print design (six different designs in total) were cut.

Since the geographic scope of the project was much larger, it was important to be nimble with multiple small teams moving at once. The project team picked a home base in the center of the project area, so it was about a 15-20 minute walk to the farthest side on either end. The volunteers used small buckets of paint that they could carry, with 1-2 groups out at any time slowly moving along the trail, often leap-frogging past each other to the next destination.

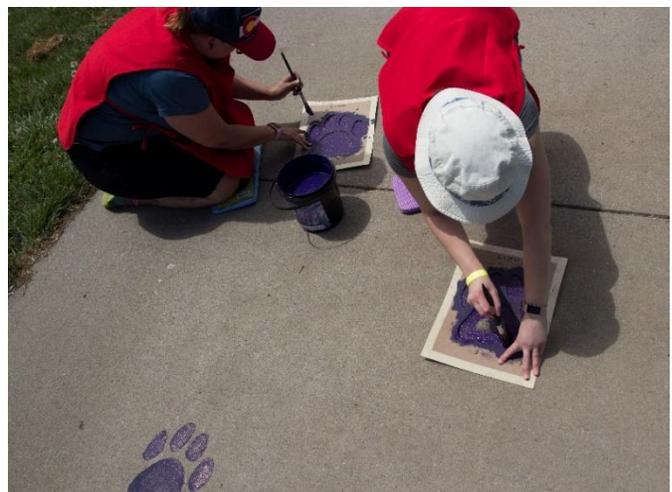
THE FRUITS OF OUR LABORS – FINAL PROJECTS

Each project was installed on a sunny day in May 2017, luckily un-impacted by Colorado’s sometimes unpredictable weather. The project team planned backup dates in June planned for each project just in case. Community leaders from each team secured donations from nearby restaurants for food and drink for volunteers, while DDPHE and WalkDenver supplied tents for shade and all supplies.

Barnum - Wayfinding along Weir Gulch Trail

Volunteers installed the paw prints on Saturday, May 6, 2017. Learn details and see more pictures in the Denver CALC recap blog post: [Barnum’s Weir Gulch Trail gets playful upgrade](#)

*Pictures below: Volunteers paint paw prints along ther Weir Gulch trail.
Photo Credits for all Barnum photos: Tiffany Huisenga, WalkDenver, Jesse T. Riley, Kayla Gilbert*



Sunnyside - Intersection Mural at Trevista Elementary

This was the flagship project in terms of media, recruiting special guests, putting out a press release, and more. Volunteers installed the Sunnyside mural on Saturday, May 13, 2017. Learn details and see more pictures in the Denver CALC recap blog post: [Frankie the Falcon to greet kids as they walk to Trevista Elementary School](#). Check out the extensive press coverage received on the Sunnyside mural: [Denver 8](#), [9News Denver](#), [Denverite](#), [Little Raven Studios \(drone flyover\)](#).

Pictures below: Volunteers of all ages create Frankie the Falcon at Trevista Elementary with Mayor Hancock and Councilman Espinosa.

Photo credits for Sunnyside photos: Evan Semón, Photography, Kevin J. Beaty/Denverite



Athmar Park - Intersection Mural at Valverde Elementary

Though details on Athmar Park's intersection mural were not laid out previously, it was completed similarly to the other intersection mural. The mural was designed and planned by local artist Michele Brown of La Mano Art, who also decorated a sadly graffitied electric box on the school property at the intersection. In addition, the Athmar Park Active Living Coalition recruited VeloFix, a mobile bike repair station, to join the site for several hours during the day, so volunteers could get their bikes tuned up while they painted and chatted with neighbors. Volunteers installed the Athmar Park intersection mural on Sunday, May 21. Learn details and see more pictures in the Denver CALC recap blog post: [New Neighborhood Mural painted by Athmar Park community members outside Valverde Elementary](#)

Pictures below: Volunteers install community mural outside Valverde Elementary in the Athmar Park neighborhood.

Photo credits for Athmar Park: Evan Semón Photography, Kayla Gilbert

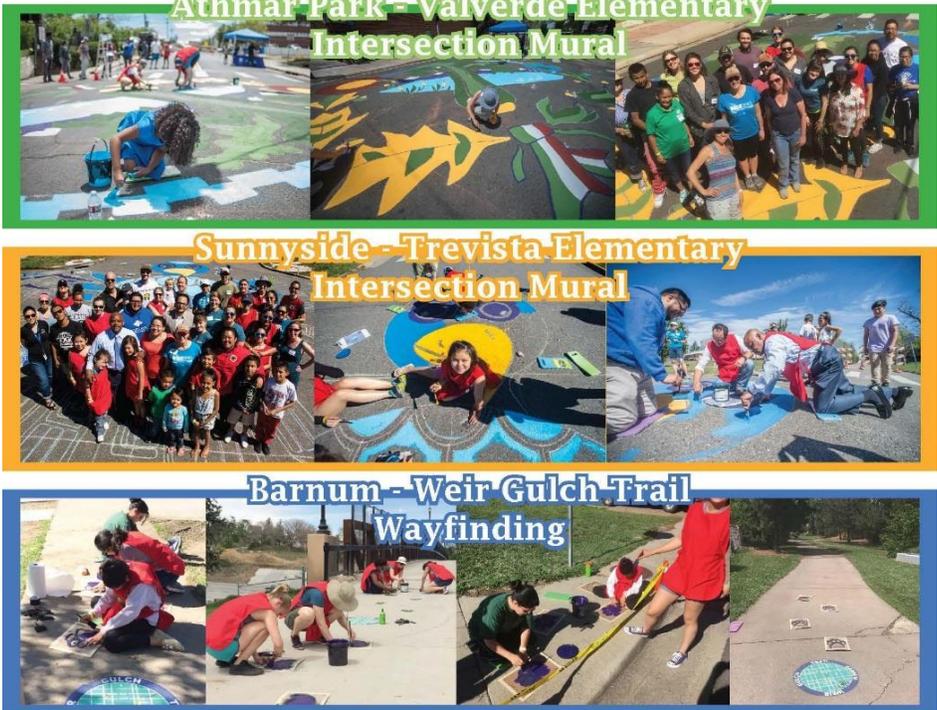


FOLLOW-UP & NEXT STEPS

Thanks & Incentives

Within a few weeks, CALC staff created a thank you flyer with some of the best photos of each day. Hand-written thank you notes were added to this and sent out to all partners, including local businesses that had donated, team leaders, and city agency partners who helped facilitate the process. Gift cards were also given as incentives to the team leaders and artists who had put a lot of time and effort into these projects, as mentioned in budgeting considerations.

Below: Thank you flyer sent out to partners on the projects.



THANK YOU!

Thank you for supporting Denver's Community Active Living Coalition, WalkDenver, and community members of Sunnyside, Athmar Park, and Barnum neighborhoods. Your support was essential in completing these projects!

Athmar Park - Valverde Elementary Intersection Mural

Sunnyside - Trevista Elementary Intersection Mural

Barnum - Weir Gulch Trail Wayfinding

Please stay engaged in future events and projects from the Denver Community Active Living Coalition at www.denverCALC.org or on Facebook @DenverHEAL. CALC is administered by City and County of Denver's Department of Environmental Health, Community Health Division, in partnership with Denver Public Health and WalkDenver. This program is sponsored by the Colorado Department of Public Health and Environment through the Cancer, Cardiovascular and Pulmonary Disease (CCPD) Grants Program.

Post-Project Evaluation

Through similar projects, CALC and WalkDenver are currently developing evaluation processes for more projects like this that will be mostly in the form of intercept surveys, or surveys inside the school or recreation center itself. Questions will center around how residents feel about the community project, if it makes them more or less likely to walk, and if it has changed their active living habits. Future evaluation to explore for future projects might also include speed studies before and after implementation to observe if intersection murals are effective for traffic calming. There is currently little research on this topic and intersection and crosswalk art is frowned upon by some municipalities.

Programming

On July 28, CALC coordinated with partners to organize a bike ride tour of three community walkability projects, including Barnum's Weir Gulch, Valverde's intersection mural, and additional community wayfinding along Lakewood Gulch Trail. This was organized in collaboration with Colorado Public Health/Parks & Recreation Collaborative and CDPHE, which were interested in creating programming and an informative tour for decisionmakers about these projects.

Below: More than 25 cyclists joined CALC and partners for a bike ride tour of Athmar Park's intersection mural (top photo), Barnum's trail wayfinding (bottom photo), and Lakewood Gulch wayfinding (partner project, not pictured).



Actual Costs & Leftover Supplies

As mentioned previously, the paint provided much greater coverage than originally budgeted for, thus leaving a surplus in paint. Though it was possible for some of the unmixed paints to be returned, CALC decided to keep them to support other community projects like these through the rest of the grant period. In fact, the leftover supplies supported a wayfinding installation in downtown Sunnyside in fall 2017 by community members in Project Shift, a program of WalkDenver focused on community leadership in car-light advocacy and lifestyles.

Below are the actual paint costs that were calculated based on the paint remaining. This is not exact, as it is based on another estimation of the square footage of paint, and there were also paint spills and differences in coverage rates for each application. Even so, the projects used much less paint than originally budgeted, calculating 340 square feet per 5-gallon bucket for coverage, or 34 square feet/gallon for two coats.

Actual Paint Costs:

Location	Square Footage of Paint	Forest Green	Yellow	Light Blue	Ice Blue	Light Green	T. Purple	Red	Grey
Athmar	750	7.35	1.91	3.24	1.76	4.26	2.65	1.18	0.25
Sunnyside	917	0.00	0.71	11.32	6.09	0.00	8.85	0.00	0.00
Barnum	225	2.94	0.00	2.94	0.00	0.00	1.47	0.00	0.00
Total Gallons		10.29	2.62	17.50	7.85	4.26	12.97	1.18	0.25
Total 5-Gallons		2.06	0.52	3.50	1.57	0.85	2.59	0.24	0.05

Rounding up to the nearest 5-gallon bucket on most, while rounding down on a few, would average around \$1,950.00 in paint costs, or about half of what was actually purchased. In addition, roughly 75 percent, or \$587, of the materials were leftover or somewhat reusable items, such as the ladder, paint mixer, buckets, trash cans, tent weights and more (noted in the [linked supplies spreadsheet](#)). All in all, calculated for only materials that were used, the three projects cost approximately \$4,800-\$5,000.



Above: Community members in Project Shift paint wayfinding in the downtown Sunnyside area.

Community Response

The best value of all of these projects was getting to work with community members on a personal level to develop relationships and trust. From start to finish, community members were involved and invested. As a city-wide coalition, Denver CALC has had difficulties with reaching the full diversity of residents in the city because of its wide scope, both geographically and topically. However, these local projects with neighborhood champions brought out a whole new group of people that CALC had never been able to engage before, as well as beginning to form lasting partnerships with those communities and partners.

While a formal evaluation of the projects has not yet been completed, many quotes and anecdotes have been documented through media coverage and this documentation. For instance, while installing the wayfinding in Barnum, a woman walking her dog excitedly shared how she had followed the wayfinding all the way from the recreation center. Read below for quotes from people involved in the projects.

"My hope is that Frankie the Falcon will do exactly what Principal Jesús hopes that he will do, and that is to inspire the students to keep striving and pushing hard. When they walk into school, let him remind them that this is a special safe place for them. And let him remind them that this is where dreams come true."

-- Mayor Michael B. Hancock, City of Denver

Below: Mayor Hancock with residents at the Sunnyside mural installation.



"It's very important to establish a place of belonging and safety. Just having that as kids approach the school begins that process of entering the learning environment."

-- Councilman Rafael Espinoza, Denver District 7

"There are so many things that divide us, but helping remember that we are neighbors, it's great when we're together, we can work on things that are important to all of us, and supporting our school is a big one too. So I'll think of that when I'm walking my daughter over here every morning."

-- Adam Evans, Sunnyside Team Leader

"We're excited that [Frankie] gets the honor to remind our our students, families, and staff, and also our community at large, of what it means to be a blue falcon."

-- Principal Jesús Rodriguez, Trevista Elementary School

“What I loved the most about creating our intersection mural was the way it brought different members of the community together – nearby residents, Trevista school students and families, young and old, longtime residents and “transplants” – we all worked alongside each other that beautiful sunny day to create something together. I think the project we created furthers the sense of pride that students, faculty, staff, and families take in Trevista, our neighborhood school. It also helps catch your eye – whether you’re walking, biking, or driving – and makes everyone’s day a little brighter.”

-- Kirsten Schatz, Sunnyside Team Leader

Below: Kirsten Schatz being interviewed on Denver 8.



“The South Tejon Street mural is one of the things I am most proud of in my term of being president of the Athmar Park Neighborhood Association. The mural is truly demonstrative of our neighborhood, our history, and our shared connections. On top of that, the painting of it really brought together our neighborhood; we had people of all ages, ethnicities, and abilities. It was truly community-enriching.”

-- Ian Harwick, Athmar Park Team Leader

Below: Volunteers paint the Athmar Park mural.



“The Weir Gulch Trail is disjointed and confusing to navigate in several sections, but the map decals and “breadcrumb” stencils provide a clear, easy solution to help guide pedestrians and cyclists and encourage trail use. They also add an element of fun, with their bright colors and playful design appealing to both children and adults.

We had a positive response from the community. During installation, neighbors and passerby approached and asked about the project, voicing their support for the idea. I personally met several long-time residents of Barnum, along with some friendly curious kids on bikes. The project opened the door to conversations about life in Barnum and brought together members of the community.”

-- Tiffany Huisenga, Barnum Team Leader

Lessons Learned

While the projects were overall very successful, there was a definite learning curve and plenty of learning opportunities. Some of the positive lessons learned included the great benefits of working alongside community members start-to-finish on projects of their own design. Also, even beyond the scope of the projects, the data collected during the challenge helped build momentum for city-wide improvements, resulting in lots of talk and press about sidewalks in late 2016 and 2017, in large part due to WALKscope.org, CALC data collection, and the Denver Data Challenge. In fact, the power of this data resulted in tangible shifts in funding — \$2.5 million for sidewalks allocated in the 2017 city general budget, \$47.7 million for sidewalks in the 2017 General Obligation (GO) Bond (which passed voter approval November 2017), and \$4.5 million for sidewalk repairs in the 2018 city general budget.

In terms of implementation, it is important to have plans for the worst- and best-case scenarios, but also to be flexible and allow for messiness. There are always variables, and community projects are much like art in that the beauty is in the imperfections. It is crucial to always keep in mind the end goal of implementing a good project that the community will enjoy. For instance, paint spills, forgetting supplies, or other things can create stress and frustration, but working as a team to adapt is the best way through it. In the case of large paint spills, having cat litter, buckets, and towels on hand for clean-up wise, as is instituting a rule that at least two people had to move paint supplies at all times in case of issues.

Part of what made the projects so successful was the communications and press that helped share the story and build visibility. Project teams used every available outlet, including DDPHE's internal communications and WalkDenver's extensive community and press outreach to increase interest and coverage. Recruiting high-profile attendees like Mayor Hancock and Councilman Espinoza for Trevista also helped increase visibility; Sunnyside's mural had the most volunteers of any of the projects.

Below: Mayor Hancock addresses a crowd at Sunnyside's mural painting.



It was really amazing to see the diversity of people who got involved in this project, and the project teams truly believe that it was largely due to the fact that the projects were local, personal, and impactful. While CALC's larger work is still important, meetings are just not for everyone! It is important to have a range of participation activities and leadership opportunities. This project really began with a call to arms — the buzz it generated in residents and community partners was enough to inspire a large enough group of teams to action.

CONCLUSION

Overall, the projects were truly successful, and created fantastic opportunities and learning experiences. The projects were engaging for Denver CALC coalition members, staff and residents, ultimately contributing to the project's goals of beautifying the neighborhood environment for walkers and bikers and bringing together diverse community members. Denver CALC hopes this guide will help other communities do similar projects both inside and outside of Denver to creatively and collaboratively enhance walking and biking for residents.

Please direct questions, comments, partnership opportunities to Kayla.Gilbert@denvergov.org or CALC@denvergov.org

Below: The completed mural at Athmar Park (from Denver CALC's GoPro timelapse).



APPENDICES

Appendix A: CALC Priority Sites Map

This map shows the priority sites of the Community Active Living Coalition (CALC) program, as of 2015. Priority areas were determined by childhood obesity rates by City Council District.

Appendix B: DDPHE's Neighborhood Equity Index Map

This index is a visual representation of some of the socioeconomic, built environment, health care and health barriers that residents of Denver neighborhood face in accessing opportunities to lead healthy, productive lives.

The index presents data in a way to help inform decision makers about where City investment and resources are needed most in order for those living in Denver's underserved neighborhoods to reach their full potential. In the future, additional indicators may be added as needed to the sub-indices to refine and improve the view of equity in Denver.

Current sub-indices are: 1) Socio-economic, 2) Built Environment, 3) Access to Care, 4) Morbidity, and 5) Mortality

For the full Equity Index story map with each sub-index mapped, visit [here](#).

Appendix C: Sunnyside Intersection Mural Permit

This is the updated final permit application for Sunnyside's intersection mural under the Denver Community Streets program.

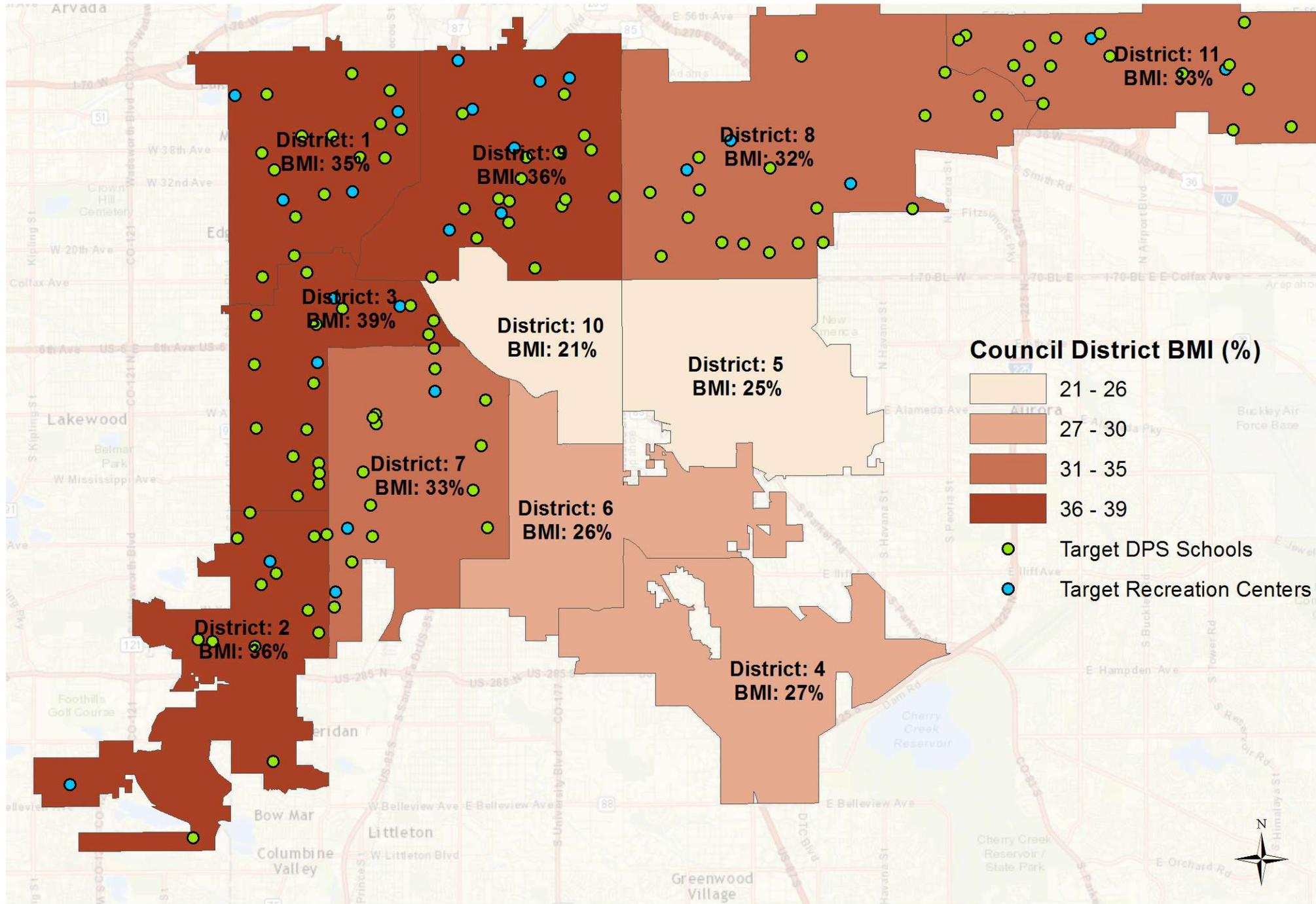
Appendix D: Athmar Park Intersection Mural Permit

This is the updated final permit application for Athmar Park's Intersection mural under the Denver Community Streets program.

Appendix E: Gridded Design Plan for Sunnyside Mural

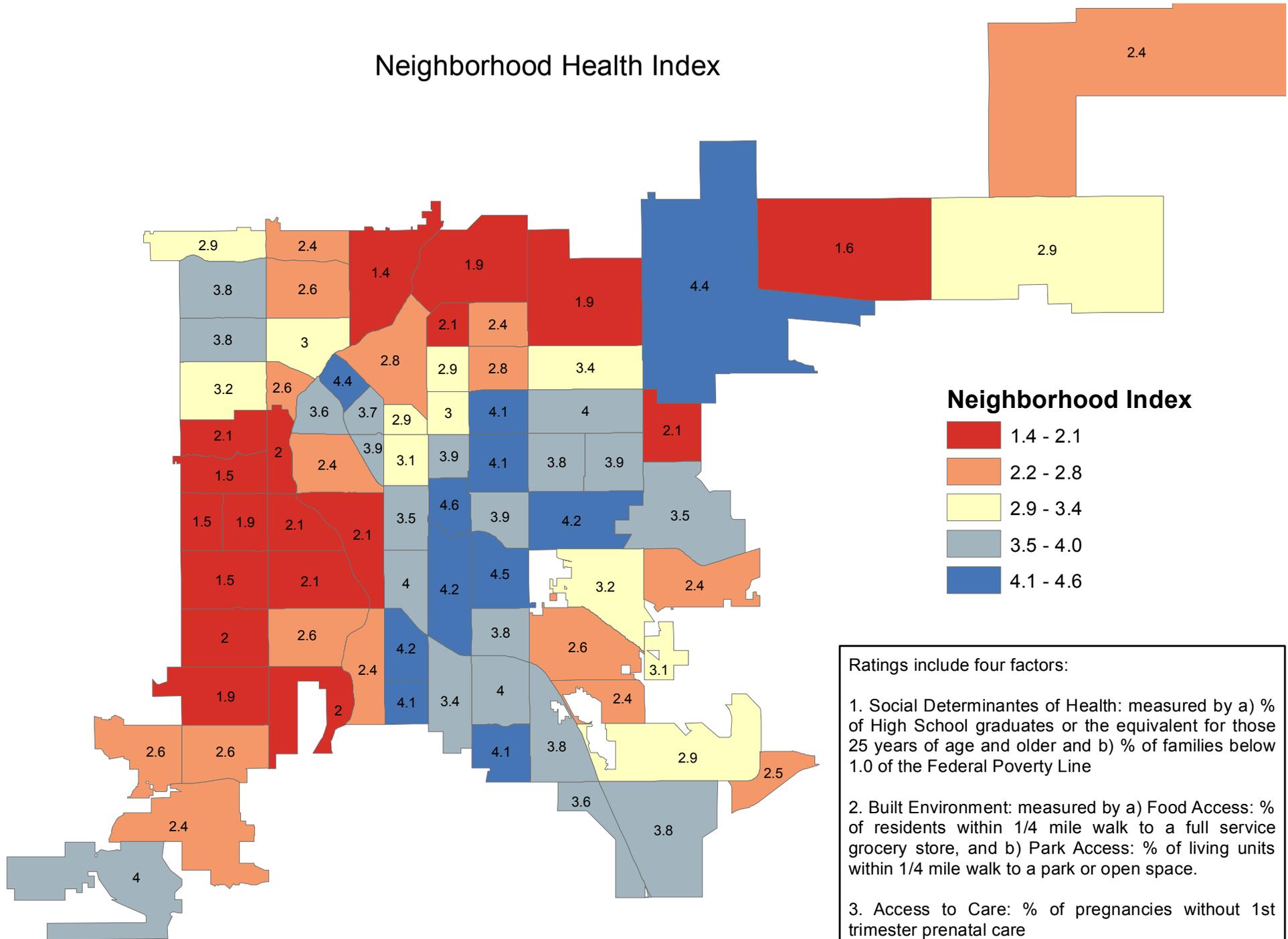
This is the full-page design plan for Frankie the Falcon, Sunnyside's geometrical intersection mural with a 60-foot wingspan.

Community Active Living Coalition Target Areas

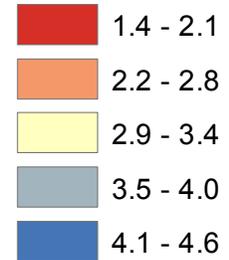


A student's school does not always correlate to their home residence. Approximately half of DPS students attend the school nearest to their home. Data were based on student's most recent measurement. Excessive weight is categorized as a child with a BMI at or above 85th percentile.

Neighborhood Health Index



Neighborhood Index



Ratings include four factors:

1. Social Determinantes of Health: measured by a) % of High School graduates or the equivalent for those 25 years of age and older and b) % of families below 1.0 of the Federal Poverty Line
2. Built Environment: measured by a) Food Access: % of residents within 1/4 mile walk to a full service grocery store, and b) Park Access: % of living units within 1/4 mile walk to a park or open space.
3. Access to Care: % of pregnancies without 1st trimester prenatal care
4. Morbidity: % of overweight or obese children
5. Mortality: no indicator included



Community Streets Permit Application:

Submitted by:

Kayla Gilbert, Active Living Program Coordinator, Denver Environmental Health, in partnership with Community Active Living Coalition, WalkDenver, and Sunnyside residents (winners of 2016 Data Challenge competition).

Date: 3/13/17 [updated notification 4/5/17](#)

Project:

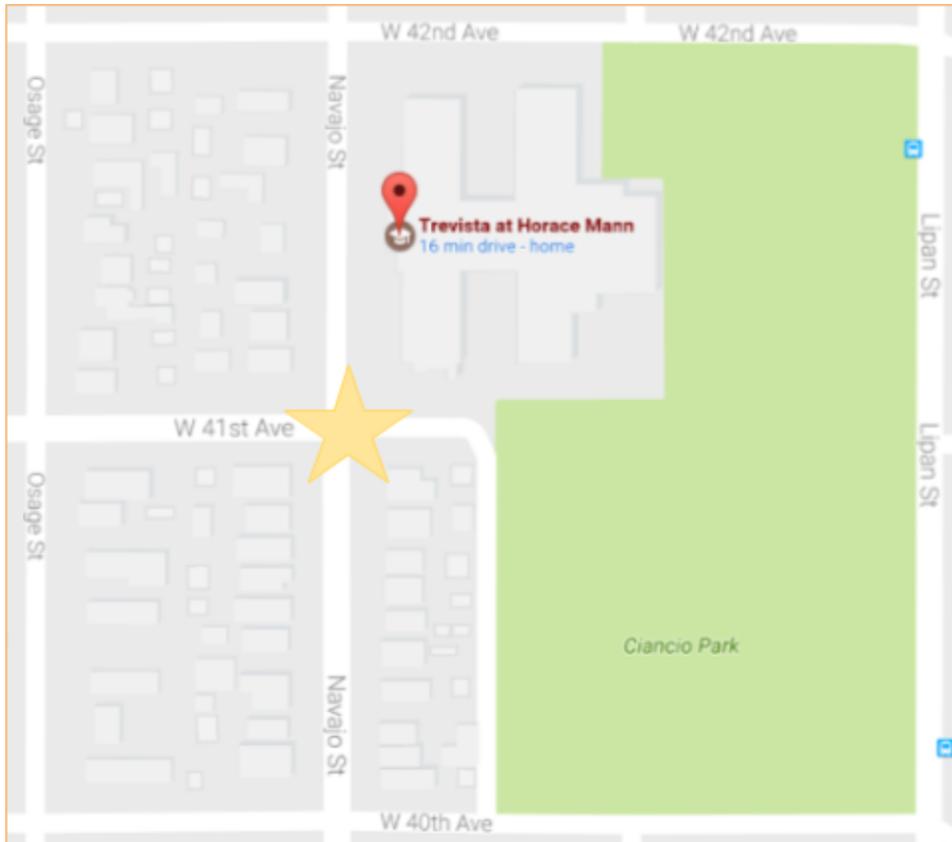
Intersection Mural

Installation Date:

Saturday, May 13th, 2017

Location Details:

West 41st Avenue and Navajo Street in Denver's Sunnyside neighborhood, at the southwest corner of Trevista at Horace Mann Elementary School. One leg of intersection leads into park next to school. Currently four-way stop with crosswalk markings at 3 sides and a stop bar at 1 side (east).



Material & Color Specifications:

- [ColorPave HD / Catalog / ALL COLORS](#)
- ColorPave has been pre-approved for use on Denver streets by Public Works, and has been used in previous street mural applications (Colfax 2016).
- For the proposed design attached to this application, we will use the **Tournament Purple**, **Light Blue**, **Ice Blue**, and **Yellow** colors below.



Traffic Control Division
 2395 South Lipan St.
 Denver, CO 80223
 D: (303) 922-7815
 F: (303) 922-5433



Colorado Barricade Co.

Rental - Sales - Service
 Traffic Control - Sign Manufacturing & Installation
 Pavement Marking - Contractor Supplies

TRAFFIC CONTROL PLAN

Plan For: City of Denver Dept. Env. Health
 Address: W 41st Ave & Navajo St
 Denver, CO 80211
 For: Kayla Gilbert 303.250.0540
 Date: January 9, 2017
 Plan By: JS
 PO/Job: W 41st Ave & Navajo St

MHT #1

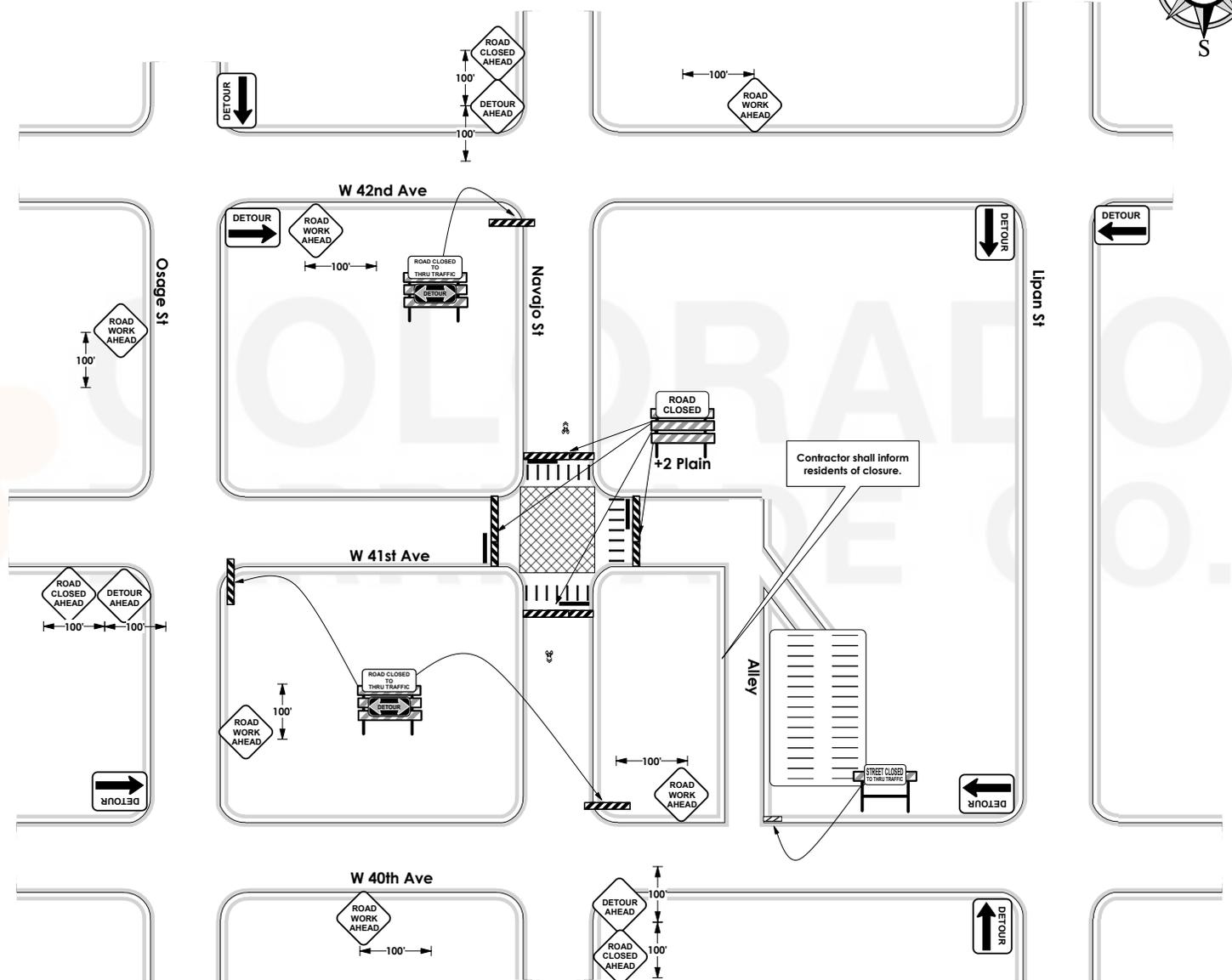
NOT DRAWN TO SCALE

All devices conform to the current MUTCD and M-S Standards.
 REV JS 3/13/17



Summary of Devices:

- 6 - 48" Road Work Ahead
- 3 - 48" Road Closed Ahead
- 3 - 48" Detour Ahead
- 3 - T-III Road Closed TTT Dbl Det
- 4 - T-III Road Closed
- 8 - T-III Plain
- 1 - T-I Street Closed TTT
- 3 - Detour Right
- 4 - Detour Left





DENVER THE MILE HIGH CITY

Public Works Right of Way Permit Application

City and County of Denver Public Works Permit Operations 2000 West 3rd Avenue, Room 107 Denver, CO 80223-1027 Telephone: (303) 446-3469 www.denvergov.org

Application must include completed form and Traffic Plan(s). Submit to: Email - PWpermits@denvergov.org

All applicable fields must be completed prior to submission of Request for Street Occupancy.

Note: Minimum Review Time For Occupancy Permits is 5 business days.

Company Name: Denver Environmental Health Contractor License #:
Company Address: 200 W 14th Ave, Suite 300, Denver 80204 Plumber/Sewer License #:
Contact's Name: Kayla Gilbert Off Phone:
Contact's Email: kayla.gilbert@denvergov.org Cell Phone:

Is This an official City funded project? [X] Yes [] No Project #: DEH - CCPD funds
City Agency & Contact: DEH - Kayla Gilbert Phone: 303-250-0540

Project Address & Location: W 41st Ave & Tejon Street
Purpose: Intersection mural outside school - Trevista Elementary School
Requested Dates: 5/13/17 To 5/13/17 Requested Times: 7am - 8pm
Additional Comments:

Does your project need to bag/cover any Parking Meters? [] Yes [X] No
If Yes, please complete the Parking Meter Request Form.

Does your project need to excavate/bore in the Right of Way? [] Yes [X] No
If Yes, please complete the section below.

Table with 2 columns: Request Type and Cost. Rows include Right of Way Cut Request (Street, Alley, Sidewalks, Tree Lawn), Cut Type (Sewer, Water, Gas, Other), and Right of Way Cut Size/Quantity (Estimated Cost) with Length, Width, Total Area, and Number of Potholes.

Does your project require a Right of Way Construction Permit? [] Yes [X] No
Examples: pedestrian ramp, curbcuts, sidewalks, etc... (See Standard Drawing)
If Yes, please complete the work sheet.

For City Use Only: Do not write below line. This Approval is only for the Street Occupancy Permit.
Status: [] Approved [] Denied
TCS / Engineer's Signature Date Permit Number
**Any modification after approval of original permit will require a resubmittal. **

4. Description on how the art will be installed including how volunteers will be managed to ensure safety in the right of way:

The intersection mural's pre-approved design will be installed using stencils, pre-approved paint specific for roads, and paint rollers and brushes. A core team of volunteers will go through an orientation training prior to install, including safe behaviors and how to handle the paint. On the day of install, the core volunteers will work with additional volunteers to install the intersection mural. Additional volunteers will be recruited in advance and there will be an age minimum for painting the intersection. Installation will occur only in fully closed lanes and any areas that volunteers should not enter for safety reasons will be clearly marked. Volunteers will cross the street in accordance with crosswalks. All volunteers will sign a waiver of liability.

NOTIFICATION

Trevista Elementary Intersection Mural at 41st Ave & Navajo St.

Dates: May 13th (Saturday) 6AM - 8PM

Event Details:

On May 13th, Trevista Elementary and Sunnyside community members, in collaboration with WalkDenver and Denver Environmental Health, will be painting a street mural at the intersection of W. 41st Ave & Navajo St. The purpose of this mural is to promote neighborhood identity and a sense of place, providing a visual cue to drivers that children may be crossing the street on their way to or from school. The community has selected a design with "Frankie the Falcon," Trevista's school mascot, to paint in the intersection.

During the mural painting, the crowd size will be up to 25 people at any given time. There will be no amplified sound or alcohol served. Food will be served to the volunteer group in the morning and the afternoon. Bathrooms and facilities will be provided by Trevista Elementary, as well as parking in the Trevista school lot.



Contact:

The day-of contacts are:

- Kirsten Schatz [REDACTED]
- and Jill Locantore [REDACTED]

You can also email jill.locantore@walkdenver.org or visit the project website for more updates about the project: <http://www.walkdenver.org/sunnyside-mural-designs/>

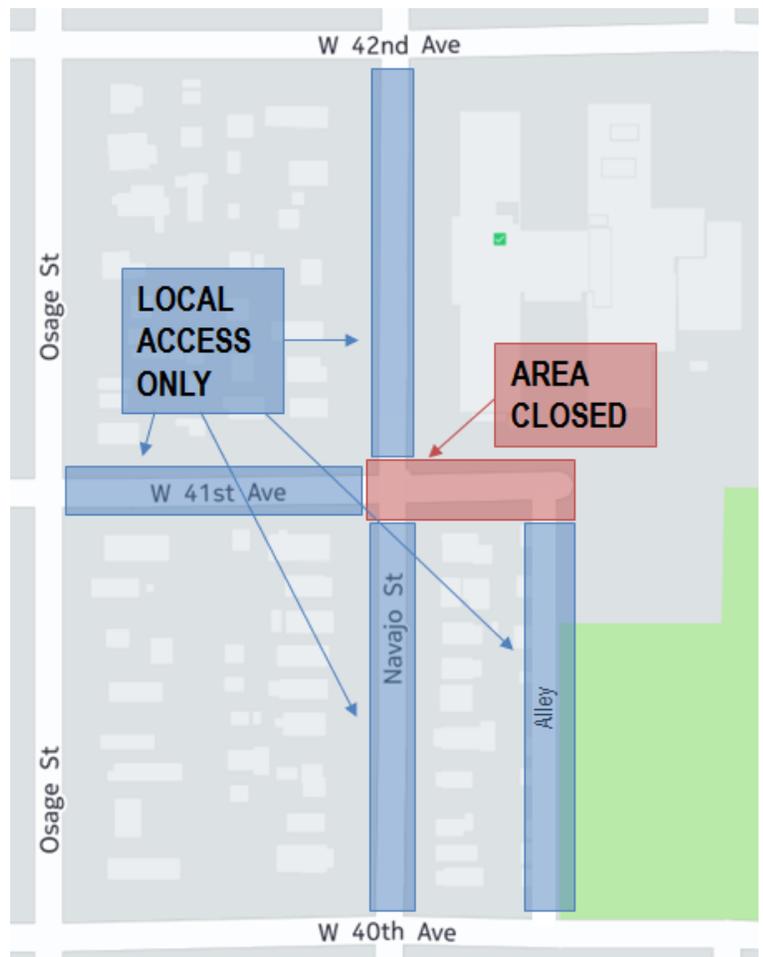
Join us!

Please visit our project website or contact Jill if you are interested in helping with the mural painting.

Street Closures:

The intersection of 41st and Tejon will be closed starting at 6AM and as late as 8PM on Saturday, May 13th. Local street access will be still available.

The Cianco Park parking lot will have local access only through the alleyway between 41st and 42nd east of Navajo Street. Please see the map to the right.



NOTIFICACIÓN

Trevista Primaria Proyecto Mural Intersección en 41a Ave y Navajo St.

Fechas: 13 de mayo (sábado) 6 am - 8 pm

Detalles del evento:

El 13 de mayo, Trevista primarias y Sunnyside miembros de la comunidad, en colaboración con WalkDenver y Denver Salud ambiental, va a pintar un mural de la calle en la intersección de W. 41st Avenida y San Navajo.

El propósito de este mural es promover la identidad del barrio y para dar un sentido de lugar, proporcionando una señal visual para los conductores que los niños pueden estar cruzando la calle en su camino a la escuela o a su casa. La comunidad ha seleccionado un diseño con "Frankie el Halcón", la mascota de la escuela de Trevista, para pintar en la intersección. Durante la pintura el mural, no más de 25 personas estarán trabajando en el proyecto. No habrá música ni alcohol servido. La comida será servida al grupo de voluntarios por la mañana y por la tarde. Los baños serán proporcionados por la Escuela Primaria Trevista, así como el estacionamiento en el lote de la escuela Trevista.

Contacto:

En el día del evento los contactos son:

- Kirsten Schatz [REDACTED]
- Y Jill Locantore [REDACTED]

Ustead también puede enviar un correo electrónico a jill.locantore@walkdenver.org o visitar el sitio web del proyecto para obtener más información sobre el proyecto:

<http://www.walkdenver.org/sunnyside-mural-designs/>

Únete a nosotros:

Por favor visite nuestro sitio web del proyecto o póngase en contacto con Jill si está interesado en ayudar con la pintura del mural.

Cierre de calle:

La intersección de la 41ª y Tejon se cerrará a partir de las 6 am y tan tarde como las 8 pm el sábado 13 de mayo. El acceso local a la calle seguirá estando disponible.

El estacionamiento del parque Cianco tendrá acceso local sólo por el callejón entre el 41o y el 42o al este de la calle Navajo. Por favor vea el mapa a la derecha.



Community Streets Permit Application:

Submitted by:

Kayla Gilbert, Active Living Program Coordinator, Denver Environmental Health, in partnership with Community Active Living Coalition, WalkDenver, and Athmar Park Neighborhood Organization (winners of 2016 Data Challenge competition).

Date: 3/13/17 [Revised with updated artwork and notification - 4/5/17](#)

Project:

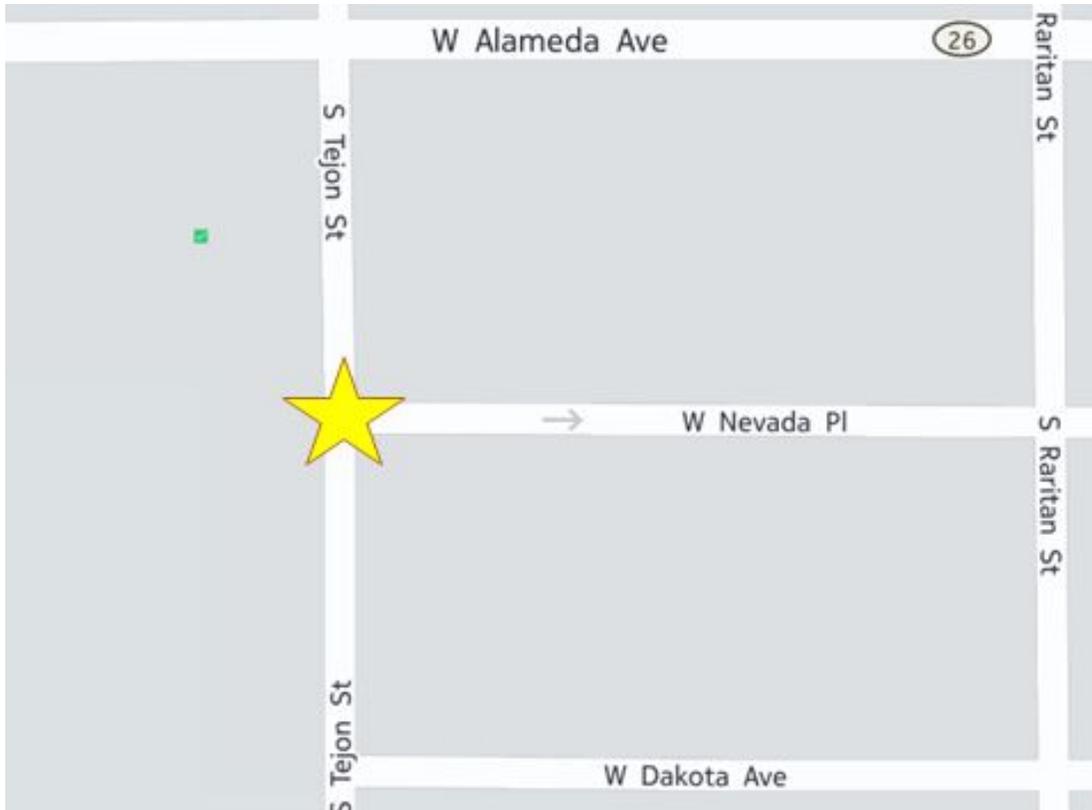
Intersection Mural

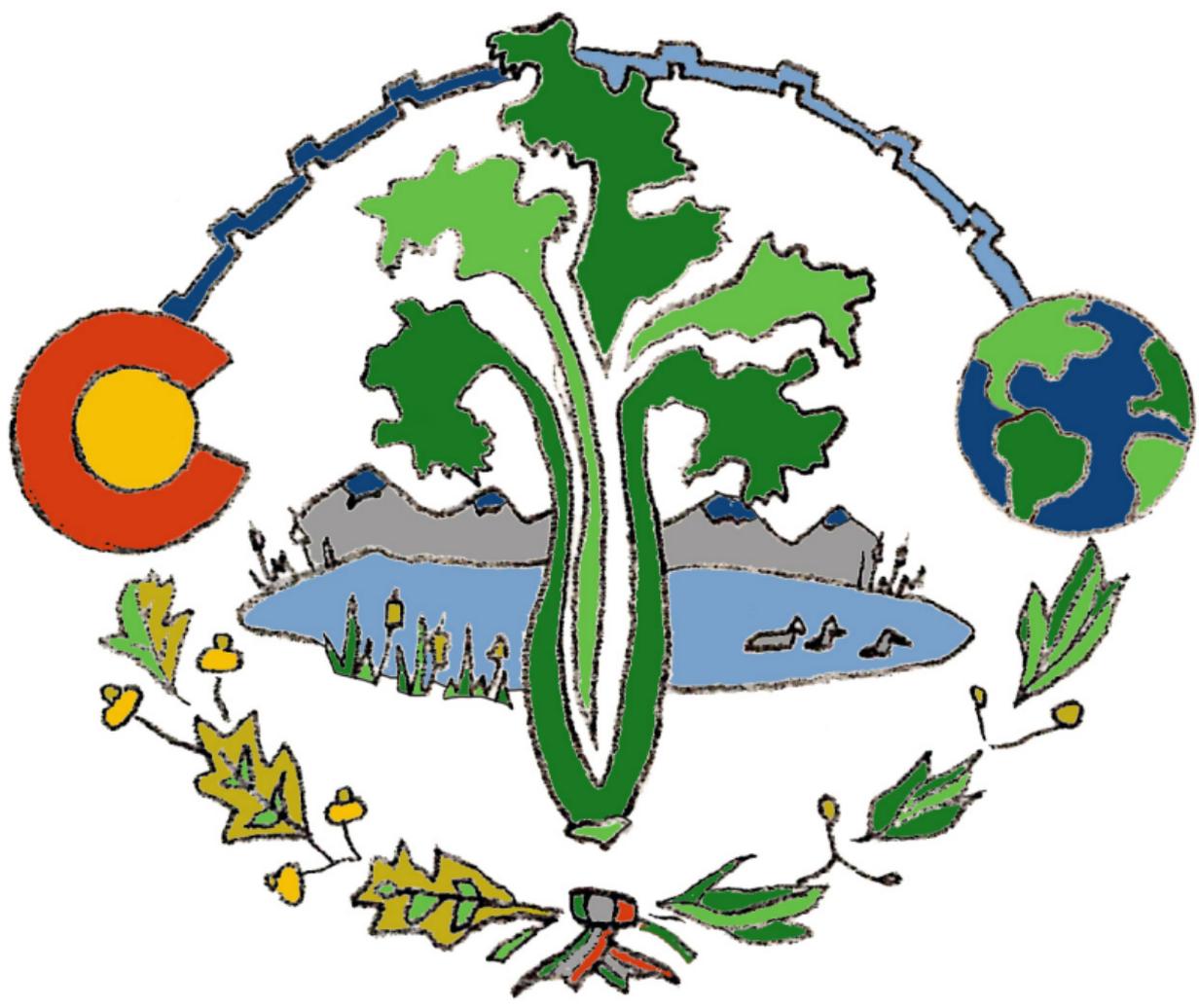
Installation Date:

Sunday, May 21st, 2017

Location Details:

West Nevada Place and South Tejon Street in Denver's Athmar Park neighborhood, at the southeast corner of Valverde Elementary School. This is currently a three-way (all-way) stop with a stop light, with crosswalk markings at all 3 sides. West Nevada Place is a one-way going east.





Material & Color Specifications:

- [ColorPave HD / Catalog / ALL COLORS](#)
- ColorPave has been pre-approved for use on Denver streets by Public Works, and has been used in previous street mural applications (Colfax 2016).
- For the proposed design attached to this application, we will use the following colors:



Dark Green



Tournament
Purple



Light Green



Red



Ice Blue



Light Blue



Yellow

-



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Submit to: Email - PWpermits@denvergov.org

All applicable fields must be completed prior to submission of Request for Street Occupancy.

Note: Minimum Review Time For Occupancy Permits is 5 business days.

Company Name: Denver Environmental Health Contractor License #: _____
Company Address: 200 W 14th Ave, Suite 300, Denver 80204 Plumber/Sewer License #: _____
Contact's Name: Kayla Gilbert Off Phone: _____
Contact's Email: kayla.gilbert@denvergov.org Cell Phone: _____

Is This an official City funded project? Yes No Project #: DEH - CCPD funds
City Agency & Contact: DEH - Kayla Gilbert Phone: 303-250-0540

Project Address & Location: W Nevada Avenue and Tejon Street
Purpose: Intersection mural outside Valverde Elem / neighborhood school
Requested Dates: 5/21/17 To 5/21/17 6am - 8pm
Additional Comments: _____

Does your project need to bag/cover any **Parking Meters**? Yes No
If Yes, please complete the Parking Meter Request Form.

Does your project need to excavate/bore in the **Right of Way**? Yes No
If Yes, please complete the section below.

Right of Way Cut Request:	<input type="checkbox"/> Street	<input type="checkbox"/> Alley	<input type="checkbox"/> Sidewalks	<input type="checkbox"/> Tree Lawn
Cut Type:	<input type="checkbox"/> Sewer	<input type="checkbox"/> Water	<input type="checkbox"/> Gas	<input type="checkbox"/> Other
Right of Way Cut Size/Quantity: (Estimated Cost)	Length: _____	Width: _____	Total Area	0
	Number of Potholes: _____		Total Area	0
Note: Emergency Sewer Cuts in alleyways must be submitted by 3pm following business day.				

Does your project require a **Right of Way Construction Permit**? Yes No
[Examples: pedestrian ramp, curbcuts, sidewalks, etc... \(See Standard Drawing\)](#)
If Yes, please complete the work sheet.

For City Use Only: Do not write below line. This Approval is only for the Street Occupancy Permit.		
Status:	<input type="checkbox"/> Approved	<input type="checkbox"/> Denied
TCS / Engineer's Signature	Date	Permit Number
**Any modification after approval of original permit will require a resubmittal. **		

4. Description on how the art will be installed including how volunteers will be managed to ensure safety in the right of way:

The intersection mural's pre-approved design will be installed using stencils or chalk for paint-by-number, with pre-approved paint specific for roads, paint rollers, and brushes. A core team of volunteers will go through an orientation training prior to install, including safe behaviors and how to handle the paint. On the day of install, the core volunteers will work with additional volunteers to install the intersection mural. Additional volunteers will be recruited in advance and there will be an age minimum for painting the intersection. Installation will occur only in fully closed lanes and any areas that volunteers should not enter for safety reasons will be clearly marked. Volunteers will cross the street in accordance with crosswalks. All volunteers will sign a waiver of liability.

NOTIFICATION

Valverde Elementary Intersection Mural at Tejon St. & Nevada Pl.

Dates: May 21st (Sunday) 6AM - 8PM

Event Details:

On May 21st, Valverde Elementary and community members, in collaboration with Athmar Park Neighborhood Organization, WalkDenver, Denver Environmental Health, and La Mano Art, will be painting an intersection mural at the intersection of W. Nevada Pl & Tejon St. The purpose of this mural is to promote neighborhood identity and a sense of place, providing a visual cue to drivers that children may be crossing the street on their way to or from school. Through community input, we have developed original artwork representing the rich history and culture of the Athmar Park neighborhood. During the mural painting, the crowd size will be up to 25 people at any given time. There will be no amplified sound or alcohol served. Food will be served to the volunteer group in the morning and the afternoon. Bathrooms and facilities will be provided by Valverde Elementary, as well as parking in the Valverde school lot.

Contact:

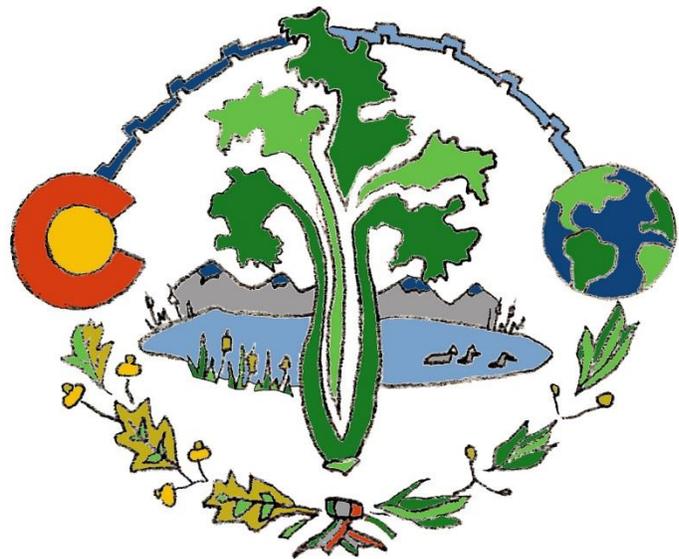
The day-of contacts are:

- Ian Harwick ([REDACTED])
president@athmarpark.com
- and Jill Locantore ([REDACTED])
jill.locantore@walkdenver.org

You can also visit the project website for more updates about the project: www.athmarpark.com/mural

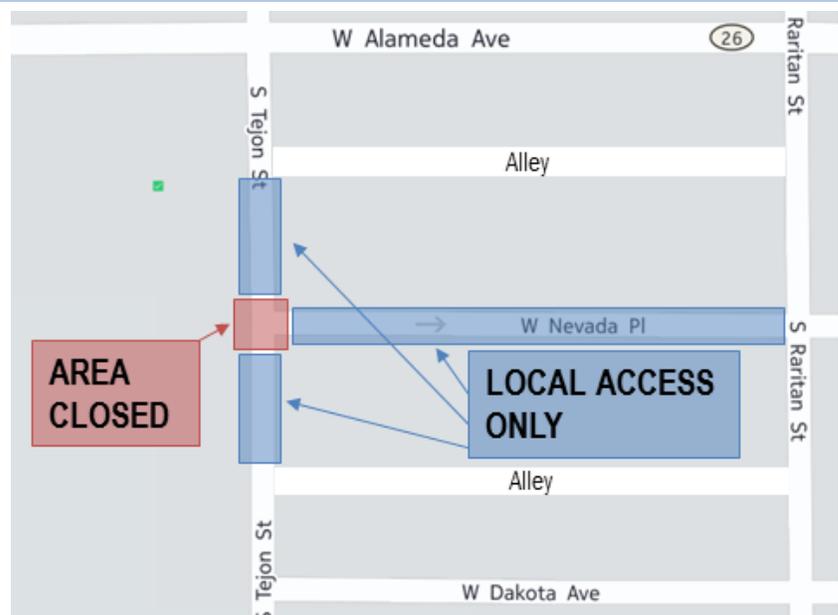
Join us!

Please visit our project website or contact Ian or Jill if you are interested in helping with the mural painting.



Street Closures:

The intersection of W. Nevada Pl & Tejon St will be closed starting at 6AM and as late as 8PM. Local street access will be still available and alleys directly north and south of W. Nevada Pl. will remain open. Please see the map to the right.



NOTIFICACIÓN

Valverde Primaria Proyecto Mural Intersección en Tejon St y Nevada Pl.

Fechas: 21 de mayo (domingo) 6 am - 8 pm

Detalles del evento:

El 21 de mayo, Valverde primarias y Athmar Park miembros de la comunidad, en colaboración con WalkDenver, Denver Salud ambiental, y La Mano Art, va a pintar un mural de la calle en la intersección de Tejon St y Nevada Pl. El propósito de este mural es promover la identidad del barrio y para dar un sentido de lugar, proporcionando una señal visual para los conductores que los niños pueden estar cruzando la calle en su camino a la escuela o a su casa. A través de información de la comunidad, hemos desarrollado obras de arte originales que representan la rica historia y la cultura del barrio Athmar Park.

Durante la pintura el mural, no más de 25 personas estarán trabajando en el proyecto. No habrá música ni alcohol servido. La comida será servida al grupo de voluntarios por la mañana y por la tarde. Los baños serán proporcionados por la Escuela Primaria Valverde, así como el estacionamiento en el lote de la escuela Valverde.

Contacto:

En el día del evento los contactos son:

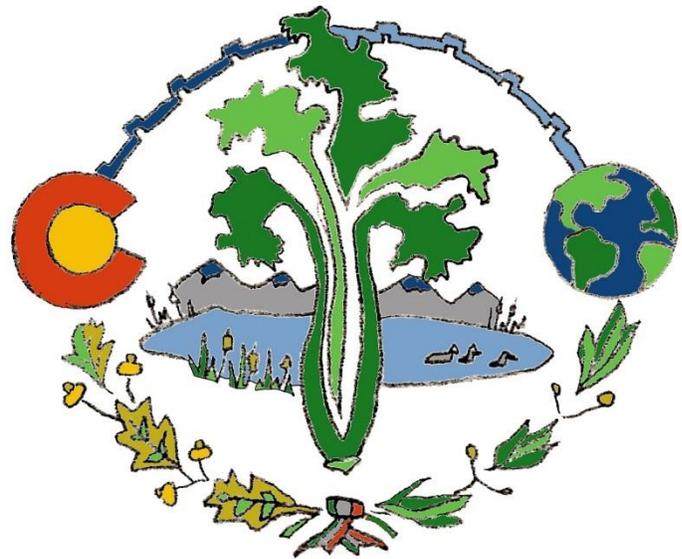
- Ian Harwick (██████████)
president@athmarpark.com
- y Jill Locantore (██████████)
jill.locantore@walkdenver.org

Ustead también puede visitar el sitio web del proyecto para obtener más información sobre el proyecto:

www.athmarpark.com/mural

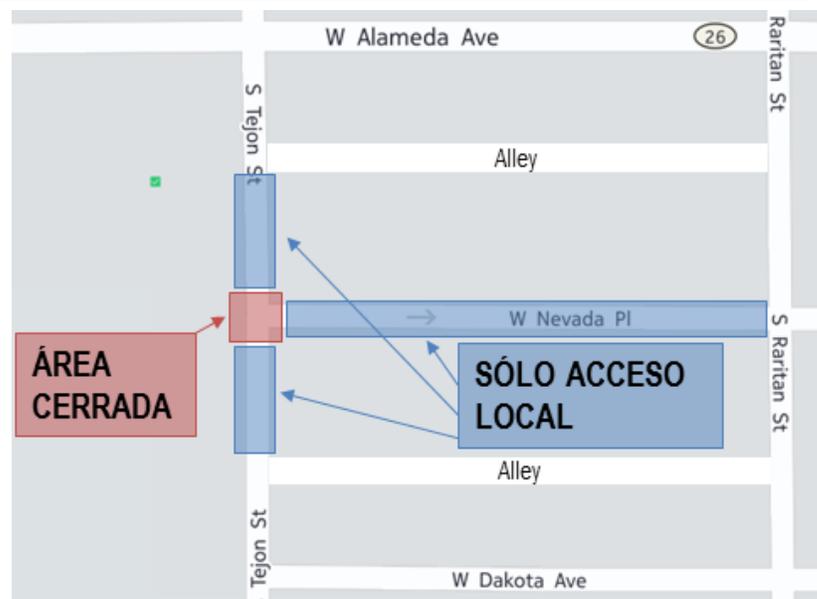
Únete a nosotros:

Por favor visite nuestro sitio web del proyecto o póngase en contacto con Jill si está interesado en ayudar con la pintura del mural.



Cierre de calle:

La intersección de W. Nevada Pl & Tejon St se cerrará a partir de 6AM a 8PM. El acceso local a la calle seguirá estando disponible y los callejones directamente al norte y al sur de W. Nevada Pl. Permanecerá abierta. Por favor vea el mapa a la derecha.



CURB TO CENTER: 18'

WING ARCH TO CENTER: 19'

19'

13' 2"

13' 2"

CURB TO TOP: 26"

3' 8"

EYE: R = 18"

HEAD TOP TO CENTER: 54"

8' 8"

5'

HEAD: R = 54"

5'

GUIDE TO BODY CENTER: 4' 4"

BODY: R = 98"

6' 1"

7' 9"

10'

TAIL WING TIP TO CENTER: 10'

3' 6"

3' 2"

