

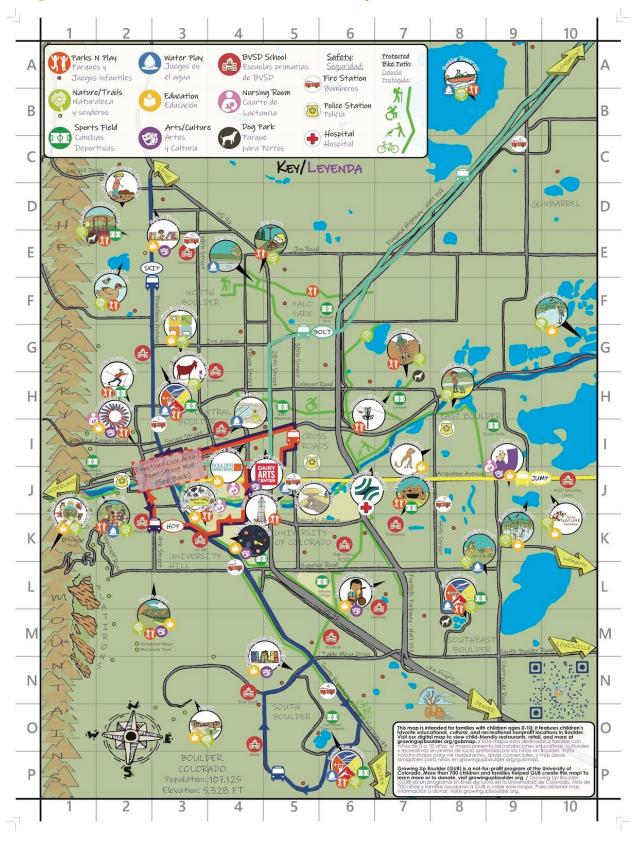
# Boulder's Child-Friendly City Map Project Report

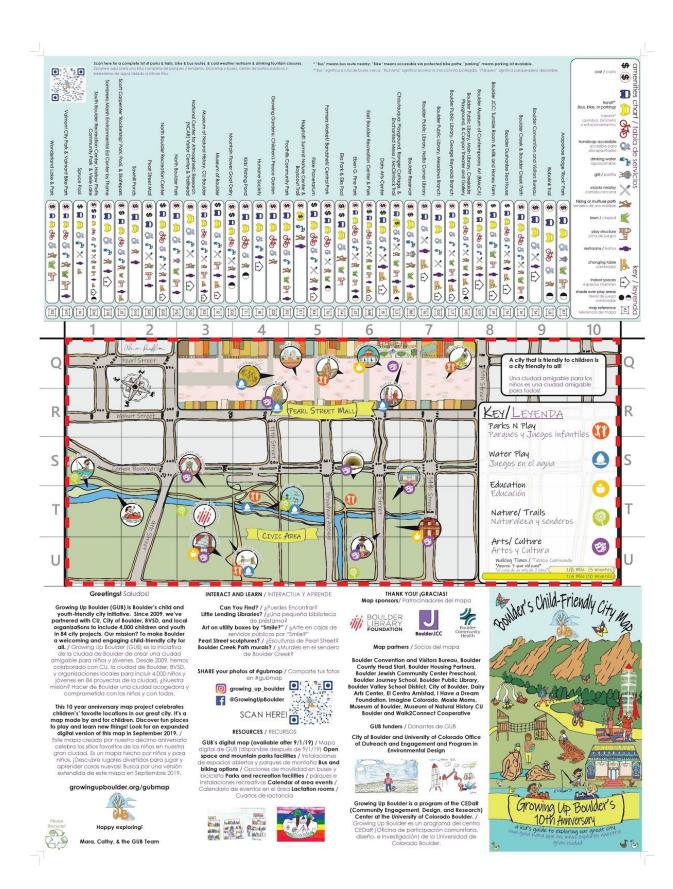
Summary of Findings, Summer 2018 - Spring 2019 Published July 2019 by the Growing Up Boulder Team



Boulder Journey School students explore Boulder's new child-friendly city map. Photo by Boulder Journey School.

# Image of Boulder's Child-Friendly City Map





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# **Overview**

From the summer of 2018 through the spring of 2019, Growing Up Boulder (GUB) worked with more than 700 children, parents and caregivers to co-create the nation's first, printed child-friendly city map. Numbers increase to nearly 1,000 map participants when families who attended the map's celebration event are included. GUB convened 42 stakeholder groups from Boulder, including city departments, nonprofits, and schools, to design a map featuring child-friendly locations and transit throughout the city. More than 300 children and parents participated in the project by completing a bilingual, online survey. By conducting extensive outreach with children and families, 52% of whom were from marginalized communities, GUB was able to reach a wide cross-section of Boulder's children, ages 0-10. The map-making project was anchored in the values of diversity, inclusion, community engagement, collaboration, and celebration. Catering to both families who live in Boulder and families visiting from out of town, the map is a social, environmental, and educational tool which supports the goal of Boulder being a child-friendly city. To celebrate the completion of the project, as well as GUB's 10th year anniversary, GUB hosted a 200-person party at the Boulder Jewish Community Center on May 4, 2019. The free, bilingual map was sent home with all elementary and preschool children in Boulder-located Boulder Valley School District (BVSD) public elementary schools and preschools before summer vacation, distributed to non-profit map partners, and made available in public spaces throughout the city.

"Being new to the (BVSD) district and to the (University Hill) school, I found being a part of this project very useful because it connected me to the community, the organizations that are involved with our schools, and ways that kids can make a difference! I also learned a lot about different places that are special to kids!"

-- Teacher, University Hill Elementary School, 2nd Grade

# By the Numbers

#### Participation overview:

- Total # children, parents/caregivers participating in map project from start to finish: 988
  - o Total # children, parents/caregivers, and teachers who co-created the map: 788
    - Total # children: 437
    - Total # parents/caregivers: 351
  - o Total # children and parents/caregivers at GUB celebration event: 200
- Total % of children who contributed to CFC Map from marginalized groups: 52%
- Total # of participating groups: 42
  - Total # public school elementary classrooms: 16
  - Total # preschools: 3
  - Total # community partners groups : 23
- Total # teachers: 33
- Total # hours of GUB direct engagement with the community: 109
- Total # hours spent by GUB team on the map: 1980
- Total # maps printed and distributed: 10,000



Boulder Journey School students explore Boulder's new child-friendly city map. Photo by Boulder Journey School.

# Participation breakdown (details):

		Form of Engagement		
		Bilingual Survey	Classroom Engagement	Community Outreach
Adult Parents and	0-5 years		Jay and Rose Phillips Early Childhood Center at Boulder JCC, Boulder County Head Start, Boulder Journey School	Boulder Public Library Story Time
	5-15 years	BVSD and general population surveys	BVSD Elementary Schools: Crestview Kindergarten, Horizons K-8 Kindergarten, University Hill 2nd grade (bilingual), Whittier 1st grade English Language Learners, 3rd grade; I Have a Dream 4th and 5th graders (after-school elementary group for children from under-resourced backgrounds); Imagine! school-aged after school program (program for children with developmental and cognitive disabilities)	Boulder Housing Partners event (meeting at affordable housing site)
	BVSD and general population surveys	Boulder Journey School, Crestview Elementary's Families and Educators Together (FET) school meeting (comprised of Latinx parents, their children, and school educators); Jay and Rose Phillips Early Childhood Center at Boulder JCC, University Hill Elementary School parents at Museum of Boulder Bilingual Showcase visit	Boulder Public Library Story Time, El Centro Amistad meeting (local Latina mothers and staff), Boulder Housing Partners event (meeting at affordable site)	

# **Project Description**

# Map Goals & Outcomes

Beside designing the first printed, bilingual child-friendly city map in the nation, the CFC map project was unique in two distinct ways: first, it met many of GUB's organizational goals through a single project; second, it was a community-wide, collaborative project by design, bringing together many city departments, existing GUB community partners, and new GUB community partners into one shared project.

GUB's overarching goals for the CFC map were to:

- 1. Advance the principles of a child-friendly city initiative in Boulder
- 2. Realize GUB's mission and strategic planning goals
- 3. Promote sustainability and resilience goals
- 4. Create a child-friendly map for Boulder

The map project worked towards the following sub-goals (note identified "overarching" goals from above in parentheses):

- Educate the public about, and make concrete, the idea of a "child-friendly city (https://childfriendlycities.org/)," as defined by the United Nations Convention on the Rights of the Child (UNCRC; also, see Appendix for Child-Friendly Cities description) (1, 2, 3, 4)
- 2. Serve as an assessment tool for how Boulder is succeeding as a child-friendly city and identify gaps and areas for growth regarding child-friendliness (1, 3, 4)
- 3. Recognize and celebrate Boulder's amenities for children, youth, and families; become an asset map for child-friendly Boulder (1, 3, 4)
- 4. Highlight elements of Boulder that support the City's Sustainability and Resilience Goals, as well as the United Nations Sustainable Development Goals (3)
- 5. Generate meaningful public awareness and fundraising opportunities for GUB (2)
- 6. Celebrate, educate, and inspire children, families about the work of local non-profits and city services (parks, open space, and transit) in the Boulder community (1, 2, 4)
- 7. Serve as a replicable model for other communities that wish to create their own child or youth-friendly city map (2, 4).

By using the map, GUB hoped that children and families would:

- Feel empowered and energized by exploring Boulder
- Experience improved, healthy ways of getting around town
- Find new favorite places to play and spend time together in Boulder
- Experience greater and more equitable access to low-cost public and civic spaces
- Feel less isolation by meeting other families in family-friendly locales
- Recognize that their ideas and opinions matter in civic decision-making

# Child-Friendly City Map Precedent Research

# Kid City, North Vancouver, Canada $\diamondsuit$ Child-Friendly Edmonton, Edmonton, Canada $\diamondsuit$ Family Friendly Oakland, Oakland, California $\diamondsuit$ Playground Map, Manly, Australia

North Vancouver, Canada, Edmonton, Canada, Oakland, California, and Manly, Australia have each developed child-friendly, family-focused maps aimed at engaging children within their communities. Maps are both physical (North Vancouver, Canada and Manly, Australia's out-of-print 2012 playground map) and digital (Edmonton, Canada, Oakland, California), and highlight locations of public art/art organizations, parks/playgrounds, and family-friendly businesses. These maps also provide unique ways for children and families to interact with their respective cities by including walking/biking trails, educational spaces, and scavenger hunts. Maps serve children and families by allowing them to easily navigate and explore child-friendly locations in their communities.

## **Map Parameters**

GUB staff summarized elements they liked from existing child-friendly maps, and then refined these elements with stakeholders during the first map stakeholder meeting in September 2018 in order to create parameters for Boulder's child-friendly city map. See the <u>Factors to Consider When Designing a Child-Friendly City Map</u> section of the Conclusion section of this report for a general list of parameters we used for this process. GUB's specific parameters, which defined both the process and the outcome of the project, included:

- Printed format, easily folded and carried
- Focus on children ages 0-10
- Two-sided map design (one side that highlights downtown areas and a second side that provides a birds-eye view of Boulder)
- Bilingual format for English/Spanish
- Eye-catching design with lots of color
- Easy to read and understand, even for non-readers
- A legend that children can access easily
- Feedback and locations from and for parents, nursing, and pregnant moms
- Design contributions that come from children and parents/caregivers
- Wayfinding strategies for children, ie. arrows, map reference, compass rose
- Accessible to local and visiting families
- Physical locations that are open to the public (and that do not require membership or an expensive admission fee) and are not commercial (restaurant or retail)
- Interactive design elements
- Promotion of sustainable transportation options (walking, biking, and public transit connections) with reduced emphasis (but acknowledgement of) parking options
- Map design that includes walking times based on a child's walking pace
- Amenities important to children and families
- Start with partner schools and then broaden outreach to diverse community partners
- Iterative process throughout

- Developing a set of criteria for what will go on the map (since not every recommendation would fit on a print version of a map)
- Underwritten by business or foundation sponsorships

It is important to note that each of these parameters involved tradeoffs. For example, the decision to make one, bilingual map instead of two separate maps (one in English, one in Spanish) meant that less text could be included on the map. We had also hoped to describe whether male, female, or all gendered bathrooms contained changing tables, as a way to bring awareness to the frequent lack of changing tables in male restrooms; however, this research proved too time consuming, thus we included only one icon describing the presence of any changing table. Creating a clean design without advertisements on the map meant fewer opportunities for map revenue. Each decision was carefully considered, then decided upon as a team.

#### **Partner Schools and Process**

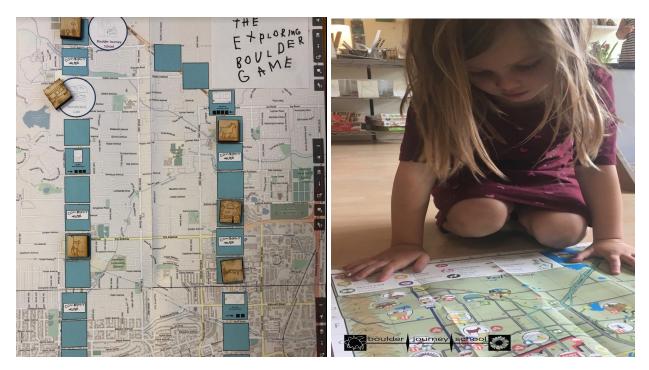
As GUB partnered with 4 elementary schools and 3 preschools, teachers found creative ways to integrate the map project into their classroom curriculum. Engagement descriptions are summarized below:

#### **Boulder Journey School (preschool)**

#### 7 teachers, 2 classrooms, 40 children, 40 hours

Two Pre-Kindergarten classrooms presented the idea of the child-friendly map of Boulder to approximately 40 children. One class of 3 teachers and 15 children, aged 4-5 years old, focused on the idea of "child-friendly." After exploring the concept of maps by creating their own map to a favorite park, they began taking the bus to several locations around Boulder. These locations were based around where the families often visit. At the first location, the Boulder Public Library, the children and teachers noticed that there were many things that were child-friendly and a few things that the children would have liked to improve. So, for the following locations, the children and teachers used the lens of "child-friendly" to explore the space, eventually creating a chart to use as a reference. While the chart was being created, the children changed the focus from "child-friendly" to "everyone-friendly."

The other class of 4 teachers and 25 children, aged 4-5 years old, enjoyed playing board games together and saw the connection between board games and maps. After being introduced to the idea of the child-friendly map, they decided to create *The Exploring Boulder Game* (and later published the game published for families to purchase). This class also traveled to different locations, and then illustrated and described them, deciding if they should be included in the game. This class also thought about the different modes of transportation and the many community members of Boulder, and they integrated them into the game.



Boulder Journey School's "The Exploring Boulder Game" (left) and a Boulder Journey School student studying map (right). Photos by Boulder Journey School.

# Jay and Rose Phillips Early Childhood Center at the Boulder JCC 3 teachers, 1 classroom, 18 students, 20 hours

Over the course of a school year, the children in a 3-4 year old classroom embarked on multiple trips away from their classroom, both by foot and by city bus. The excursions were motivated by a curiosity about group travel, and a love for their home city of Boulder. From these trips stemmed an exploration of maps, including their purpose, process of creation, and the concept of symbolic representation. Throughout the school year, the children in the class initiated their own experiences around group travel and exploring the city in which they live. The teacher was then able to capture these experiences and voice them to GUB. Students and parents shared their thoughts and opinions about details for the child-friendly city map. They noticed familiar places and finding things through pictures. Teachers hope to continue this work more specifically with the City of Boulder transportation department, and to advocate for children's voices in public transportation decision-making in the future.

#### **Boulder County Head Start,**

#### 2 teachers, 2 classrooms, 20 children, 1 hour

Head Start teachers worked with children in 2 classrooms to gather feedback for the map, and also collected feedback on map drafts from parents during preschool pickup.

#### **Crestview Elementary School, FET Program**

#### Families and Educators Together: 5 teachers, 18 parents, 8 children, 2 hours

GUB staff collaborated with Crestview Elementary School's Families and Educators Together group (FET) in March 2019 to gather feedback on the latest draft of the map. The group, consisting mostly of Latinx parents, children and Crestview teachers, echoed design suggestions and ideas related to favorite locations related by previous groups; in addition, they suggested several new locations and clarifications. Parents were excited to use the child-friendly maps and appreciated learning that the maps would be bilingual and available at no cost.

#### **Crestview Elementary School, Kindergarten**

#### 1 teacher, 1 classroom, 20 children, 5 hours

A kindergarten teacher who attended the FET group meeting was so excited about the child-friendly city maps that she asked to borrow them for use in her classroom the following week. After studying the map and gathering student feedback for a final map draft, the students used what they had learned about maps as a natural springboard to imagine the route Goldilocks might have taken to get to the Three Bears' House.

"My 1<sup>st</sup> grade kid came out of school yesterday and was so excited to show me her child friendly map. 'It's a map for kids!!,' she told me. On the last day of school this is what she specifically wanted to show me. It was a very nice moment."

#### -- Crestview parent describing her 1st grade child

# Horizons K-8 Elementary School, Kindergarten 2 teachers, 2 classrooms, 40 students, 10 hours

After a brief GUB presentation of the Child-Friendly City Map Project, Kindergarten teachers introduced "Explore Boulder Backpacks" they created for their students as a take-home weekend family activity. Each Explore Boulder backpack included a journal with an informational parent letter that explained the activity and a stuffed animal indigenous to Boulder. Students and their families took turns taking the Explore Boulder Backpacks home with them, and drew pictures and took photographs of where they went in Boulder as a way to tell GUB what map locations they recommended for the child-friendly map.



Horizons K-8 students learn about the map-making process from the map's university student designers. Photo by Cathy Hill.

# Whittier International Elementary School, 1st grade ELD 3 teachers, 3 classrooms, 17 students, 12 hours

Throughout the 2018-2019 school year, emerging bilingual students from Whittier's 1st grade English Language Development (ELD) classrooms had numerous opportunities to support the development of the CFC map. In the fall, GUB staff and interns presented an introduction to the Child-Friendly City Map Project. Students explored different kinds of maps and shared their with us their previous experiences and current knowledge about maps. Teachers invited map experts, including Sarah Kelly, cartographer and instructor from the University of Colorado's (CU's) geography department, and Naomi Heiser and Ilene Raynes, Map Librarians from CU's Earth Sciences & Map Library, to visit their classrooms to learn more. Students created their own definition of the term "child-friendly" by deconstructing North Vancouver's Kid Map. They noticed themes in location and categorized various themes using a Tree Map organizer (ie. sports, education, nature, play, services, etc.). Next, students used the city's free tourist "Discover Map" to find locations that they knew and liked--locations that they felt were worthy of GUB's map. Students made detailed drawings of their favorite places to visit in Boulder, and GUB staff used them to inform future iterations of the child-friendly city map drafts. GUB staff and map-makers returned to all of the classrooms with multiple drafts of the map so that children could directly see how their input changed the map, and also provide additional input.

In the spring, Whittier students went on a neighborhood walk with Darcy Kitching from the Walk2Connect Collaborative and discovered many interesting things. The students confirmed that child-friendly walking routes would be a great addition to GUB's upcoming digital map. In

May, students enthusiastically explored the map, noticing places where they had been and places where they would like to go with their families this summer.



Whittier International Elementary ELD students try out a walking route for the child-friendly digital map. Photo by Growing Up Boulder.

"A child-friendly city map is important because adult maps have too many words and are hard to read."

--English Language Development Student, Whittier International Elementary School, 1st grade

# Whittier International Elementary School, 3rd grade 3 teachers, 3 classrooms, 60 students, 10 hours

Students studied both the North Vancouver Kid Map and Boulder's Discovery Map. They came up with lists of map locations they liked, locations they didn't like, locations they wished were on the maps, and how the maps could be made better through improved map features and design. Students made drawings of their favorite map locations, and teams created scavenger hunts

that children could use to learn more about their city. The scavenger hunts will be featured on the child-friendly digital map published in September 2019.



Whittier International Elementary 3rd grade students provide feedback on the first draft of the child-friendly city map. Photo by Cathy Hill.

# University Hill Elementary School, 2nd grade 4 teachers, 4 classrooms, 72 students, 10 hours

Uni-Hill 2nd grader teachers fit their work with Growing Up Boulder into a larger BVSD project entitled, "Humans of Boulder--Big and Small," where students from four schools studied how to be change-makers in their community. Mapping was a part of this larger unit, so GUB's project had a natural and meaningful integration. By studying both the North Vancouver Kid Map and Boulder's Discovery Map, students came up with lists of map locations they liked, locations they didn't like, locations they wished were on the maps, and how the maps could be made better through improved map features and design. Students made drawings of their favorite map locations to inform GUB of what they wanted in a map. In spring 2019, Uni-Hill hosted a culminating Humans of Boulder--Big and Small event at the Museum of Boulder during which time GUB shared the latest version of the map and solicited feedback from students and their parents.



Two University Hill Elementary 2nd grade change-makers provide feedback on the first draft of the map during their Museum of Boulder "Humans of Boulder--Big and Small" Bilingual Showcase event. Photo by Jade Cody.

# **Community Partner Engagements**

The CFC map project is a great example of a large number of community organizations and departments collaborating for a single purpose. The map was sponsored by the Boulder Library Foundation and Boulder Community Health, and the Boulder Jewish Community Center donated space and time for the GUB celebration. See a complete list of contributing partners in the Appendix of this report.

GUB staff facilitated one-time engagements with students and families from the following groups: Boulder Housing Partners, Boulder Public Library, El Centro Amistad, I Have a Dream, and Imagine. In each setting, we shared the child-friendly map drafts with participants and captured their ideas and opinions relative to map content, design and features. Feedback was then incorporated into the next draft of the map.

#### Map Feedback from Partner Organization Representatives

Throughout the map-making process, GUB requested feedback from its partner organizations on the map. Non-profit, city, and other partners met periodically in subcommittees to guide the map. The subcommittees included: 1) map budget and sponsorship, 2) map design and art, 3)

early childhood outreach, and 4) out-of-school community outreach. In addition, GUB shared map drafts at stakeholder meetings, then sent drafts to stakeholders electronically in order to ensure participation from as many organizational representatives as possible. Partner recommendations ranged from ideas for improved map readability to the addition of new child-friendly locations. Partners were instrumental in co-creating the map process and outcomes.

# BVSD Online Survey for Children & Parents/Caregivers

A bilingual online survey was sent to parents/caregivers of Boulder-based BVSD Pre-Kindergarten through 5th grade students. Surveys were completed by 207 parents and caregivers (203 English, 4 Spanish) and 45 students for a total of 252 respondents. See the appendix of this report for complete <a href="English/Spanish survey information">English/Spanish survey information</a>. Survey questions are listed below and analyzed on page 19.

**Question 1: Favorite Locations**--What are your 3-5 places to visit or spend time in Boulder? For example, these may be parks, hiking trails, indoor spaces, or museums, etc. These places may be in your neighborhood or anywhere in the City of Boulder.

**Question 2: Activities at Locations**--What makes a place fun to visit? (Think: what do you like to do when you visit your favorite places?)

**Question 3: Child-friendly Map**--Is there anything in particular that you would like to see on a child-friendly city map of Boulder?

Question 4: Contact Info--Email address

Question 5: Demographic Info--Ages of children

**Question 6a: Barriers-**-We would like Boulder to be an inclusive place, in all senses of the word. Are there any barriers that keep you from visiting certain places in Boulder? Yes/No

Question 6b: Barriers--If you answered yes, what are they?

Question 6c: Solutions to Barriers--Choose the best solutions below to address barriers listed above

# Community Online Survey for Children & Parents/Caregivers

The same bilingual, online survey described above was shared widely with parents/caregivers in Boulder. GUB publicized this "community" survey through local, online parent groups and through partner preschools. In addition, GUB shared the survey with community partners serving Latinx parents, including El Centro Amistad and Boulder Housing Partners; however, no Latinx parents completed this community survey. These outcomes echoed GUB's previous experiences, which found that in-person engagements tended to be more successful than conducting on-line surveys with the Latino community in Boulder. Surveys were completed by 76 parents/caregivers and 16 children for a total of 92 respondents. See the appendix of this report for complete English/Spanish survey information.

## Map Design & Construction

As GUB analyzed feedback from children and families on suggested locations and design elements, 2 undergraduate CU Environmental Design students constructed the map under the guidance of GUB's Program Director and Education Coordinator. Students used editing softwares such as Adobe Illustrator, Adobe InDesign, and ArcGIS to design the map. The map included approximately 40 layers, which ranged from layers capturing the map's base colors to other layers containing individual landmark locations. All landmarks and most icon images were hand drawn by one of the student map designers and then placed in their respective locations by the other map designer.

Primary map decisions came directly from the students, and approximately 20 progressive iterations were created to get to the final product. Locations of city parks with play structures or open turf were added with guidance from the City of Boulder's Parks and Recreation GIS specialist. Through this completely collaborative process, the map was realized, and the intent of providing Boulder's youth with the tools to create change became a reality.

As recognition of the hard work and design excellence realized by the undergraduate Environmental Design students, the map and students won the "People's Choice Award" from the University of Colorado's Environmental Design Program.



Children and parents offer feedback on the map during the Museum of Boulder's Bilingual Showcase. Photo by Jade Cody.

# **CFC Map Project Timeline**



# Stage 1: Background research & creation of foundational documents

- Research CFC map examples from around the world
- Identify goals for project
- Communicate with potential partners
- Consider sponsorship and find designers



# Stage 2: Stakeholder meeting, subcommittee work, & school partners

- Hold stakeholder meeting to kick-off CFC map project
- Determine map parameters
- Establish school and preschool partners for sustained inquiry
- Create subcommitties to address map design and process



# Stage 3: Community outreach, data collection & analysis, & map draft

- Conduct outreach with community organizations
- Construct CFC Map Report framework
- Partner schools share ideas and recommendations for the map
- Collect and analyze child and parent survey feedback
- Design map draft 1



#### Stage 4: Map draft feedback & map iterations

- Continue community outreach, data collection, and data analysis
- Update map content and design features to reflect feedback
- Finalize sponsors of map
- Design map draft 2



#### Stage 5: Final map data collection & design

- Design map draft 3, then final draft
- Print 10,000 maps
- Begin CFC Map Report



#### Stage 6: Roll out map & celebration

- Celebrate map launch and GUB's 10th year anniversary at the Boulder Jewish Community Center
- Distribute maps to stakeholders, including all Boulder-located BVSD elementary and preschools
- Offer two family-friendly walks for Walk and Bike month using the CFC map



#### **Data from Children and Families**

GUB collected data from children and parents/caregivers via two methods: in-person engagements and surveys. For summaries of data, please see below. For complete data from all outreach methods, including in-person engagements broken out by partner group, see this link to the <a href="Complete CFC map data with engagement data by group, public version">CFC map data with engagement data by group, public version</a> spreadsheet. For complete survey data, see this link to the <a href="Survey Responses for CFC map 18-19 Public Version">Survey Responses for CFC map 18-19 Public Version</a> spreadsheet.

# **Engagements: Student Contributions**

#### Interest

Student interest levels were very high throughout the project. When introduced to the concept of a child-friendly map and asked whether creating a child-friendly city map of Boulder was a good idea, 100% of students responded positively. Students of all ages frequently mentioned that most maps were made for adults and that maps can be hard to read. Students with whom we collaborated more than once demonstrated a strong connection to GUB staff and the map work; they were keenly interested in seeing how the drafts of the maps changed with each iteration. Overall, students saw the project as a way to contribute to creating something fun and real, and they were proud of their contributions.

#### **Map Content**

Students from participating classrooms were asked to draw their favorite places to visit or spend time in Boulder. These drawings helped bring student recommendations alive, and GUB map designers used them to inform their hand drawings for location landmarks. Students eagerly shared their favorite locations for the map, and they confidently shared the reasons for their recommended locations. Generally, students recommended Boulder locations based on their own personal interests and experiences. They expressed their ideas clearly and with intention.

Once drafts of the map were ready, students loved spending time exploring the map with their classmates. Engagements were highly social in nature, with groups of students talking and sharing with one another throughout the session. School-aged children immediately noticed components common to all maps, such as the key, compass rose, roads and transit, wayfinding elements, and landmarks. Students were very interested in figuring out where they lived and where their school was located on the map. They spent long periods of time finding places on the map which were familiar to them, and students often shouted out a comment like "I know this place!" or "My family goes here." Unfamiliar places brought curiosity and a hope for visiting there soon. Extended exploration produced more recommendations for the map.

#### Design

Students wanted a brightly colored map that was easy to read (keys, compass rose, roads, large font, wayfinding guides). They felt the hand-drawn quality was child-friendly and attractive. Consistent feedback from all students and groups indicated that they wanted the map to be

inclusive--that it should be a map for everyone. They strongly supported the bilingual key and information panels, and that the map should be available at no cost.

#### Feedback Window 1

GUB map-makers made constant edits to the map once it was designed, with two formal feedback windows taking place in February and March 2019. While only 4 versions of the map were shared with stakeholders and the public, there were 20 iterations of the map created internally. Most frequently mentioned elements students "liked about the map," or wished "changed to the map" are shown in the tables below:

Map elements students liked:	Map elements students recommended changing/adding:
<ul> <li>Basic structure</li> <li>Landmarks (favorite locations)</li> <li>Legibility</li> <li>Bright colors</li> <li>Hand drawings</li> <li>Interactive quality</li> <li>Wayfinding</li> <li>Overall friendly in appearance</li> </ul>	<ul> <li>Colors confusing for map background &amp; icons</li> <li>More landmarks, trails, playgrounds</li> <li>Names on schools</li> <li>Signs needed to direct people to nearby towns</li> <li>Font type/size for greater legibility</li> <li>Key needed for both sides of map</li> <li>Simplify some landmarks &amp; icons</li> <li>Bilingual key</li> <li>Title: Boulder, CO, population, &amp; elevation</li> </ul>

# Feedback Window 2

Map elements students liked:	Map elements students recommended changing/adding:	
<ul> <li>Additions &amp; changes (from above recommendations)</li> <li>New locations: parks, trails, landmarks</li> <li>New icons (symbols &amp; category names) in key</li> <li>Amenity chart: shade, changing tables</li> <li>Greater ethnicity/diversity in graphics</li> </ul>	<ul> <li>Safety: fire, police, hospitals</li> <li>Simplify Pearl Street &amp; Civic Area</li> <li>Add dog parks</li> <li>Expand transit &amp; protected bike paths</li> <li>Simplify information panels &amp; include student artwork</li> <li>Update amenities chart</li> <li>Map scale</li> </ul>	

# **Engagements: Parent/Caregiver Contributions**

GUB conducted numerous in-person engagements with parents, since parents and caregivers play such an important role in young children's lives. GUB put extra energy into holding engagement sessions for underrepresented groups, since there appeared to be a low response rate from such groups to GUB's online surveys. Sometimes, GUB relied upon a partner organization to build upon their existing relationship with parents in order to gather feedback.

Boulder Housing Partners (Boulder's affordable housing agency), Boulder County Head Start (a preschool for children from under resourced families), the Jay and Rose Phillips Early Childhood Center at the Boulder JCC, and Boulder Journey School, all conducted outreach directly with their families. The GUB team hosted their own outreach at a Boulder Library Story Hour, and received feedback from a wide array of parents and young children.

Many parents requested that indoors play spaces for inclement weather, and outdoor play spaces with shade directly over play structures, be represented on the map. One mother explained that shade during only part of the day over a play structure, or shade that was only partial, was inadequate for her child's fair skin. Numerous parents spoke to metal slides being too hot in the summer months for their children to use them. Other parents offered additional locations, such at Mountain Flower Goat Dairy, for the map. Finally, parents offered ideas for child-friendly bike routes, which will be added to the digital map.

"A father of a 4th grade student told us that his family visited Thorne Nature Center's Sombrero Marsh Environmental Center for the first time this weekend because his daughter found it on the map and suggested it as a family activity."

#### -- Anecdote shared with the GUB team

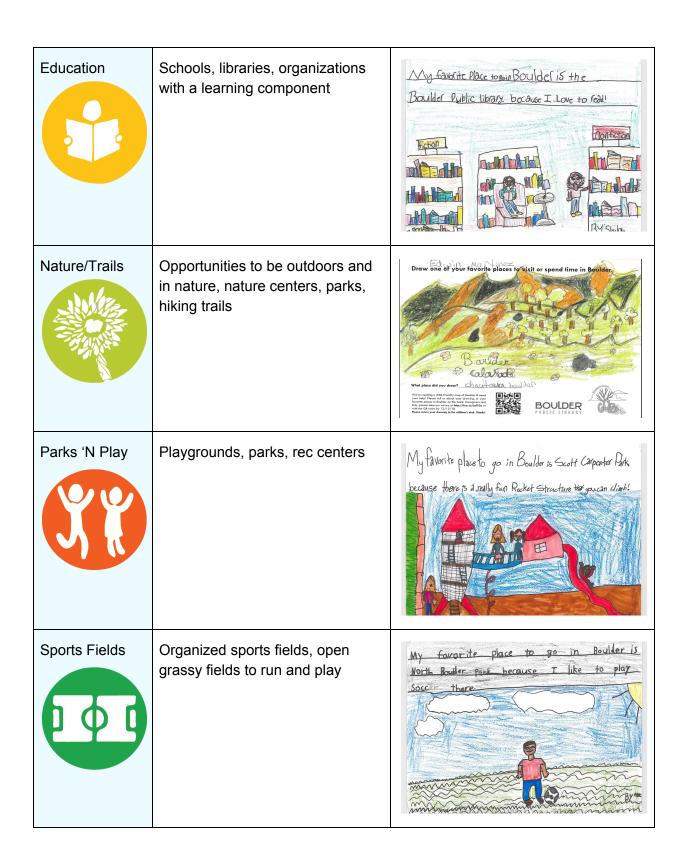
# **Survey Data: Student and Parent Contributions**

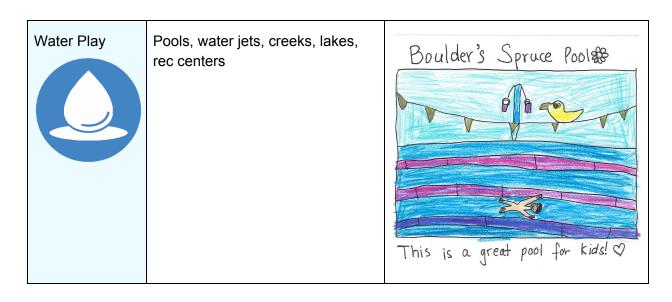
Survey questions 1,2,3, and 6a-c directly influenced the development of the child-friendly map in both content and design.

#### Question 1: What are your favorite places to visit or spend time in Boulder?

When reviewing the most frequently requested student and parent requests for map locations, six categories emerged. Map designers used these categories to develop the eventual "icons" within the map's key. See table below.

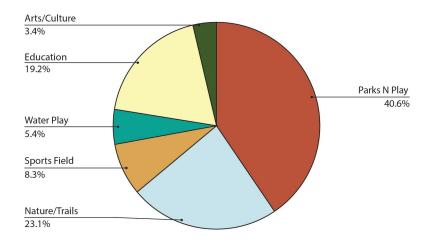
Key icon	Icon/category description	Example of student work
Arts/Culture	Museums, galleries, theaters	





The pie chart below shows the breakdown of favorite locations based on feedback collected from all ages via surveys and in-person engagements. The three most frequently recommended location (icon) categories were: Parks N Play, Nature/Trails, and Education. It was possible for some locations to fall into more than one category: for example, the East Boulder Recreation Center might represent both Water Play (for its indoor pool) and Parks N Play (for its outdoor playground). Nearly 41% of all favorite location responses correlated to Parks N Play, and spending time in nature and/or on one of Boulder's many trails represented 23% of children and parent responses. While not surprising, it does bear noting: Boulder's children and parents have clear preferences for spending their time at playgrounds, parks, rec centers, in nature and on trails.

Desired locations: Child & parent responses from all community engagement events and surveys combined



% Breakdown of Desired Locations for CFC Map

The tables below indicate top locations separated out by age (parent vs. child). It's interesting to note that seven out of ten locations are indicated on both lists. Three locations on the

child-recommended list not on the parent-recommended list are: East Boulder Rec Center, Gateway Park, and CU Natural History Museum. Three locations on the parent-recommended list not found on the child-recommended list are: Hiking Trails, Farmer's Market, and Foothills Community Park.

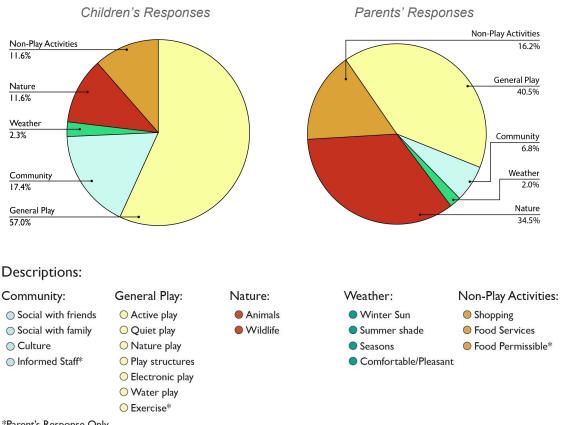
Top 10 Child-Recommended Locations	% of Total
1) Boulder Public Library 2) Chautauqua Park 3) North Boulder Rec Center 4) Pearl Street Mall 5) Scott Carpenter Park 6) Valmont Bike Park 7) East Boulder Rec Center 8) Boulder Creek 9) Gateway Park 10) CU Museum of Natural	16% 12% 8% 8% 3.5% 3.5% 3.5% 2.5% 2.5%
History	270

Top 10 Parent-Recommended Locations	% of Total
1) Pearl Street Mall 2) Boulder Public Library 3) Hiking Trails (in general) 4) Chautauqua Park 5) Valmont Bike Park 6) Boulder Creek 7) Scott Carpenter Park 8) Farmer's Market 9) Foothills Community Park 10) North Boulder Rec Center	12% 10% 9% 5.5% 5% 4.5% 4% 4% 3%

#### Question 2: What makes a place fun or enjoyable to visit?

In the analysis for the children's responses to this question, we found consistencies in response type that corresponded to five overarching themes: General Play, Community, Weather, Nature, and Non-Play (such as food or shopping) activities. The pie charts below represent the themes that emerged, and the descriptions below the charts further define the themes. Children's responses showed that general forms of play (active, quiet, nature, electronic, water) were the most frequent reason that places are fun or enjoyable to visit. Overall, the results in the charts are somewhat similar, however children are more interested in Play and Community, while parents are more interested in Nature and Non-Play.

#### Desired Elements of Enjoyable Spaces: Child & Parent Responses from BVSD and General Survey (Combined)



\*Parent's Response Only

Most responses to this question fell into one of the five major themes noted above. However, because there were also more specific comments made by children relating to a quality or feeling of a space, word clouds were created (below) to represent and compare the data. In this regard, we found that children repeatedly prefer a place that allows them to learn new things and explore. Children also prefer to engage in open spaces where they can run around, they like to experience safety, and they prefer areas that allow for interactivity. Parents valued practical features such as food, parking, accessibility, bathrooms, safety, cleanliness, while kids put a greater emphasis on general play. The definition of play from the adult perspective was geared more towards letting out energy/exercising, whereas the definition from child perspective was more geared towards exploring/learning/fun. The much larger response rate in surveys from parents yielded a broader vocabulary of concerns.

Common Phrases Re: Enjoyable Space: Child & Parent Responses from BVSD & General Surveys Combined





Children Responses

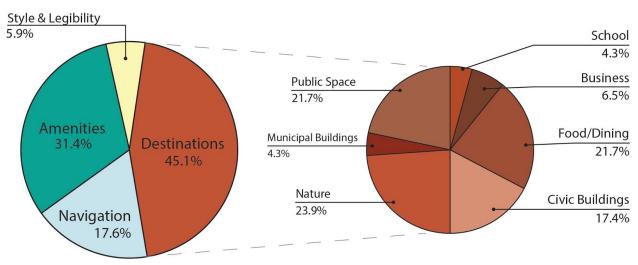
Parent Responses

"I recommend that Growing Up Boulder puts happiness on the child-friendly city map to bring love to the community."

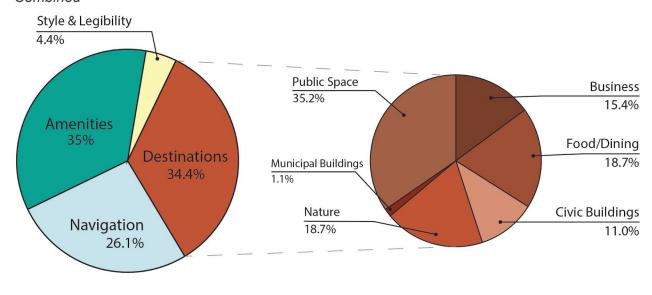
#### --5th Grade Student, I Have a Dream class

#### Question 3: Is there anything in particular that you would like to see on the child-friendly city map?

Breakdown of Desired Map Components: Child Responses from BVSD & General Survey Combined



Breakdown of Desired Map Components: Parent Responses from BVSD & General Survey Combined





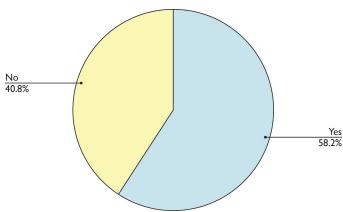
When breaking down the responses to the question "Is there anything in particular that you would like to see on a child-friendly city map of Boulder?," we found that the responses could be categorized into 4 overarching themes: Destinations, Amenities, Navigation, and Style/Legibility of the map. Specific destinations could further be broken down into nature, public spaces, food/dining, civic buildings, businesses, schools, and municipal buildings.

Both parents and children requested amenities such as playgrounds, water features, and bathrooms at a similar rate, but parents seemed to be slightly more interested in connectivity than the children. Parents were interested in major roads, bike paths, and hiking trails, while children were almost exclusively concerned with bike paths and hiking trails. Both parents and children valued destinations, however the children requested destinations more often than the parents (45.1% to 34.4%). When breaking down the destinations, children cared more about nature, food/dining, and civic buildings, while parents cared more about public spaces and businesses. It is also worth noting that while 4.3% of children's responses mention that they would like to see schools on a child-friendly city map, parents did not mention schools at all.

Businesses were not included on the map for several reasons. First, we wanted the map to be centered around education, recreation, and culture, and we found that it was too subjective to determine which businesses reflected these ideals. Second, including businesses on the map was contrary to our goal of promoting resources that are financially accessible to the entire Boulder community. Third, because there are so many businesses in Boulder, they would likely have crowded the printed map. Due to these three factors, we decided to leave businesses out of the printed map; however, since many map participants did request businesses for the child-friendly map, businesses will be included on the digital version, as there will be more space plus the ability to turn off layers (categories).

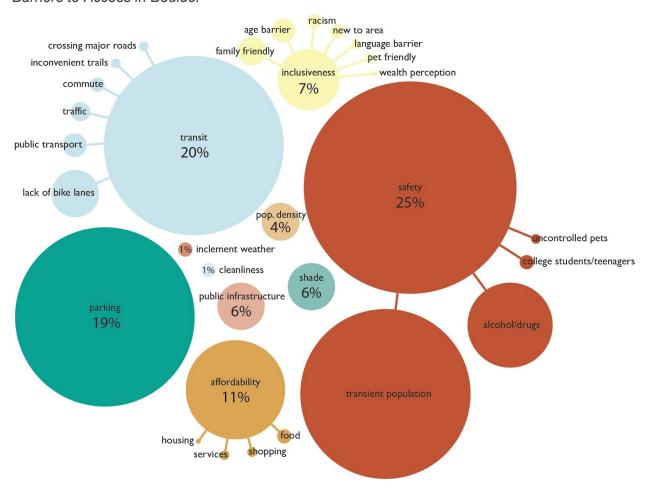
Question 6a: We would like Boulder to be an inclusive place, in all senses of the word. Are there any barriers that keep you from visiting certain places in Boulder? (This question was posed only to adult survey-takers.)

Are there barriers that keep you from visiting places in Boulder?



#### Question 6b: If you answered yes, what are they?

Barriers to Access in Boulder

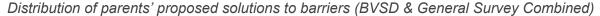


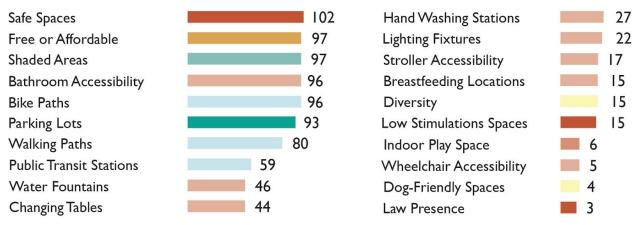
When analyzing the survey responses to Q6b, it became clear that parents' biggest reported barriers to enjoying Boulder were safety, transportation, and affordability concerns. The most commonly mentioned safety barrier was Boulder's transient population, specifically in areas such as Boulder Creek and Boulder Public Library. Families were concerned about their safety and about the use of alcohol and drugs in areas frequented by the transient population. It is also notable that areas like University Hill were avoided due to the perception of alcohol/drug use.

Among transportation concerns, the lack of parking, bike lanes and public transit were reported as the largest issues. Respondents noted that parking is either too expensive or not available at all, and that walking/biking is not a realistic substitute due to the inconvenience it represents for families with young children. Public transportation was also seen as inconvenient, as well as too expensive to replace driving.

Affordability was the third major barrier listed by parents. This was related to the cost of parking, as well as to the high costs of food, shopping, housing and general services.

Question 6c: Choose the best solutions below to address barriers (listed above)





(Respondents could choose more than one response and add additional suggestions.)

Respondents suggested more safe spaces, parking lots, bike paths, public transit and affordable activities as solutions to the barriers they described in Q6b. Respondents also noted that they would like to see more shaded areas in parks and covering play structures, more infrastructure such as bathrooms, water fountains, changing stations, and lighting in parks and public spaces.

# Feedback Informing and Regarding 2019 Final Map Draft

Responses to Feedback from Children, Parents, and Partners			
FINAL draft of map:	2020 printing of PRINTED map:	Digital Version of CFC map:	
<ul> <li>Updated key</li> <li>Expanded child-friendly bus routes &amp; bike paths</li> <li>Simplified Pearl Street &amp; Civic Area</li> <li>Information panels with student artwork</li> <li>Updated front cover graphics</li> <li>QR code linked to website</li> <li>Additional city playgrounds and open turf</li> <li>Updated amenities chart, including map references for wayfinding</li> <li>Landmark arrows for more accurate placement on map</li> </ul>	<ul> <li>2 BVSD schools, inadvertently omitted</li> <li>Corrections to some map reference markers on amenities chart (errors on current map due to a corrupted file, which erased updates)</li> <li>Check links</li> <li>Updates from youth/parent feedback</li> </ul>	<ul> <li>Expand locations to include full range of student recommendations (such as retail, restaurants, and other for-profit locations)</li> <li>Links to school websites, student artwork from map project, photographs</li> <li>City of Boulder links (OSMP, Parks and Rec, GO Boulder, Planning &amp; Housing, etc.)</li> <li>Add visible and interactive layers so users may sort</li> </ul>	

- Shading to designate CU areas & neighborhood labeling
- Sponsorship logos

- Expand walking and biking routes
- Consider parent tab/layer: what to pack, advice from other parents
- Consider children tab/layer: how to ride a bus, location recommendations for certain age groups
- Some advertising to support the cost of the digital map

# **CFC Map Celebration**

On Saturday, May 4th from 9:30 am-12:00 pm, 200 families with young children attended GUB's 10th Anniversary and Map Launch Celebration. The event, with space generously donated by the Boulder JCC, featured music and entertainment by "Jeff and Paige," fruit donated by Lucky's Market and Alfalfa's, and free maps. Partner organizations hosted information tables and child-friendly activities. GUB offered bilingual registration and interpretation services; however unfortunately, no monolingual Spanish-speaking families attended the event. Attendees and partners reported a successful and fun event.





Children's performers, "Jeff and Paige," designed their performance around use of the map. Photos by Jade Cody.

#### Reflections

# **Teacher Reflections**

Partner school teachers report that students had very positive map engagement experiences. Teachers who integrated the GUB CFC Map Project into their curriculum and standards reported high satisfaction of student learning and map skill development. They noted high levels of student engagement and appreciated the real-life component of the project where students

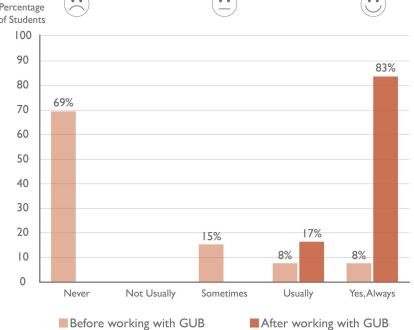
were able to see an idea evolve into a published map. Teachers confirmed that students were empowered by being contributing participants to the project.

# Partner School Reflections: Whittier International Elementary School

Because of their multi-month partnership with the CFC map project, students from Whittier International Elementary School completed surveys before and after the project to measure beliefs about being civically engaged. Children's perceptions of civic engagement increased in response to all six questions asked; there were especially strong increases in responses to two questions shown in charts below. In regards to the first question, "I know I have a voice in city issues that matter to me", students felt they had little voice in city issues before working with GUB, but by the end of the project, 90% of students felt they had much greater voice in city issues. The same held true for the second question, "I feel I can help my city by sharing opinions and ideas." Whittier students engaged with GUB and their teachers regarding the map throughout the school year. They saw first-hand how their ideas and opinions for the map's content and design showed up on the next iteration of the map. A strong connection to the map work resulted.



"I know I have a voice in city issues that matter to me"



"I feel I can help improve my city by sharing my opinions and ideas."



"Kids see that their voices are heard. Kids feel that they matter, that they have some say, that people listen to them. They can see themselves on this map. It's really cool."

--Teacher, Whittier International Elementary School, 1st Grade; as quoted in the Daily Camera 4/30/19

# **Reflections from Partner Organizations**

We will add additional partner reflections to this section as they become available. Because we wish to share back the data collected in this report with partners as a final stage of the engagement process, the final partner survey (to the City, nonprofits, and others) has not yet been administered. However, we would like to share our feedback thus far:

"I'm excited for our participants to see the map and what they contributed. It's awesome they had a voice in a project that will have an impact on the greater community."

#### -- Therapeutic Specialist, Imagine!

"Thank you very much for this incredible tool for children. We believe children have the right to participate in their community, and, with this tool, they are able to (participate) even more."

#### **GUB Staff Reflections**

#### Design

The CFC map project was comprehensive in design; a year allowed us to fully implement each stage of the project (research, outreach, map feedback and iterations, data collection and analysis, and report writing)and employ best practices from the field of participatory planning. To achieve such a diversity in map participation amongst parents and children, GUB relied upon tireless persistence. Partner non-profits were extremely busy with their own programs, and the child-friendly city map was not a top priority for many. Thus, for each partner we successfully engaged, there was at least one partner we were not able to engage (and who is therefore not reflected in this report).

When we did succeed in engaging with a community, it took an average of 4 contacts per organization before they agreed to participate. In sum, we needed time, persistence, and a dedicated team, to complete the work thoroughly. The result was a robust set of triangulated data.. There were challenges in that a bilingual map meant less space for interactive activities, but we were satisfied with the compromises needed to achieve the goal of two languages on the amp.

Finally, a map-making project such at this one involves thousands of details, resulting in many late-night map-making sessions to correct errors. Even with partners and GUB team members reviewing the final map draft multiple times, several errors still appeared in the final printing. This felt inevitable, given the complexity of the project (and lack of paid copywriter); however, our hope it that a second printing will eliminate any errors.

#### Survey and Data

Because our survey questions did not include demographic information such as socio-economic status or race, we were not able to determine the percentage of survey respondents from underrepresented backgrounds. Regardless, survey responses highlighted that significant barriers to accessing child-friendly spaces do exist in Boulder, and the momentum generated from the map offers an opportunity for parents to contribute to collective problem solving.

In addition, data analysis took a large amount of time. While we analyzed locations and overarching themes for the map during the map-making process, it was not until after meeting map printing deadline that we were able to analyze the more nuanced findings in the data from all sources.

#### Reception from Public

It is clear from the overwhelmingly positive response to the child-friendly map by children, parents, city staff, and community organizations, and academia, that the map tapped an unmet need. Our map project has received acclaim both nationally and internationally. Based on our work, Bay Area Rapid Transit (BART) is considering creating a child-friendly transit map and the City of Denver is hoping to create a child-friendly bike map. Finally, the Transportation

Department in Boulder's own school district, BVSD, will use the map to enrich the work they already do on active transport. Nothing like this map has ever been done in our city, and we believe it's the first of its kind in the nation.

At a basic level, children and families are using the CFC map as a vehicle to actively engage with their city. However, the map goes beyond serving as a teaching tool for families wanting to use transit or discover an unfamiliar park or trail. The map offers ALL residents and visitors an opportunity for equitable access, and as such, the map serves as a social justice tool. Further, we were surprised by the high degree of parent enthusiasm. The project has spurred parents of young children to become involved in civic decision-making. To that end, a parent advocacy group is meeting in July to help parents share their voice related to child and family needs in our city.

#### Reflection Upon Whether the CFC Map Met GUB's Map Goals

#### Goal 1 - Advance the principles of a child-friendly city initiative in Boulder

First, the CFC map project validates the concept that children are experts on their own lives, and, moreover, that they are amazing thinkers. Child-friendly cities all over the world are grounded in the idea that children are current citizens, and should be involved in civic decisions that affect their lives. This was evident in every engagement we facilitated--kids had many ideas, and their enthusiasm for sharing their voice was palpable. Also, as the upcoming cover article in the August edition of Colorado Municipal League magazine highlights, young people of all ages can and have contributed successfully to a wide range of projects within their own city. Finally, the map serves as a CFC assessment tool in that it celebrates places in Boulder that are child-friendly while also revealing where there are gaps in child-friendliness. The parent and child survey results could additionally be used as a benchmark to compare local child-friendliness now and in the future.

#### Goal 2 - Realize GUB's mission and strategic planning goals

One of GUB's central goals in our strategic plan is to reach an increased number of community members--children, teachers, parents, schools, and the community-at-large--in order to inform the community of the collaborative work that GUB is doing and to increase community engagement in this work. We hope to move GUB away from being "Boulder's best kept secret," and to generate shared ownership and agency of the program amongst Boulder stakeholders. We are pleased with the progress made on this goal, as we now have a new set of families and community organizations invested in child-friendly cities work.

Using the map as a fundraising stream was a second goal, and in this outcome, our results were mixed. We were successful in covering map expenses (\$4,100, thanks to our sponsors and organizations that paid to have their logo placed on the map) but we only netted 12% of our original goal of raising \$35,000. We had hoped to hire an additional staff member to support GUB's growing communication and development needs. We are currently looking for sponsors to support the next printing of the physical map, and to support the publication of the digital map. We believe that the success of this first printing, and the positive press it has received, should lead to increased sponsorships for the next printing. In addition, offering business and

foundations a year in advance to consider a map sponsorship request should allow more business the time needed to set aside the funds within their budgets.

#### Goal 3 - Promote City of Boulder Sustainability & Resiliency Framework

Our map project encompassed the components of the City of Boulder's Sustainability & Resiliency Framework, as described below:

- Safe: Offer a welcoming and inclusive community through bilingual and easy-to-read map
- Healthy & Socially Thriving: Highlight locations that support physical and mental well-being as well as abundant recreational, cultural, and educational opportunities
- Livable: Share locations with safe, well-maintained, and attractive buildings/ infrastructure
- Accessible & Connected: Feature safe, accessible, and sustainable multi-modal transportation systems for families
- Environmentally Sustainable: Promote active transit and environmentally sustainable activities
- Responsibly Governed: Design a map driven by data from the community
- Economically Vital: Highlight low-cost activities and spaces so families of all income levels can thrive

#### Goal 4 - Create a child-friendly city map for Boulder

It was rewarding to share a vision, and then a tangible outcome, with so many community organizations, city departments, schools, and university departments. Our project serves as a model for how diverse community groups can work together. We believe it was beneficial to take a risk and test out a new idea to benefit the community. We believe the map was successful due to building upon other communities' precedents to due to authentic and thorough community engagement.

"Children are delighted to see themselves and their ideas reflected in the map; and they are using the map to navigate the city in new ways. The map builds children and parents' capacity to engage in the physical and civic space of their city and provides equitable information to offer access for all residents."

--GUB Program Director

# **GUB: Map Next Steps**

The map was printed and distributed to schools, partners, and public kiosks in May and June 2019. In addition, GUB is selling laminated versions of the map, as well as a "Boulder as a Child-Friendly City" posters, through the Museum of Boulder gift shop.

Thanks to extensive media cover, social media promotion, and presentations at international conferences, GUB has received numerous requests for more information about the map. In response to these inquiries, we plan to host a webinar to explain the map-making process and answers questions for other communities wishing to create a similar product. This is another opportunity for GUB to raise funds for its program and to share our learning from the map-making experience.

In addition, as we have run out of child-friendly city maps and as there have been requests for additional maps, we will likely print a second edition of the map within the next year. A second edition will allow us to correct errors from the first version and also solicit funding from additional sponsors.

Finally, the data collected from the map-making process highlighted barriers children and parents face to accessing child-friendly locations in Boulder. This included concerns about safety (especially fear about the transient community and/or public drug and alcohol use), accessible public transportation, and shade over outdoor play structures. GUB plans to share this data with relevant stakeholders and then continue the conversation within Boulder about how to address these challenges.

# **Conclusion**

Members of the GUB team agree that the child-friendly city map was one of GUB's most rewarding and successful projects. It was an asset-based project that succeeded due to authentic community engagement and community partner collaboration. It demonstrates that, given sufficient time, resources, and vision, a community can design a beautiful and user-friendly product by children, for children.

We hope that this conclusion section will serve as a framework for other communities wishing to engage in similar efforts, and as documentation for our own community on how we created the map. We also recommend approaching the map-making process with an open mind: you do not know what you will find until you have started exploring! Communities with fewer resources may find that their map looks different from ours, but it will be no less useful or beautiful; it might include locations for family support, such as government agencies and NGOs, or informal spaces frequented by children and families. It can be used as a launching pad for community discussions and aspirations about child-friendliness, and it can bring visibility to child and family needs.

# Factors to consider when designing a child-friendly city map

- **Format**: Printed or digital, dimensions of the map (printed), software (digital); if the map is printed, will there be a connection to online resources (we used a QR code connected with our website to do this)?
- Map partners: Who should be at the table to help create the map? Think about schools, out-of-school programs, on-the-ground parent groups, online parent groups, city departments, university departments, cultural institutions, visitors bureaus, and more.
   Once you have convened this group, ask the group who is missing that should be there, then invite them to join.
- **Target audience**: Children, youth, parents, grandparents, nursing parents, pregnant parents, local or visiting families?
- **Inclusivity**: After determining your target audience, list all of the groups you want to include, with a special focus on how to reach people from marginalized communities;
  - Then design an outreach plan that explains how you will engage each one of these groups
  - Do you need to connect with any additional partners to conduct successful outreach?
- Methods for engagement: What tools and methods will you use to engage children and parents? See the following book for ideas: <u>Placemaking with Children and Youth:</u> <u>Participatory Practices for Planning Sustainable Communities.</u>
- **Key values and messages**: What values underlie the creation of the map? Are there specific messages you are trying to share with the community? For GUB, these included the values of inclusivity, fun, play, learning, nature, and health.
- **Map boundaries**: What are the geographical boundaries of the map; are there call-out sections that focus on downtown or other locations?
- Language: Will the map be only in the dominant language or in other languages as well? Will there be separate maps or one map with multiple languages? Weigh the pros and cons of each.
- **Literacy level**: Ensure that there are many visual cues that a child or an adult with a low literacy level can use.
- What else will make the map specifically child-friendly: Colorful illustrations? An easy legend? Whimsical font? Interactive games and activities?
- Wayfinding strategies: Arrows, map reference, compass rose, etc.?
- **Types of locations**: Cultural, educational, recreational, locations open to the public or requiring membership, restaurants, retail, etc.
- Transportation: Walking, biking, public transit, parking, include everything or select specific transport to highlight? Include a child's walking/biking pace for distances on map?
- **List of amenities**: What amenities are important to children and families in your community? Toilets? Shade? Cost?
- **Criteria for map locations**: How will you determine what is included on the map and what isn't included, since there won't be room to include all locations? Will locations need a certain number of recommendations to be included on the map? Will they need to support healthy child development?

- **Map iterations**: How will you ensure that you receive feedback on multiple drafts of the map? How will you analyze the data you receive and then ensure that it is integrated into new drafts of the map?
- Cost of the map: How will you pay for the cost of the map? Underwriting by foundations? By businesses? By partner organizations? Will you allow advertising? Will the map be free or will there be a charge (we prefer free as an equity issue)?
- Map design: Who will design the map? Will you use free software (like Google Maps), work with university students, or work with professional designers? Will you use children's art, adult art, computer graphics, or a combination? How can partners, students, and volunteers partner on the project to reduce costs?
- Map roll out: How will you share the map when it's complete, both physically and virtually? Will there be a celebration? Press release? We recommend using the partner network you've developed through the map-making process to reach the whole community. Make sure to build in time for this step, because you want your map to be well-utilized.
- **Report and reflection**: How will you reflect upon the map-making process and document the data you have collected?
- **Next steps**: How will you build upon any momentum created from the map? What will the community do to address challenges identified by the map-making process?

# Sponsors, Partners, Funders, and Appreciation

This project was the result of a truly collaborative process. Our sincere thanks go out to our sponsors, the Boulder Library Foundation and Boulder Community Health, and to the Boulder Jewish Community Center, who donated its space for the map celebration. We would like to thank all of the partners who directly gave their time and energy to make this project a success, and thank the hundreds of Boulder children and caregivers who shared their wonderful ideas for Boulder's first CFC map:

- Boulder Community Health, Grant Besser, Rich Sheehan
- Boulder Convention and Visitors Bureau, Kim Farin
- Boulder County Head Start, Jasmine Bailon and Stacey Fujieda
- Boulder Housing Partners, Keelin McGill
- Boulder Jewish Community Center--Jay and Rose Phillips Early Childhood Center, Susie Valdez, Lindsey Bradley, and Kyle McKay
- Boulder Jewish Community Center, Sara Guttman
- Boulder Journey School, Vicki Oleson & Hailey Noble
- Boulder Library Foundation
- Boulder Public Library, Aspen Walker and Jaime Kopke
- Boulder Valley School District
  - o Career and Technical Education, Arlie Huffman
  - Education Center, Kiffany Lychock
  - Crestview Elementary, Kindergarten teacher Erin Cameron, Families and Educators Together (FET) group, teacher Diane Brenton

- Horizons K-8, Kindergarten teachers Wendy Thoresen and Talia Shapiro
- Lifelong Learning, Matt Jenkins
- University Hill Elementary, 2nd grade teachers Sara Nelson, Marina Orozco, Luis Marquez, and Enriqueta Martinez
- Whittier International Elementary, 1st grade ELD teachers Judy Gilligan, Alysia Hayas, Teresa LeRose, and Tamar van vliet; 3rd grade teachers Hayley Bacall, Frannie Parkinson, and Lisa O'Brien
- City of Boulder
  - City Manager's Office, Sarah Huntley
  - o GO Boulder, Jean Sanson
  - o Open Space and Mountain Parks, Curry Rosato
  - o Parks and Recreation, Tina Briggs and Christy Spielman
- Dairy Arts Center, Juliette Bartsch
- El Centro Amistad, Elena Aranda, Jetzabel Martinez and Leticia Abajo
- Food donors
  - Alfalfa's
  - Lucky's Market
  - Natural Grocers
  - Snarf's Sandwiches
  - Sprouts Farmers Market
- Growing Up Boulder Staff/Team
  - Abe Proffitt, GUB Intern and Volunteer Map Designer
  - o Alex Haefling, GUB Volunteer Map Designer
  - o Aria Dellepiane, GUB Program Associate
  - Cathy Hill, GUB Education Coordinator
  - Merlyn Holmes, Communication & Development Lead
  - Leandre Mills, GUB Intern
  - o Mara Mintzer, GUB Program Director
  - Max Jongewaard, GUB Intern
  - Ollie Brooks, GUB Intern
  - Omar de la Mora, GUB Intern
  - Valeria Henao Cano, GUB Volunteer Translator
- I Have a Dream Foundation, Mariah Salem
- Imagine!, Out & About program, Maggie Clinton & Quincy Hegeman
- Moxie Moms, Susan Lavelle, Sabina Zolot
- Museum of Boulder, Emily Zinn
- University of Colorado
  - Department of Geography, Sarah Kelly
  - o Earth Sciences & Map Library, Naomi Heiser & Ilene Raynes
  - Environmental Design/Community Engagement Research and Design (CEDaR)
     Center, Brian Muller
  - Fiske Planetarium, Briana Ingermann
  - Museum of Natural History, Dr. Cathy Regan
- Walk2Connect Collaborative, Darcy Kitching

# **Appendices**

## **Detailed Map Project Numbers**

- By age:
  - Child participation
    - 376 students via classroom engagements:
      - 58 students in preschool classrooms
      - 217 students in BVSD elementary classrooms at 4 schools
      - 101 children in 6 partner organization classrooms
    - 61 child survey responses
    - Additional children engaged at Boulder Public Library storytime and Boulder Housing Partners Meeting (unknown number)
  - Adult participation
    - 283 survey responses
    - 68 parents and caregivers (50 at Museum of Boulder, 18 FET)
    - Additional parents engaged at Boulder Public Library storytime, Boulder Housing Partners Meeting, and via preschools' own outreach (unknown number)
- By survey :
  - 344 responses to 2 surveys: 252 respondents to bilingual BVSD survey and 92 respondents to bilingual Community survey
    - 283 parent/caregiver responses
      - 207 BVSD survey parents/caregivers (203 English, 4 Spanish)
      - 76 Community survey parents/caregivers (all English)
    - 61 child responses
      - 45 BVSD survey child (all English)
      - 16 Community survey child (all English)
- By GUB team
  - o # GUB hours: 1980
  - Cost equivalent if GUB charged consultant rates for project: \$145,000
  - University of Colorado and GUB team members
    - 2 GUB staff
    - 1 GUB communications and development lead
    - 1 CU masters student volunteer translator
    - 2 CU undergraduate map designers
    - 4 CU undergraduate student interns
    - 4 CU undergraduate volunteers
    - 3 CU university staff and faculty (CU map librarians and Geography instructor)
- Map distribution
  - 6,100 maps distributed to Boulder located BVSD PreK-5th grade schools
  - o 3,900 maps distributed to 30 partners and public spaces throughout Boulder

#### Abstract for EDRA 2019 Conference

In May 2019, GUB Program Director, Mara Mintzer, delivered a presentation on the CFC map for the 2019 Environmental Design Research Association (EDRA) Conference. The title of the conference was, "Sustainable Urban Environments: Place-making: Personal, Social and Cultural Meanings of Space." Below is the accepted abstract.

#### How designing a child-friendly map can lead to a more sustainable city

Our organization is developing the nation's first child-friendly city map. We have convened a collaborative of 30 nonprofits, city agencies, and schools to use participatory action research to design a map featuring child-friendly locations and transit throughout the city. This free, bilingual map will go home with all elementary and preschool children before summer vacation.

Both the map's features and the map-making process meet the city's sustainability and resilience goals of social, environmental, and economic sustainability. Our commitment to social sustainability is embedded in our participatory planning approach, which uses a variety of methods to gather voices of children with disabilities, limited financial means, and from immigrant and minority backgrounds. By the end of the project, more than 300 children and 300 parents/caregivers will contribute to the map.

The map supports environmental sustainability in several ways. It contains child-identified wild and outdoor spaces, including hiking trails, lakes and parks, in order to connect children and families to nature. Research shows that children must have personal interactions with nature if they are to become future environmental stewards. Next, by highlighting child-friendly biking, walking, and busing routes, sustainable transportation becomes fun and accessible. To make walking and biking even more engaging, school classes will develop scavenger hunts and geocaching adventures for the map.

Finally, the map contributes to economic sustainability by emphasizing free or low-cost activities. Only cultural and recreational locations are included on the printed version of the map, so that all families may take advantage of the city's amenities.

Our goal is to make families and city planners aware of our community's child-friendly assets, as well as barriers, in order to design a more sustainable, child-friendly city. Through documentation and evaluation of the process, we hope to establish a transferable, PAR model for other cities.

# **Engagement Documents**

- Guiding questions for map feedback (bilingual)
- Community survey for parents and children in English
- Community survey for parents and children in Spanish

# **Child-Friendly Cities Description**

This excerpt from North Vancouver's Child-Friendly City Strategies Report reflects GUB's goals for Boulder as a Child-Friendly City.

# CHILD, YOUTH + FAMILY FRIENDLY CITIES

The concept of child, youth and family friendly cities stems from the resolution adopted during the 1996 United Nations Conference on Human Settlements. \* This resolution builds upon and supports the UN Convention on the Rights of the Child which was created in 1989 and outlines 54 articles designed to provide and protect the rights of children (ages 0-18 years). From the perspective of UNICEF, putting children first is critical; it is noted that the well-being of children is the ultimate indicator of the overall current and future health of a community, a democratic society and good governance.

In respecting children's rights and creating a child friendly city which is committed to a system of local governance that fulfills children's rights, it is incumbent on governments to take action in order to ensure that children can:

- · Influence decisions about their city
- Express their opinion regarding the city they want
- · Participate in family, community and social life
- Receive basic services such as health care, education and shelter
- Drink safe water and have access to proper sanitation
- Be protected from exploitation, violence and abuse
- · Walk safely in the streets on their own
- Meet friends and play
- · Have green spaces for plants and animals
- · Live in an unpolluted environment
- Participate in cultural and social events
- Be an equal citizen of their city with access to every service, regardless of ethnic origin, religion, income, gender or disability



"We love the City. Now that we have a child, we think it's the best place to raise her in the Lower Mainland. The resources are excellent."

PARENT AND CITY RESIDENT

City of North Vancouver. (2014). CN4ME report: Connecting Children, Youth, and Families in the City of North Vancouver. North Vancouver, British Columbia, Canada.