CITY BUILD 2040 CHALLENGE

CITY BUILD 2040

What is the City Build 2040 Challenge?

The [City] Build 2040 is a two-day hands-on experience for K-8 youth to use mainly recycled materials to build a representation of their town as they envision it will look in 2040, a time when they may be the next generation of community leaders. In the 2040 City Build, students will work with peers, city and business leaders, and event facilitators to design a city with a focus on housing, businesses, parks and recreation, transportation, water management systems, and renewable energy.

General Build

Students ideate and create what they envision their community to look like in the year 2040. Students work in teams of three with cardboard and recycled materials to build a 3ft x 3ft plot in the 9ft x 9ft city.

Community Connect

Throughout the City Build, students engage with local professionals and city decision makers. Professionals are invited to talk about their role in the community and ideas on the future of the community.

Community Showcase

Each student has the chance to their thoughts, ideas, and what they accomplished during their City Build experience to their family, friends and community to wrap up the two-day event.

Who is this guide for?

This guide is designed for afterschool educators (from high school students to trained professionals) who want to organize and facilitate the [City] Build 2040 Project. This guide is intended to have enough instructions and resources for you make some minor adjustments and plug directly it into your afterschool program or community to host a [City] Build 2040 event.

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NOTE: All of the content in this guide are suggestions. We encourage you to tailor any of the elements to fit better with your particular group of students or the specific challenges your community faces.

Planning Overview/Roadmap

1. Decide on hosting the event
2. Recruit a strong team of organizers
3. Determine date and begin obtaining necessary resources & funding (if needed)
4. Recruitment
   a. ~15-30, 3-8th grade students
   b. Community Connects
5. Facilitator Training
6. Host the event
   a. Build
   b. Newsflashes
   c. Community Connects
   d. Community Showcase
7. Conduct a Post-Event Reflection

HOW TO USE THIS GUIDE

First, read through the [City] Build description (page 2) and make sure this program is event is a good fit for you.

Review the Planning Overview (page 3), Planning Timeline (page 7), and Organizing Considerations (page 8) to gain a better sense of what considerations to keep in mind as you go forward.

Review all the materials in the appendix section, so you know what tools have already been developed. No need to recreate the wheel. We have provided sample agendas (page 15), registration forms (page 17), newsflash printouts (page 19), communication samples (page 23), among other helpful program tools.

Go over the planning timeline once more and determine how you need to adapt it to fit your specific needs.

Begin organizing your event!

GENERAL ROLES & RESPONSIBILITIES

Event Organizers
- a. Obtain resources & funding
- b. Organize event logistics: venue, time, date, location
- c. Communicate to all stakeholders
- d. Recruit students & facilitators

Event Facilitators
- a. Guide students through the [City] Build experience
- b. Community Official (CO) Roles (during event)
    - There are 4 City Official Roles. If you don't have 4 facilitators, assign multiple roles each person.
    - While all facilitators will need to help accomplish each role, we suggest that you put one facilitator be in charge of each of the following Community Official Roles:

News Agent (CO #1):
- a. Announce newsflashes and gather students to provide instructions to students

City Inspector (CO #2):
- a. Throughout the event inspect zones to ensure the zones are abiding by the zoning rules
- b. In charge of approving exceptions to zoning rules

Materials Manager (CO #3):
- a. Layout all the materials as they are needed
- b. Determine a way to fairly distribute materials
- c. Ensure required materials for the newsflash activities are reserved
- d. Keep track of supplies that are running low, in case another supply run is needed

GENERAL ROLES & RESPONSIBILITIES
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Food and Health (CO #4):
   a. Make sure students are staying healthy.
   b. Encourage them to eat food, drink
       lots of water, and have students take breaks
       as needed
c. Newsflash Activity Exprts (Facilitators)
   - There are about 4 newsflashes throughout the
      event. Designate one or more facilitators to
      become experts in facilitating the newsflash
      activities.
   - Newsflash activity experts are responsible for
      o   Creating the newsflash activities and
          instructions,
          considering what materials you have.
      o   After the News Agent city official announces
          the newsflash, the newsflash activity expert
          will provide
          the specific instructions and a
          demonstration on
          how each student group can address each
          newsflash.
      o   Approve each groups' efforts to address the
          newsflash and release them to begin work
          again on their zone as normal.

Student Builders
   a. Work in teams of 3 to develop a 3 ft x 3 ft plot of
       the larger 9 ft x 9 ft city

Community Connects (Local Professionals)
   a. Give a 5-10 minute talk to students about their
       profession and how it impacts the community
       Community connects also provide any tips for
       the students on what they could consider in
       their vision for their future community.

PLANNING TIMELINE

4-8 Weeks out
- Recruit an organizing team
- Review and become familiar with this playbook.
- Select a date for the event
- Brainstorm ways to make the [City] Build 2040 your own and fit your town and students better
- Reserve a location for the event
- Determine a plan for how you will obtain the materials and funding needed to host this event.
- Begin obtaining the materials and funding.

2-4 Weeks out
- Advertise to and recruit students
- Advertise the community showcase
- Recruit professionals for the community connects
- Send event details to parents of registered students
- Ensure all co-organizers are familiar with their specific roles and the organizing playbook
- Distribute day-of roles to the event facilitators (e.g. City Official Roles, Newsflash Expert Roles)
- Have the event facilitators prepare their newsflash activities
- Order the necessary materials for event and each activity
- Prepare materials as needed (break down cardboard boxes, cut out 3ft x 3ft zones)
- Determine a plan for city disassembly – where can you discard/recycle all the used materials
- Tailor/edit your facilitator and student printouts

1-3 Days out
- Send email confirmation/reminders:
    - Confirm student attendance
    - Confirm community connects
- One more advertisement push for the community showcase
- Print student printouts
- If possible, set up the space/room in advance (i.e. layout all the materials, printouts, sign-in booth, etc)
- Ensure all food is obtained or ordered
- Make sure all your facilitators are prepared

Days of Event
- Ensure space is fully set up and necessary materials placed out
- Check students in and out as needed
- Layout food as needed

ORGANIZING CONSIDERATIONS

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Building Your Team of Organizers

- Who are the organizers?

- How many organizers will I need?

- What does an organizer do?

- How do I choose a suitable location for my event?

Building Your Team of Facilitators

- Who are the Facilitators?

- How do to facilitators prepare?

- How many facilitators are needed?

- Where do I recruit facilitators?

Recruitment and Promotion

- What students should I recruit to participate?

- How do I recruit the students?

- What do student participants do?

- Who are Community Connects?

- How do I recruit a Community Connect?

- Schedule, event description, talk description

- How do I recruit community members for the community showcase?

ORGANIZING CONSIDERATIONS

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Host Event

- How do I welcome the students?

- What should I consider regarding food and snacks?

- What are Newsflashes and how do I run those activities?

- How do I keep the students engaged?

- How do I facilitate the community showcase?

- How do I disassemble the city?

Post Event

- What do I need to do after the event?

COMMUNITY SHOWCASE

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Pre-Showcase

    a.   Reassure the students that it is okay if some things aren't finished. All great towns are a work in progress.

    b.   Assemble the plots of the city into the final grid and ensure there is enough space for the community guests for the showcase.

Welcome

    a.   After most of the community guests have arrived:

    - Give an overview of the event: describe the event what a newsflash is, who the community connects were, and what the community showcase will consist of.

    b.   Allow any guest speakers or other organizers to say a few words.

Share

    a.   Go from city plot to city plot. For each plot have each team introduce themselves. Have one person give an overview of how their plot fits in to the city. Have each team member:

    - Point out the family/guardian,

    - Describe what they worked on in their plot

    - Say one thing they learned.

COMMUNITY SHOWCASE

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Conclude

a.   Make closing remarks, thank all attendees, thank all student participants, organizers/facilitators, and other stakeholders.

b.   Before all the community guests leave, have them line up with the students and their city and take a group picture.

c.   Provide instructions to students and facilitators for disassembling the city.

d.   Allow some time for guests to walk through the city build before disassemby.

NOTE:

a.   Students will likely ask if they can take some things home. Be prepared and have your answer ready.

APPENDIX

Supporting Documents & Templates

SUGGESTED MATERIALS

Note: This suggested materials list is intended to serve ~15-25 students for a 1.5 day [City] Build. Please tailor this list to your specific needs.

General Event
- Check-in Booth
  - Laptop with check-in spreadsheet (Consider printing if restrictions on power or internet)
  - Table for check-in booth
  - Name tags
  - Marker
- Safety
  - First-Aid Kit
  - Towels/paper towels, especially if indoors

For Students
- Waste
  - Large accessible garbage bins
  - Recycle Bins

- Food & Water
  - Breakfast, Lunch, and Snacks
  - Cups/bottles

- General Building Tools
  - Scissors/Heavy duty scissors for cardboard
  - MakeDo ToolSets
  - Tape measure

- General Building Materials
  - Markers, pens, pencils
  - Cardboard for building
  - Cardboard for plots
  - Construction paper
  - Tape
    - Duct Tape
    - Scotch Tape
  - Pipe cleaners
  - Plastic bottles and lids
  - Popsicle sticks
  - Bamboo skewers
  - Yarn

SUGGESTED MATERIALS

Student Materials Continued

- Newsflash Activity Example Materials
  - o   Water Management Materials
    - Small buckets for water
    - Clear rubber tubes
    - Cups
  - o   Electricity Materials
    - LEDs
    - 3v batteries
    - Tape
    - Small Solar Panels
    - Voltmeter
    - Bendable Straws – for light posts

Material Notes & Considerations

- Don't layout all the materials. The students will likely use whatever you have. Instead, consider only placing out modest amount of materials and get more out as needed.
- Green construction paper seems to be very popular!
- Prep the cardboard: Breakdown all cardboard boxes, cut out 9, 3ft x 3ft squares
- Cardboard is a valuable resource. Obtain a lot of it! Consider a cardboard drive or asking local hardware stores for cardboard donations.
- Hot glue guns were helpful, but typically power is limited, so it may be too much of a hassle to provide them.
- Tape is likely an essential building block for your build. Ensure you have enough tape or be ready to make a run to the hardware store.

SAMPLE AGENDA

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Saturday, [DATE]

8:30   am   - Organizers arrive at event location and set up
9:30   am   - Students check-in + breakfast
9:45   am   - Welcome & introduction to city build
10:00 am   - City planning starter activity
10:20 am   - Construction begins
11:00 am   - Snack/bathroom break
12:00 pm   - Lunch – take groups to check out the Google Goggles
12:30 pm   - Back to build & News Flash #1 (Reinforce Buildings)
2:00   pm   - Mayor and Chamber of Commerce representative arrive
2:30   pm   - News Flash #2 (Storms - prepare for flood)
3:30   pm   - Snacks/bathroom break
3:45   pm   - News Flash #3 (Sustainable Energy)
4:00   pm   - Small take home questions for reflection given
4:30   pm   - Move City Build to safe storage location
7:30   pm   - Dinner with organizers and invited community members

Sunday, [DATE]

8:00   am   - Meet to prepare for second day activities
9:00   am   - Students arrive + breakfast
9:15   am   - Intro to second day & News Flash #4 (Recreation & Innovation)
10:30 am   - Snacks/bathroom break
10:45 am   - New Flash #5 (Business & Agriculture Development)
11:30 am   - Put city plots together & add final touches
12:00 pm   - Begin community Showcase
1:00   pm   - Cleanup and head home

SPACE SETUP

Space Checklist:
- Safety precautions (Priority)
- Bathrooms
- Area for student sign-in/sign-out booth
    - Electricity & internet (optional)
- Area for food – breakfast & lunch
- Area for materials
- Area for building plots of city
- Area for showcase
- General meeting area for announcements (e.g. welcome, newsflashes, reflections community connects, etc.)
- Overnight storage space

Outside Considerations:
- What will you do in the event of non-favorable weather conditions (e.g. wind, rain, heat, etc)? Communicate   contingency plans to parents and students.
- Consider identify nearby shaded areas, trees, gazebos, foldable canopy
- Bring (or ask parents to donate) extra sunscreen and/or bug spray

FORMS/LINKS/SURVEY

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Event Registration Form Checklist

- Note: If you are signing up multiple students, you must do so in separate registration forms.
- [AUTO-REGISTRATION FORM TIMESTAMP]
- Primary Contact Name (Parent/Guardian – First & Last)
- Primary Contact Email Address (Parent/Guardian)
- What is your student participant's name? (First & Last)
- What grade is your student currently in? If summertime, what grade will they enter in the Fall?
- Family/Emergency Contact (First & Last)
- Family/Emergency Contact relation to child
- Family/Emergency Contact Phone Number
- Photo Release agreement

Sign-In/Sign-Out Sheet

- Student Name
- Date

STUDENT PACKET

[SHORT AND VERY HEAVY ON VISUAL AND GRAPHICS]

Instructions
- You are responsible for developing a 3 ft x 3 ft plot
- Your plot will be one piece in the larger city!
- You must abide by the city Zone rules below.
- You may ask the city officials for exceptions for the rules. All three city officials must approve your request.

Building Rules
- No one building can be larger than 1/4 of your space
- No building can be taller than 3 feet
- The larger city must have a diverse set of zones – the zones must be different enough
- You may only use the resources you need for your zone and ensure enough resources are left for other groups

Images for Inspiration
- Building
  - Cardboard buildings
- Renewable Energy
  - Wind turbines
  - Solar panels
- Parks and Recreation
  - Skate park
  - Water park
- Transportation
  - Public Transportation
  - Bullet Trains
- Innovation
  - Urban Gardening
  - Cardboard art

[SCHEDULE]

NEWS FLASH #1

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Tornado Inbound

• BREAKING NEWS: There have been tornado clouds spotted 4 miles from your town. You have just enough time to reinforce your buildings, but you will have to work quickly. Begin reinforcing your buildings and structures immediately.

• You may only stop working on reinforcing buildings after a city official has approved.

NEWS FLASH #2

Prepare for Flooding

BREAKING NEWS: There are extreme thunderstorms forecasted across the Midwest. You have a small window of time to prepare for flooding. What can you do make your city safe?

You may only stop working on preparing for the flood after a city official has approved your work.

NEWS FLASH #3

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Energy Sources Needed

BREAKING NEWS: Our national power system has collapsed – what can we do to power our city with renewable energy sources?

You may only stop working on the power supply issues after a city official has approved your work.

NEWS FLASH #4

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Recreation & Innovation

BREAKING NEWS: Our kids are bored! What kind of recreation activities or innovations should we build into our cities?

You may only stop working on recreation and innovation after a city official has approved.

TO PARENTS:

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After Student's Sign-Up
Good morning,

My name is [NAME] and I am [ROLE IN PROJECT OR COMMUNITY]. We work closely with Austin Casselberry at Norfolk Aftershock, and he passed along your information to me since he is away on an adventure in Singapore.

Thank you for signing up to participate in [Town Name] Build 2040, a two-day hands-on experience for K-8 youth to use mainly recycled materials to build a representation of their town as they envision it will look in 2040, a time when they may be the next generation of community leaders. In the 2040 City Build, students will work with peers, city and business leaders, and event facilitators to design a city with a focus on housing, businesses, parks and recreation, transportation, water management systems, and renewable energy.

Event Details

WHEN: [TIMES AND DATES FOR THE ENTIRE EVENT]. *Families and community members are invited on [COMMUNITY SHOWCASE TIME AND DATE] to listen to the students describe their creation and experience.

WHERE: [LOCATION], [LINK TO MAP], [ANY OTHER TIPS TO GET THERE]

WHAT TO WEAR: Students should dress in athletic and comfortable clothing that is appropriate for [TYPE OF TEMPERATURE] temperatures.

WHAT TO BRING: Students need only bring their imagination. We will provide all materials and supplies, as well as breakfast, snacks, lunch and plenty of cold beverages. *please email me with dietary restrictions so we can try to accommodate every student.

WEATHER: Since it is going to be warm, [DESCRIBE YOUR ACCOMODATIONS FOR WEATHER]

HOMEWORK: There will be some questions for reflection on Saturday night in which we ask students to talk with their families about a vision for the future of their community. Students should bring these responses back on Sunday and see if they can incorporate them into their project.

FACILITATION: We will have [DESCRIBE # OF FACILITATORS] working with the students at all times to help with the project.

Please don't hesitate to contact me if you have any questions. Thank you again for participating in our first City Build project!

Sincerely,
[NAME]

TO PARENTS:

3-Days Before Event
Happy Friday!

We are looking forward to your child's participation in our [TOWN NAME] Build 2040. We have [DESCRIBE WORKSPACE]. Example: We have both outdoor (in Adams Park) and air conditioned indoor (In Dodge Museum) space for the kids to build, so we will be able to accommodate kids who don't do well in the heat. The forecast says 80s tomorrow, but with this heat wave you never know!

I have had a few parents tell me their child is unable to attend the event. Please email or call me tonight if your family has a change in plans since I will be shopping for food for everyone.

We have the Mayor, Chamber of Commerce and an NRD board member stopping by to meet the kids and give some expert advice for what it takes to run a town.

On Sunday at noon is when the kids share out what they have built, so feel free to bring family and friends.

I look forward to meeting all of you tomorrow!

Sincerely,
[NAME]

Morning of Last Day
Good morning!

We are looking forward to the last part of the [TOWN NAME] Build 2040, where your kids will put finished touches on the amazing community the kids have developed.

We start at [BEGINNING TIME] this morning. [ADD SPECIAL NOTES OR ANY CHANGE IN PLANS].

Please email / call / text me if you child is not able to participate today.

Quick reminder that at noon we will have completed the build out and will be ready to present the finished product to you and the rest of the community. We hope you can attend. Invite your friends and family.

Sincerely,
[NAME]

Post-Event - Thank You
Good morning!

I want to thank you all again for allowing your child to participate in [TOWN NAME] Build 2040 experience. Our team was so impressed by how innovative, collaborative, and dedicated your children are, which resulted in an amazing town of the future.

We have many pictures and filmed footage of the build that we would love to share with you and our network to highlight the [TOWN NAME] Build 2040 project.

Thank you again for a great weekend experience!

Sincerely,
[NAME]

PROGRAM EXTENSIONS

Note: Events/activities like these are highly adaptable. You can get creative and make this fit your particular community needs.

Additional Activities

- Consider adding additional breakaway activities to help students take a break or regain motivation. For example, access VR goggles and set up an activity where students get to see different cities to inspire them during the build process.

Event Duration

- 1 Day
- 4-6 Week After School Club

Impose Resource Limitations

Financial Literacy

- Create a currency
- Activity/ proposals for 'fundraising'
- Determine general 'costs' for materials