

GIS Project Ideas For Students

List of most helpful GIS Project Ideas For Students:

Nature & Wildlife

1. Map local bird nests to see the colors of feathers and where they are.
2. Mark trees with numbers for a fun nature hunt.
3. Make a map that shows where squirrels cross the streets in your town.
4. Draw a map of frog homes near ponds and streams.
5. Use pins to show where you see ladybugs in gardens.
6. Track where butterflies land on the flowers in your backyard.
7. Plan a map of all the dog parks in your neighborhood.
8. Note where fireflies shine the most on summer nights.
9. Mark places where mushrooms grow after it rains.
10. Create a map of all the playgrounds that have swings.
11. Show where beehives are in community gardens.
12. Track the best spots to find ladybug eggs under leaves.
13. Map where ducks swim in local lakes and rivers.
14. Note the tallest trees in your school yard.
15. Create a map of all the bird feeders in your area.
16. Mark where ladybugs come together in sunflower fields.
17. Track where ants build their hills in the grass.
18. Plan a map of all the trails that dogs can use.
19. Note where fireflies gather when the sun sets.
20. Show the best spots for catching tadpoles.
21. Create a map of all the bird baths in parks.
22. Mark where ladybugs hide under garden leaves.
23. Track where butterflies rest on flower petals.
24. Plan a map of all the trails with benches in nature.
25. Note where mushrooms pop up in cool, shady spots.
26. Show the best places to find ladybug larvae.
27. Create a map of all the birdhouses in backyards.
28. Mark where ladybugs live in compost piles.
29. Track where fireflies flash together in groups.
30. Plan a map of all the butterfly gardens.
31. Note where ladybugs eat aphids on plants.
32. Show the best spots for catching tadpoles.
33. Create a map of all the bird nests in trees.
34. Mark where ladybugs sleep under tree bark.
35. Track where butterflies drink water from puddles.
36. Plan a map of all the playgrounds with a nature theme.
37. Note where mushrooms grow near old logs.
38. Show the best spots for finding ladybug eggs.
39. Create a map of all the parks that welcome animals.
40. Mark where ladybugs fly in the morning sun.

Community & Safety

41. Map all the fire hydrants on your block for safety drills.
42. Create a map of crosswalks where kids go to school.
43. Mark spots of community gardens where food grows.
44. Plan a map showing where streetlights are dim or broken.
45. Note where recycling bins are in parks.
46. Track where trash collects near sidewalks.
47. Create a map of all the bike racks by stores.
48. Mark where benches are in sunny and shady spots.
49. Track where trash cans overflow on weekends.
50. Plan a map of all the police stations nearby.
51. Note where sidewalks are cracked or uneven.
52. Show the best spots to add new benches.
53. Create a map of all the parks that are pet friendly.
54. Mark where trash cans are too far from homes.
55. Track where street signs are missing or faded.
56. Plan a map of all the libraries with study areas.
57. Note where parked cars block the sidewalks.
58. Show the best routes to walk to school safely.
59. Create a map of all the community centers.
60. Mark where park benches need to be fixed.
61. Track where parking lots are very crowded.
62. Plan a map of all the fire stations nearby.
63. Note where sidewalks need more trees for shade.
64. Show the best spots to add new bike lanes.
65. Create a map of all the parks with picnic tables.
66. Mark where trash cans are too close to houses.
67. Track where streetlights are too bright at night.
68. Plan a map of all the playgrounds that have swings.
69. Note where sidewalks lack wheelchair ramps.
70. Show the best routes for recycling trucks.
71. Create a map of all the community art murals.
72. Mark where benches are missing in parks.
73. Track where sidewalks are too narrow for strollers.
74. Plan a map of all the police substations.
75. Note where trash cans are too far from bus stops.
76. Show the best spots to put new trash cans.
77. Create a map of all the parks with basketball courts.
78. Mark where street signs need to be updated.
79. Track where benches are in cool, shady spots.
80. Plan a map of all the community swimming pools.

Transportation & Travel

81. Map the best routes to school to skip busy roads.
82. Create a map of bike paths with stops to rest.
83. Mark where buses stop near your favorite stores.

84. Plan a map that shows the safest sidewalks.
85. Note where bike lanes are missing in busy spots.
86. Track where crosswalks are very far apart.
87. Create a map of all the train stations nearby.
88. Mark where traffic lights take too long to change.
89. Track where parked cars block the sidewalks.
90. Plan a map of all the parking garages.
91. Note where bike racks are missing near schools.
92. Show the best paths for walking your pet at night.
93. Create a map of all the bus stops with shelters.
94. Mark where sidewalks are cracked or uneven.
95. Track where bike paths are too narrow.
96. Plan a map of all the ferry terminals.
97. Note where traffic jams happen in rush hour.
98. Show the best routes for delivering groceries.
99. Create a map of all the car washes nearby.
100. Mark where sidewalks are missing near parks.
101. Track where bike lanes are blocked by cars.
102. Plan a map of all the taxi stands.
103. Note where traffic lights are broken.
104. Show the best paths for walking to a friend's house.
105. Create a map of all the bike-sharing stations.
106. Mark where sidewalks are too steep for strollers.
107. Track where bike paths have too many potholes.
108. Plan a map of all the parking lots with shade.
109. Note where sidewalks are covered with leaves.
110. Show the best routes for delivering packages.
111. Create a map of all the bike repair shops.
112. Mark where traffic jams happen on weekends.
113. Track where bike lanes are too close to cars.
114. Plan a map of all the bus schedules.
115. Note where sidewalks are missing in some neighborhoods.
116. Show the best paths for walking to libraries.
117. Create a map of all the train schedules.
118. Mark where traffic lights need more time for crossing.
119. Track where bike paths are hidden by trees.
120. Plan a map of all the car washes with green choices.

Environment & Sustainability

121. Create a map of all the trees planted last year.
122. Mark where solar panels are on roofs.
123. Track where rain gardens catch stormwater.
124. Plan a map of compost bins in parks.
125. Note where wind turbines can be seen from home.
126. Show the best spots for planting wildflowers.
127. Create a map of all the recycling centers nearby.
128. Mark where green roofs have plants.

129. Track where rain barrels catch water.
130. Plan a map of all the community solar farms.
131. Note where native plants grow wild.
132. Show the best paths to cut down car trips.
133. Create a map of all the parks with solar lights.
134. Mark where electric car chargers are placed.
135. Track where rain gardens stop flooding.
136. Plan a map of all the stores that care about nature.
137. Note where solar streetlights shine.
138. Show the best spots for planting fruit trees.
139. Create a map of all the community gardens.
140. Mark where green spaces are getting smaller.
141. Track where rainwater is used for gardens.
142. Plan a map of all the bike-friendly stores.
143. Note where solar benches charge phones.
144. Show the best paths for walking to cut emissions.
145. Create a map of all the parks with solar trash cans.
146. Mark where electric buses stop.
147. Track where rain gardens clean pollution.
148. Plan a map of all the eco-friendly schools.
149. Note where solar playground equipment can be found.
150. Show the best spots for planting plants that need little water.
151. Create a map of all the community solar panels.
152. Mark where green roofs are built on buildings.
153. Track where rain barrels save water.
154. Plan a map of all the parks with eco-trails.
155. Note where solar trash compactors are used.
156. Show the best paths for cutting down on plastic.
157. Create a map of all the parks with solar benches.
158. Mark where there are spots for electric cars to park.
159. Track where rain gardens are close to homes.
160. Plan a map of all the parks that are eco friendly.

Technology & Innovation

161. Create a map of all the Wi-Fi spots in parks.
162. Mark where drones drop off packages safely.
163. Track where AR games show secret treasure spots.
164. Plan a map of all the smart trash cans that fill up.
165. Note where robots clean sidewalks by themselves.
166. Show the best spots to try self-driving toy cars.
167. Create a map of all the smart streetlights with sensors.
168. Mark where drones check bridges for cracks.
169. Track where AR apps show old dinosaur bones underground.
170. Plan a map of all the areas for robot vacuums.
171. Note where solar drones go to charge.
172. Show the best paths for taking drone pictures.
173. Create a map of all the smart parking meters.

174. Mark where robots water plants in gardens.
175. Track where AR games show secret paths.
176. Plan a map of all the smart benches with USB ports.
177. Note where drones bring snacks to parks.
178. Show the best spots for trying robot dogs.
179. Create a map of all the smart street signs.
180. Mark where drones map flood areas after rain.
181. Track where AR apps teach about different trees.
182. Plan a map of all the smart traffic lights.
183. Note where robots pick up trash in parks.
184. Show the best paths for tours led by robots.
185. Create a map of all the drone landing pads.
186. Mark where solar robots clean the streets.
187. Track where AR games show spots for lost animals.
188. Plan a map of all the smart compost bins.
189. Note where drones check power lines.
190. Show the best spots for trying robot scooters.
191. Create a map of all the smart garden sprinklers.
192. Mark where robots bring books to libraries.
193. Track where AR apps show old events in history.
194. Plan a map of all the smart trash compactors.
195. Note where drones watch pollution levels.
196. Show the best paths for hikes led by robots.
197. Create a map of all the solar-powered robots.
198. Mark where robots help during disasters.
199. Track where AR games show hidden stars.
200. Plan a map of all the smart parking lots.

Fun & Games

201. Create a map for a giant outdoor board game in parks.
202. Mark spots for a neighborhood scavenger hunt.
203. Track where glow-in-the-dark games take place at night.
204. Plan a map of all the best places for hide-and-seek.
205. Note where kids can build forts with things from nature.
206. Show the best paths for an obstacle course race.
207. Create a map of all the best picnic spots with a view.
208. Mark where outdoor chess boards are set up.
209. Track where kids can draw chalk art on sidewalks.
210. Plan a map of all the best spots to fly kites.
211. Note where hopscotch grids are painted in parks.
212. Show the best spots for a giant leapfrog game.
213. Create a map of all the best places for soccer goals.
214. Mark where kids can build sandcastles by water.
215. Track where outdoor puzzles are hidden in nature.
216. Plan a map of all the best spots for treehouses.
217. Note where kids can play capture the flag.
218. Show the best paths for a bike treasure hunt.

219. Create a map of all the best spots for frisbee golf.
220. Mark where outdoor domino games are played.
221. Track where kids can paint murals on blank walls.
222. Plan a map of all the best spots for tag games.
223. Note where giant Jenga blocks are set up.
224. Show the best spots for a nature bingo game.
225. Create a map of all the best spots for shadow puppet shows.
226. Mark where outdoor chess tournaments take place.
227. Track where kids can build blanket forts outside.
228. Plan a map of all the best spots for hopscotch.
229. Note where outdoor puzzles are buried in the sand.
230. Show the best paths for a giant tic-tac-toe game.
231. Create a map of all the best spots for leapfrog.
232. Mark where kids can build forts out of cardboard.
233. Track where outdoor dominoes are played.
234. Plan a map of all the best spots for soccer games.
235. Note where giant Connect Four games are set up.
236. Show the best spots for an outdoor art show.
237. Create a map of all the best places for hide-and-seek.
238. Mark where kids can paint hopscotch grids.
239. Track where outdoor puzzles are hidden in trees.
240. Plan a map of all the best spots for a giant board game.

GIS Project Ideas Environmental

1. **Map of City Green Spots:** Imagine you want to find all the parks and gardens in your city. You can make a map that shows where they are. Then, you can see if everyone can easily get to a green space, like kids in different neighborhoods. If some places don't have many parks, we can find ways to make it better for them.
2. **Finding Lost Forests:** Big forests are important, but sometimes they get cut down. We can use pictures from space taken over time to see where forests are disappearing. These are like "forest hotspots." We can watch these hotspots to see how fast the trees are going away.
3. **River Pollution Search:** Rivers can get dirty from factories or farms. We can make a map of places that might make rivers dirty. Then, we can check the river water to see if it's clean or not. This helps us find out what makes the river polluted.
4. **Saving Animal Homes:** Some animals are in danger, and we need to protect them. We can make a map to find good places for these animals to live. We look for things like trees, water, and mountains that they need. Then, we can try to keep these places safe for them.
5. **Stopping Beach Erosion:** Beaches can get washed away by the ocean. We can make a map of beaches that might disappear because the water is rising. We look at how strong the waves are and what the beach is made of. This helps us know which

beaches are in danger.

6. **Air Pollution Tracker:** Sometimes, the air can be dirty, especially near factories or busy roads. We can make a map to see where the dirty air goes. We can also find out how many people are breathing in bad air.
7. **Good Spots for Clean Energy:** We can use the sun and wind to make clean energy. We can make a map to find the best places for windmills or solar panels. We look for places with lots of sun and wind and where there is enough land.
8. **Farming Changes with Weather:** Weather is changing, and it can affect farms. We can make a map to see how farms might change because of weather changes, like getting hotter or less rain. This helps farmers know what to grow in the future.
9. **Forest Fire Finder:** Forest fires are dangerous. We can make a map to find places that are likely to have forest fires. We look at trees, mountains, weather, and past fires. This helps us know where we need to be careful.
10. **Cooling Down Hot Cities:** Cities can get very hot, like islands of heat. We can make a map to see the hot spots in a city. Then, we can plan to plant more trees and make more parks to cool down the city.
11. **Wetland Explorer:** Wetlands are special places with water and lots of plants and animals. We can make a map of wetlands and see what good things they do, like stop floods and clean water. Then, we can work to protect the most important wetlands.
12. **Stopping Bad Plants from Spreading:** Some plants that don't belong here can spread and cause problems. We can make a map to see where these bad plants might go. Then, we can make a plan to stop them from spreading.
13. **Quiet Zone Finder in Cities:** Cities can be noisy. We can make a map of noisy places in a city. Then, we can find quiet places or find ways to make some areas quieter.
14. **Nature's Value Map:** Nature does good things for us, like cleaning air and water. We can make a map to show how much nature's services are worth in different areas. Like, how much are trees worth for cleaning air in a park?
15. **Farm Runoff Checker:** Rain can wash away stuff from farms into rivers and lakes, making the water dirty. We can make a map to see which farm areas might be causing the most pollution in the water.
16. **Ocean Park Watcher:** We have ocean parks to protect sea animals. We can use pictures from space and ocean data to check if these parks are working to keep the animals safe.

17. **Land Trouble Finder:** Land can get damaged and become like a desert. We can make a map to find places where the land is getting bad. We look at the soil and weather to see which places are in danger.
18. **Storing Carbon in Nature:** Trees and soil can hold carbon, which is good for the Earth. We can make a map to see where we can store the most carbon in forests and soil. These places can help us fight climate change.
19. **Checking Big Project Impacts:** When people want to build big things like roads or dams, it can hurt nature. We can use maps to see how these projects might harm animals, water, and quiet places before they are built.
20. **Careful Tourism Planner:** Beautiful places can get ruined if too many people visit them. We can make a map of special natural areas. Then, we can figure out how many tourists can visit without hurting these places, so we can have tourism that is good for nature too.

GIS Projects for Beginners

21. **Your Town Parks Map:** Make a map that shows all the parks in your town. You can write about what's in each park, like playgrounds or pools, and when they are open.
22. **School Zones Map:** Make a map that shows where all the schools are in your area. You can draw lines to show which streets belong to each school, like a school zone.
23. **Yummy Food Map:** Make a map of all the places to eat near you, like pizza places or ice cream shops. You can put pictures and notes about each place, like if they have good pizza or ice cream.
24. **Neighborhood Crime Spot Map:** Find out about crimes that happened in your neighborhood. Make a map that shows where different kinds of crimes happened, like if more car break-ins happened on one street.
25. **Bus and Train Map:** Make a map of all the buses and trains in your city. You can show where they go and how easy it is to get to different places using buses and trains.
26. **Bike Path Finder:** Make a map of all the bike paths and trails in your city. Show the safe paths for bikes and fun places to bike to, like parks or ice cream shops!
27. **Cool Old Places Map:** Find old and interesting places in your area, like old buildings or statues. Make a map of these places and write about their history and maybe add old photos.

28. **Book and Fun Place Map:** Make a map of all the libraries and community centers in your city. Write about what you can do there, like borrow books or play games.
29. **Voting Place Map:** When it's time to vote, make a map of all the voting places. This helps people find where to go to vote.
30. **Flood Zone Finder Map:** Find maps that show where floods might happen in your area. Make a map that shows these flood zones, so people know which areas might get flooded.
31. **Park Tree Map:** Go to a park and count the different kinds of trees. Make a map of the park and show where each kind of tree is. You can make it like a tree guide for the park.
32. **Pet Home Finder Map:** Make a map of all the places where you can adopt pets, like animal shelters. Put links to their websites so people can find pets to adopt.
33. **Farm Market Map:** Find all the farmers markets in your city. Make a map that shows where they are and when they are open each week.
34. **Garden Spot Map:** Make a map of all the community gardens in your city. Show if they have empty garden spots and how people can get a garden spot.
35. **Loud Place Map:** Find out where people complain about noise in your city. Make a map that shows the noisy areas. These are places where it might be too loud.
36. **Clean Air Spot Map:** Find out where the air is checked in your city. Make a map that shows where these air checkers are. If you can, show how clean or dirty the air is at each spot.
37. **Road Work Map:** Find out about roads that are closed or being fixed in your city. Make a map that shows these road closures, so people know which roads to avoid.
38. **Store Finder Map:** Make a map of important stores near you, like 药店 or grocery stores. This helps people find places to buy things they need.
39. **Hiking Path Map:** Find hiking trails near you. Make a map of these trails and show how hard they are, how long they are, and how high they go.
40. **Fun Place Review Map:** Make a map of fun places for tourists in your city. Find reviews of these places online and put them on the map, so people can see what others think of each place.

GIS Projects in India

41. **Ganges River Checkup:** The Ganges River is important in India. We can check the water quality of the river and find out where it is dirty. We can make a map to show the dirty spots and find out why they are dirty.
42. **City Slum Map:** Big cities in India have slum areas. We can make a map to show where these slums are. Then we can see if these areas have enough good things, like clean water and toilets.
43. **Dry Farm Watcher:** Some parts of India don't get enough rain for farming. We can use pictures from space to watch farms in these dry areas. We can see if the farms are dry and guess how many crops they will grow.
44. **Forest Loss in Western Ghats:** The Western Ghats are special mountains with lots of forests and animals. We can see how the forests are changing and find out why some forests are disappearing.
45. **Brahmaputra Flood Map:** The Brahmaputra River can flood. We can make a map to show places that might get flooded by this river. We can also see which towns and roads might get flooded.
46. **Punjab Water Problem Map:** Punjab and Haryana are states that grow a lot of food, but they are using too much water from the ground. We can make a map to show where the water under the ground is going down. We can see if this is making it hard for farmers.
47. **Delhi Air Check:** Delhi and other big cities in India have bad air pollution. We can make a map to show where the air is most polluted in these cities. We can also see if this bad air is making people sick.
48. **Tiger Path Finder:** Tigers need to move between forests to find food and mates. We can make a map to find paths that connect tiger forests in central India. We can make plans to keep these paths safe for tigers.
49. **Desert Land Map:** The Thar Desert is a big desert in India. We can make a map to see which areas in the desert are getting worse, like becoming more sandy. We can find out why this is happening.
50. **India Coast Danger Map:** The sea level is rising, which can hurt beaches in India. We can make a map to show which parts of the Indian coast are in danger from the sea rising. We can see if towns and nature areas are at risk.
51. **Mumbai and Kolkata Heat Map:** Big cities in India like Mumbai and Kolkata can get very hot. We can make a map to see the hottest parts of these cities. Then we can find ways to cool them down, like planting trees.
52. **Farm Water Map:** Many farms in India use canals to get water. We can make a map of these water canals. We can check if they are using water wisely and if water is

being wasted.

53. **Himalayan Fire Risk Map:** The Himalayan mountains have forests that can catch fire. We can make a map to show which parts of the Himalayas are most likely to have forest fires. We can make plans to stop and manage these fires.
54. **East Himalaya Nature Map:** The Eastern Himalayas are full of special plants and animals. We can make a map to show the most important nature spots in the Eastern Himalayas. We can decide which areas to protect first.
55. **India Clean Energy Map:** India wants to use more clean energy like sun and wind power. We can make a map to show the best places in India to make solar and wind energy. We look at sun and wind and if there is space to build.
56. **City Trash Plan Map:** Indian cities make a lot of trash. We can make a map to find good places to put new trash areas outside of cities. We need to think about nature and people when we find these places.
57. **India Health Map:** We can make a map to show health places in villages in India, like clinics. We can also see where people are getting sick in villages. This helps us see if people in villages can get to health care easily.
58. **Northeast India Road Map:** Northeast India has lots of hills and not many good roads. We can make a map of roads in Northeast India. We can find ways to make roads better so people in villages can travel and sell their goods more easily.
59. **Rajasthan Culture Map:** Rajasthan is a state in India with many old forts and palaces. We can make a map of these cultural places in Rajasthan. We can show which places are good for tourists and how to bring tourists in a good way.
60. **India Water Finder Map:** Some places in India don't have enough clean drinking water. We can make a map to show these places. We can find ways to bring clean water to these areas.

GIS Based Projects for Civil Engineering

61. **New Town Road Planner:** Imagine we are building a new town. We can plan the best roads for this town using maps and computers. We want to make roads that are easy to use for everyone, including buses.
62. **Good Land Finder for Building:** Before building roads or houses, we need to find good land. We can check maps to see which land is good to build on. We look at hills, dirt, and nature areas to find the best spots.
63. **City Pipe and Wire Map:** Cities have pipes for water and wires for electricity under the ground. We can make maps of these pipes and wires. This helps us keep track of

them, fix them when they break, and find leaks.

64. **City Flood Zone Map:** Cities can flood. We can make maps to show which parts of a city might flood. Then we can make plans to stop floods, like building walls or changing how we use land.
65. **Hillside Safety Map:** Hills can be dangerous because the ground can slide down. We can check hills and make maps to show which areas are likely to have landslides. This helps us build safely on hills.
66. **Building Site Manager with Maps:** When people build big buildings, we can use maps and cameras on drones to watch how the building is going. We can track materials, check if it's safe, and see if things are on time.
67. **Best Road Path Planner:** When we build new roads, we want to find the best path. We can use maps to find paths that cost less, hurt nature less, and are still good for driving.
68. **Bridge and Tunnel Spot Finder:** When we need to build bridges or tunnels, we need to find the best places to put them. We can use maps to find good spots based on hills, rocks, and nature.
69. **Fast Train Road Planner:** If we want to build fast trains, we need to plan the train tracks. We can use maps to find the best paths for fast trains that are quick and don't hurt the area too much.
70. **Water Dam Spot Finder:** Dams hold water. If we want to build a dam, we need to find a good place for it. We can use maps to find places with enough water and that are safe to build a dam without hurting nature too much.
71. **Farm Water Way Planner:** Farms need water. We can plan good ways to water farms, like canals or pipes. We can use maps to design water systems that give water to farms in the best way and don't waste water.
72. **Beach and Harbor Planner:** If we build things near the ocean, like harbors, we need to think about the waves and sand. We can use maps of the ocean floor and waves to plan harbors that are safe from ocean problems.
73. **Pipe Path Planner:** If we need to build pipes for oil, gas, or water, we want to find the best paths for these pipes. We can use maps to plan pipe paths that are cheap, safe, and don't hurt nature.
74. **Road and Train Noise Map:** Roads and trains can be noisy. When we build roads or train tracks, we can make maps to show how much noise they will make. Then, we can plan ways to make them quieter, like building walls to block noise.
75. **Project Nature Checker:** When we build big things like roads, we need to check if they will hurt nature. We can use maps to guess how projects might hurt air, water,

and animals before we build them.

76. **Building Material Finder:** When we build things, we need materials like wood and steel. We can use maps to find places to get these materials. We want to find places that are not too far away and follow rules about nature.
77. **Building Caretaker with Maps:** After we build things like roads and bridges, we need to take care of them. We can use maps to keep track of roads and bridges, check if they are in good shape, and plan when to fix them.
78. **Smart City Planner with Maps:** Smart cities use computers to make things better. We can use maps to plan smart things in cities, like sensors, smart lights, and smart buses. Maps can help us see and understand all the city data.
79. **Rain Water Planner for Cities:** Cities have rain water that needs to drain away. We can use maps to plan ways to drain rain water in cities. We want to stop floods and keep dirty water out of rivers.
80. **Soil Checker for Building:** Before we build, we need to check the soil. We can check the soil and make maps to show what kind of soil is in different places. This helps us build safely because different soils are good for different things.