MASS GENERAL BRIGHAM APPLICATION

User Manual

Team (C)rimson Cerberus

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GitHub Link: https://github.com/cs3733-d25/team-c

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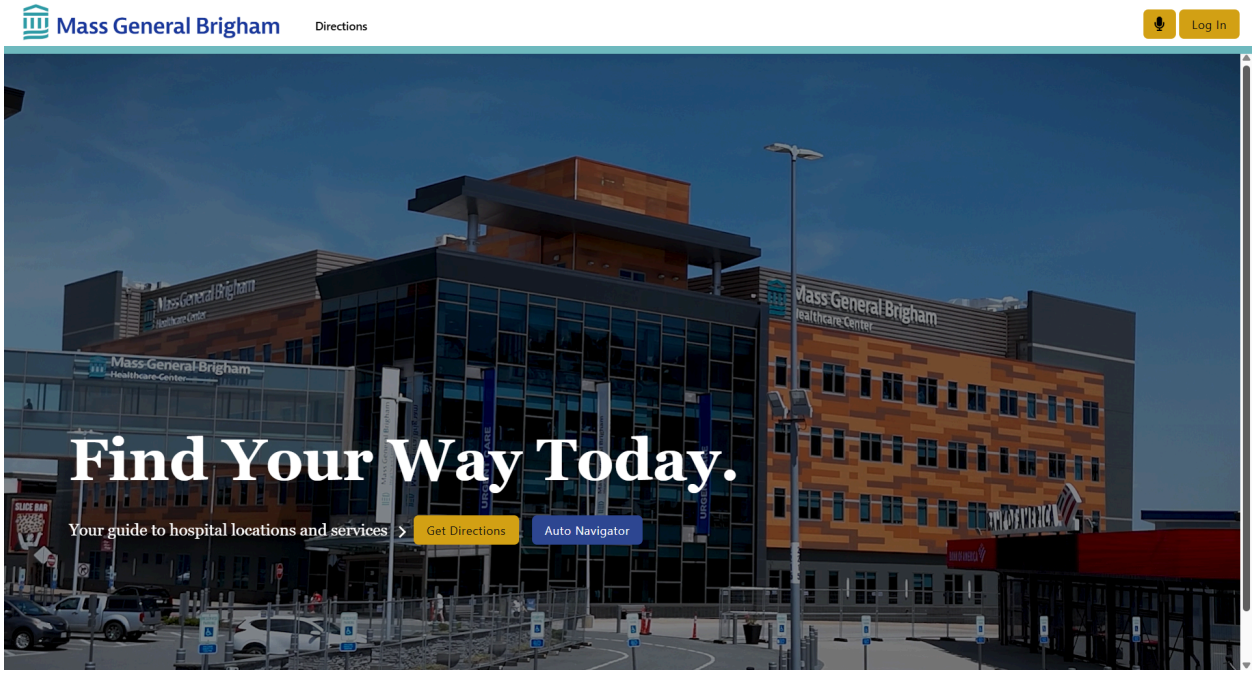
Home Page

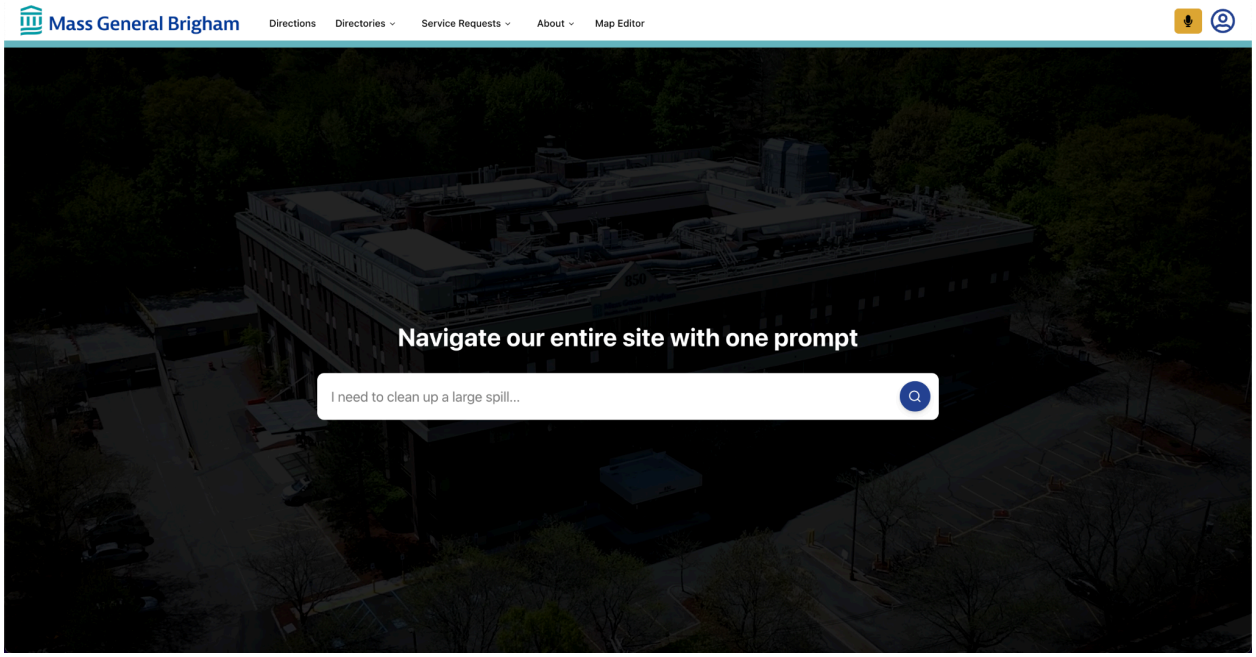


Upon first opening the application, you will be directed to this page, the Home Page. Here, you can see the logo bar at the top, which allows you to navigate the application. For a normal user, you can only access the Home Page by pressing the MGB logo, directions, automated voice search by pressing the microphone button, and login. You can also get directions from the “Get Directions” button, or automatically navigate the entire site with one prompt using the “Auto Navigator” button.

Get Directions Button

The Get Directions Button will take you to the Directions page

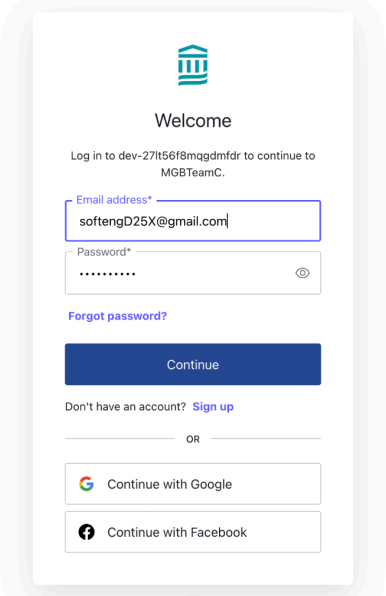
Auto Navigator Button



The Auto Navigator button will allow you to navigate our site by typing. For example, typing in “I need to clean a large spill” will take you to the Sanitation Request form if you are an admin/staff user. You can also type “I need directions to Chestnut Hill,” and the directions page for Chestnut Hill will be displayed.

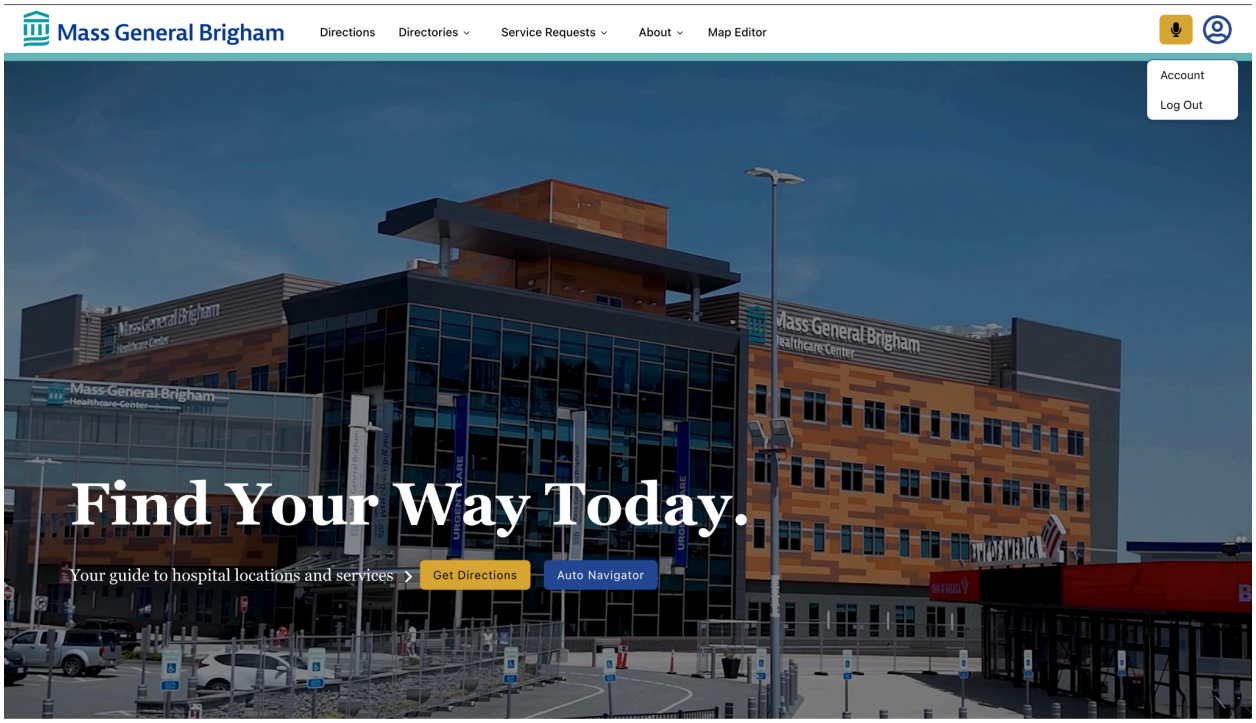
Log In

To log in to the application, click the yellow login button in the navigation menu at the top of the page. You will be brought to the secure login page shown below:



From here, you can enter a registered email and password or continue with Google/Facebook to log in to the application. If you do not already have an existing account, you can click the blue ‘Sign up’ link and create a new account with an email and password. If you have an account but have forgotten your password, you can click the blue ‘Forgot password?’ link, and you will be able to send yourself an email to reset your password.

Log Out



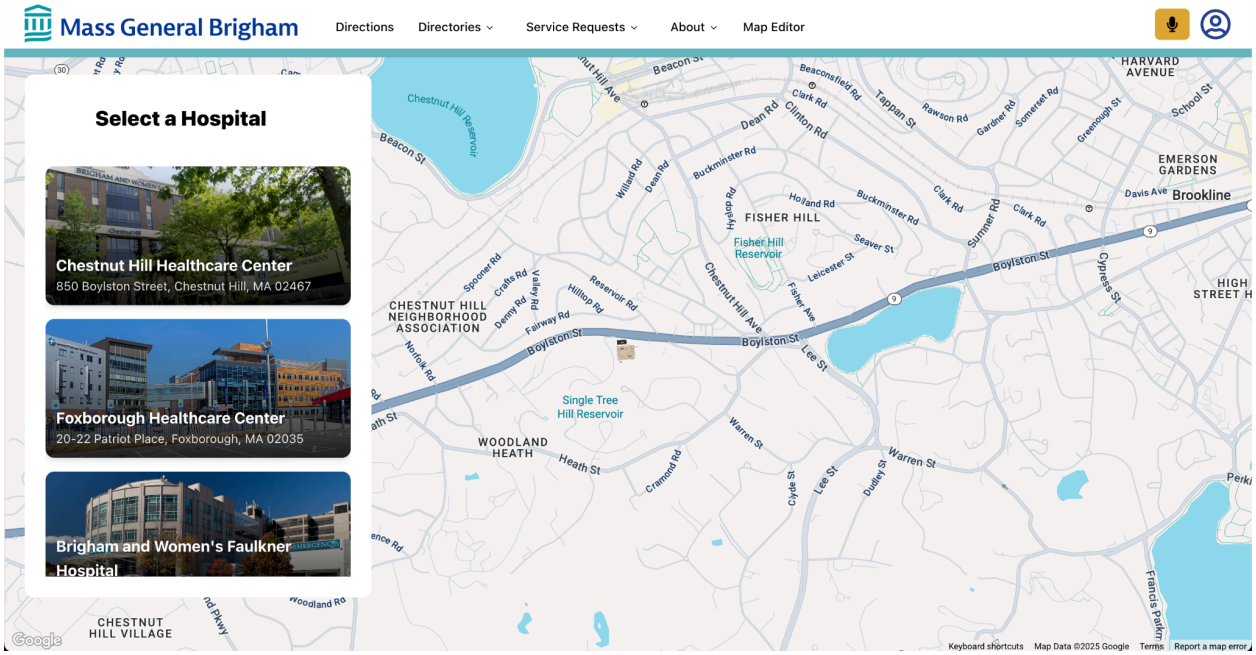
To log out of your account, find the user icon in the navigation menu at the top of the page. Click on this icon and a drop-down menu will appear. Click the ‘Log out’ button inside the dropdown. Your account will be logged out and you will be redirected to the home page.

Directions

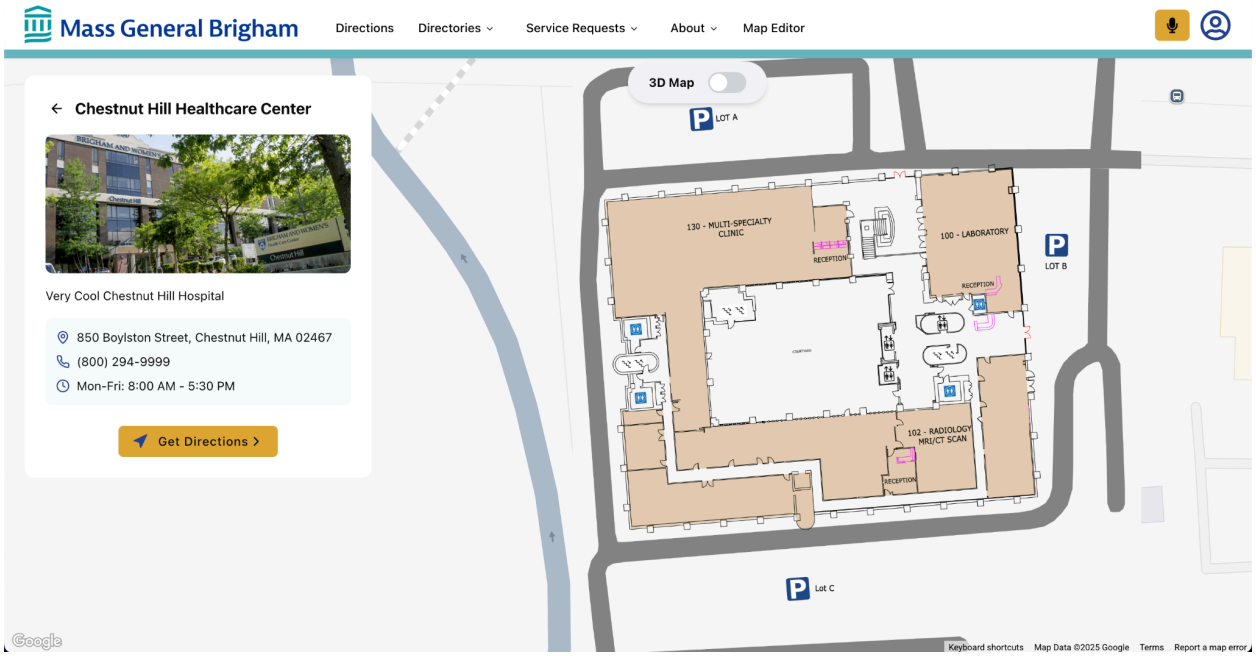
When you get to the direction page, you will be prompted with a sidebar to navigate this page and a map on the right side. Here, you can use Google Maps to find directions to the hospital and also pathfinding to different departments, receptions, and check-in desks at MGB Chestnut Hill, Foxborough, Faulkner, and the Main Campus Hospital.

Google Map Directions

Select a Hospital

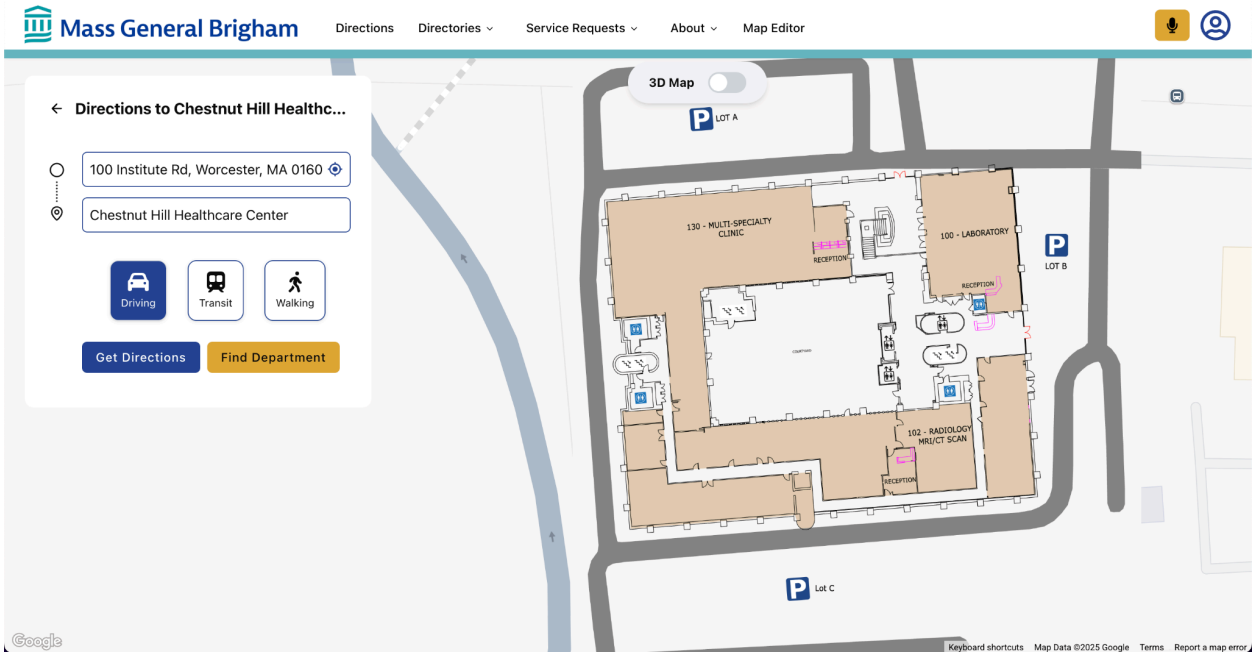


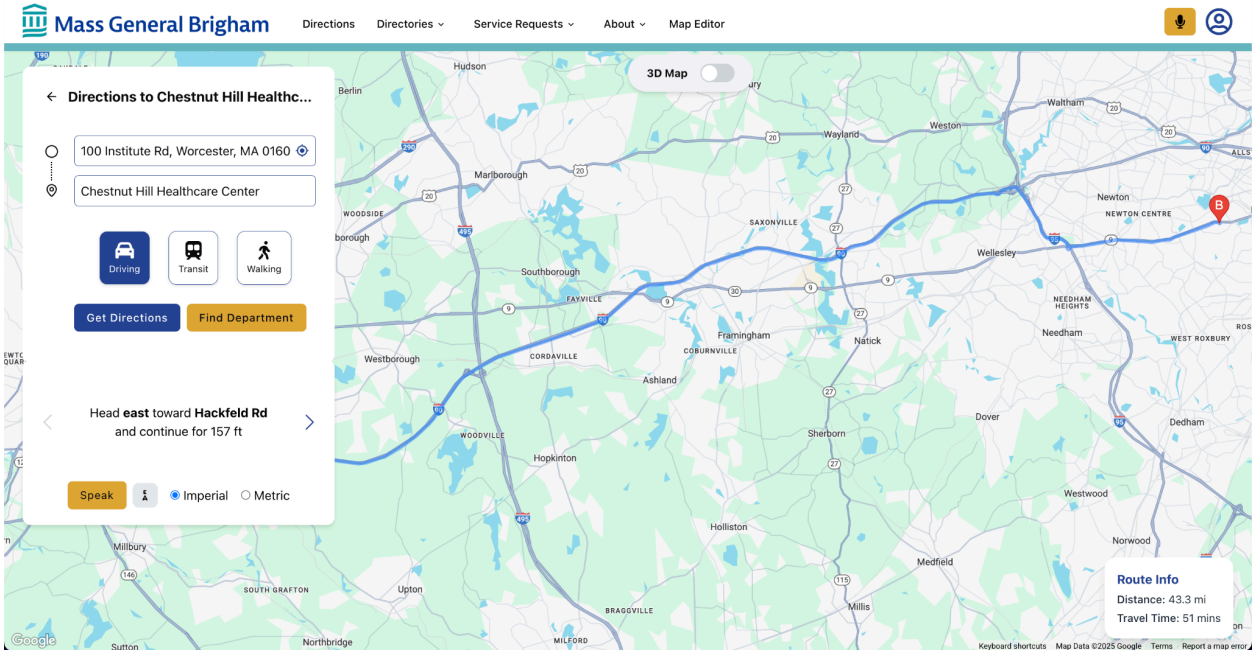
Hospital Information



When you click on the hospital card on the sidebar (ex. Chestnut Hill Healthcare Center), you will be zoomed in to a closer view of the hospital location. The sidebar will display information about the hospital such as a description, location, phone number, and hours. Clicking on *Get Directions* will now take you to find directions to the location you chose.

Directions to the Hospital

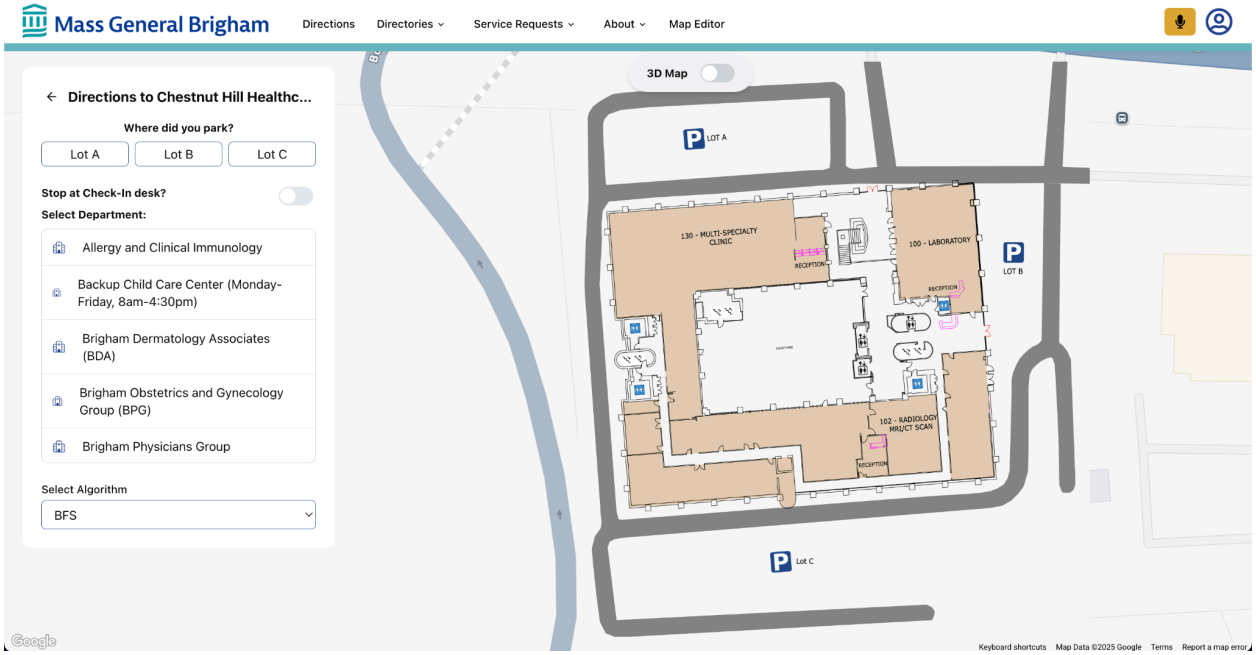




On this step, you can input a start address or press the icon on the right side of the search bar to use your current location. Upon selecting your start address, you can select your mode of transportation, and finally, click the get directions button. The get directions button will do three things: zoom out of the hospital to show your complete path from start destination to hospital, show the text directions, and the Route Info box to appear in the bottom right of the screen.

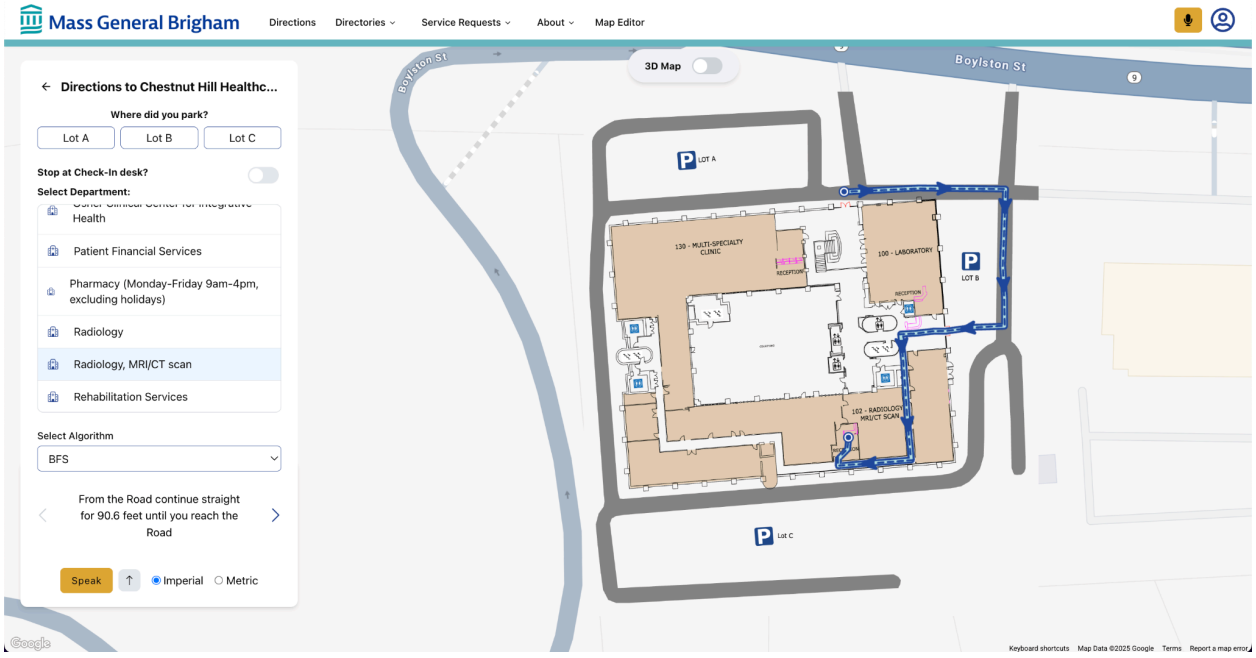
The new text direction box allows you to see all directions to the hospital in text form, using the arrows on either side to move from individual directions forward and back. The speak button will speak the currently selected direction, and the two metric selectors will allow you to switch between imperial and metric units. An icon describing the action in the text box accompanies the speak button to the right. The Route Info box displays information about your chosen route: the distance in miles or kilometers, and the travel time. To choose a new mode of transportation after having previously selected another, you must select the desired mode and once again click the get directions button.

Internal Pathfinding Department



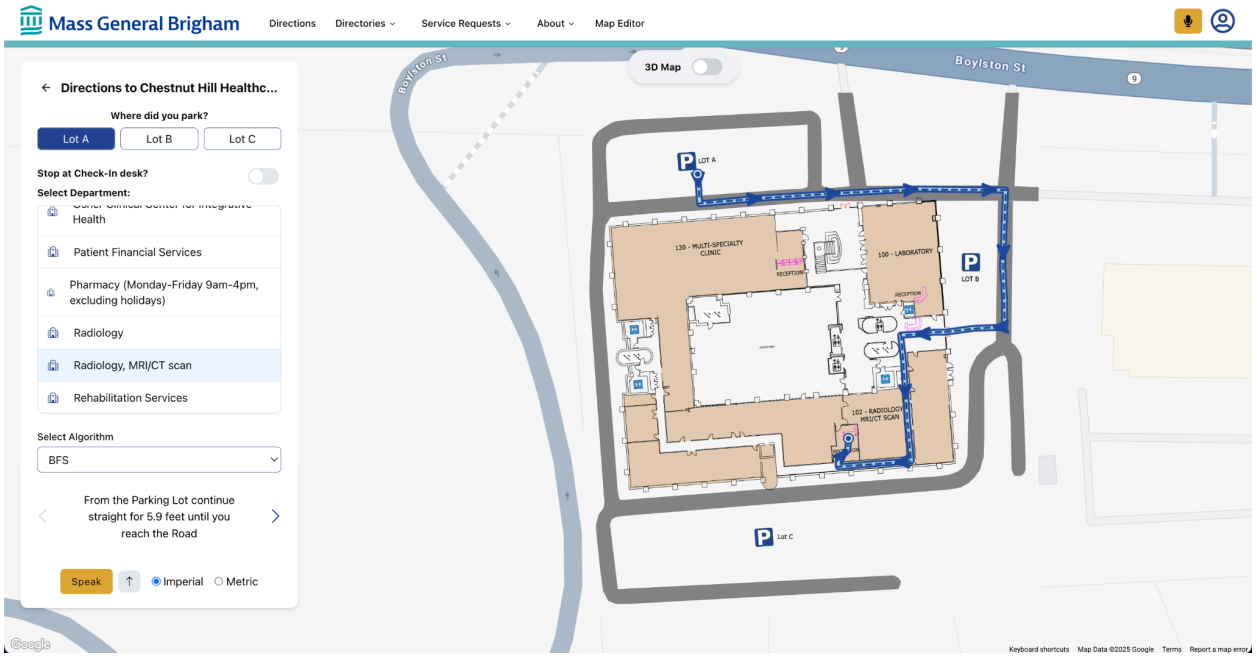
On this step of the directions page, you will see the above screen. The only difference between admin and non-admin accounts is that the “Selected Algorithm” section will not be present on non-admin accounts. The “Where did you park?” selector is optional, as it is defaulted to the main road when not selected. The purpose of this page is to allow a user visual, textual, and auditory directions to their chosen department destination. You can select a department, and in response, a path is generated in all three forms across the map, and a newly appeared text/speak section appears below the sidebar.

When an admin clicks on the BFS dropdown, a list of available algorithms appears: BFS, DFS, Dijkstra, and A_STAR. Each algorithm follows a different pathfinding method. Once an admin selects one, it becomes the default algorithm for all users.

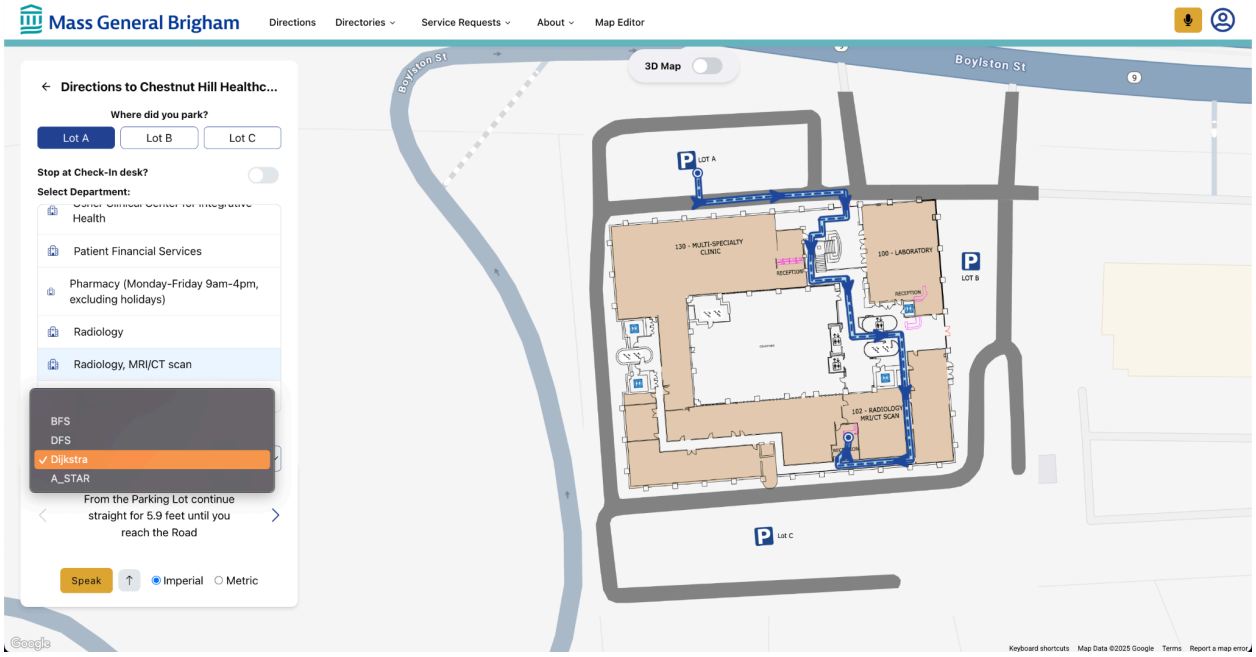


The speak, metric selection, and directional icons work identically to the Directions to Hospital Section. The Speak button will voice the currently selected text direction in the box above it, with the icon describing the action to its right. The metric selector will allow a switch between

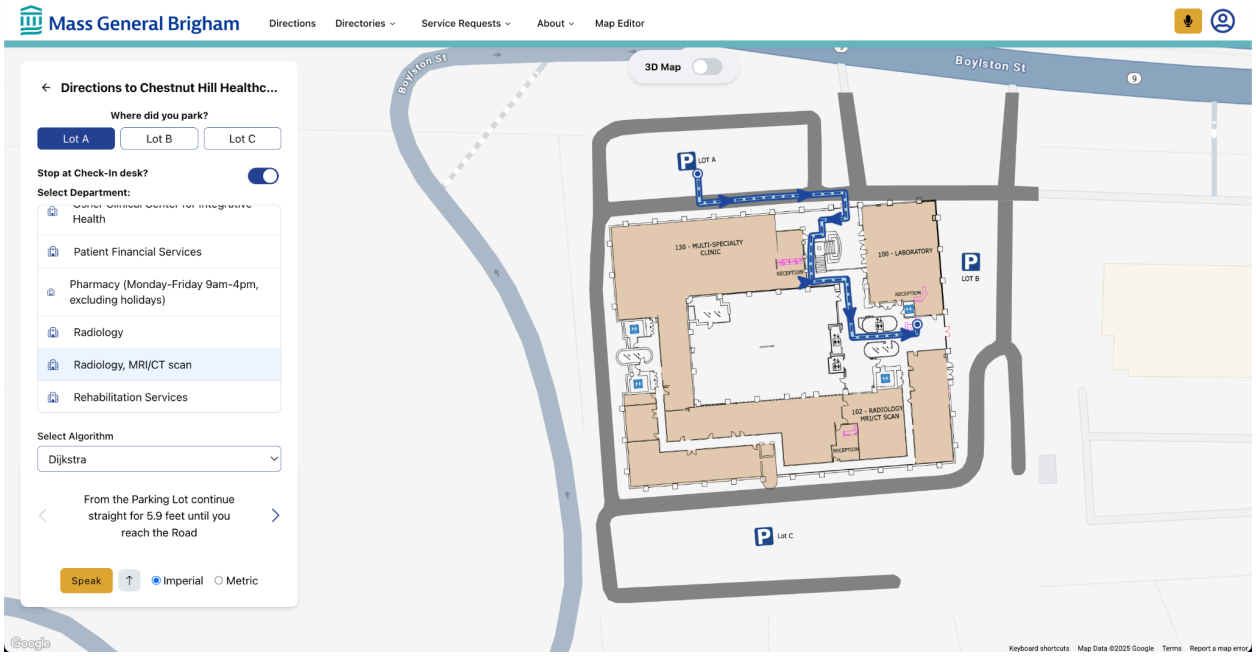
metric and imperial units. The visual path shows a path created from the selected algorithm in the case of an admin account, and is defaulted to BFS in a standard account.



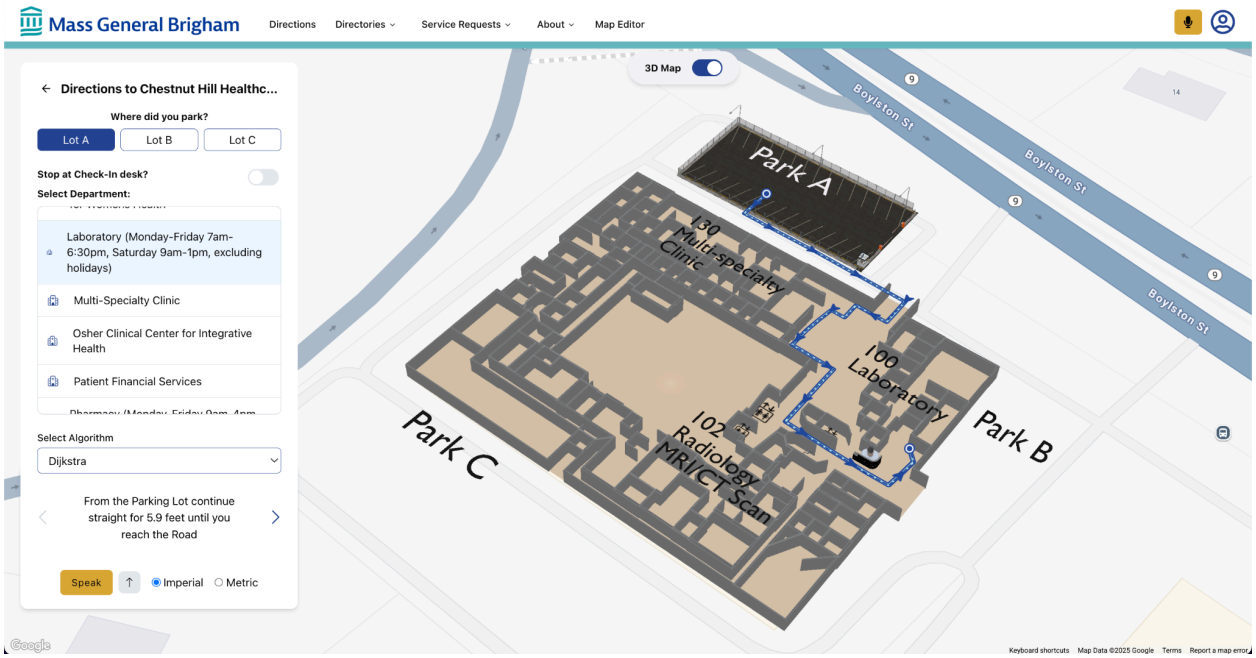
Selecting the parking lot as above will change the start of the pathfinding and directions to a specific parking lot.



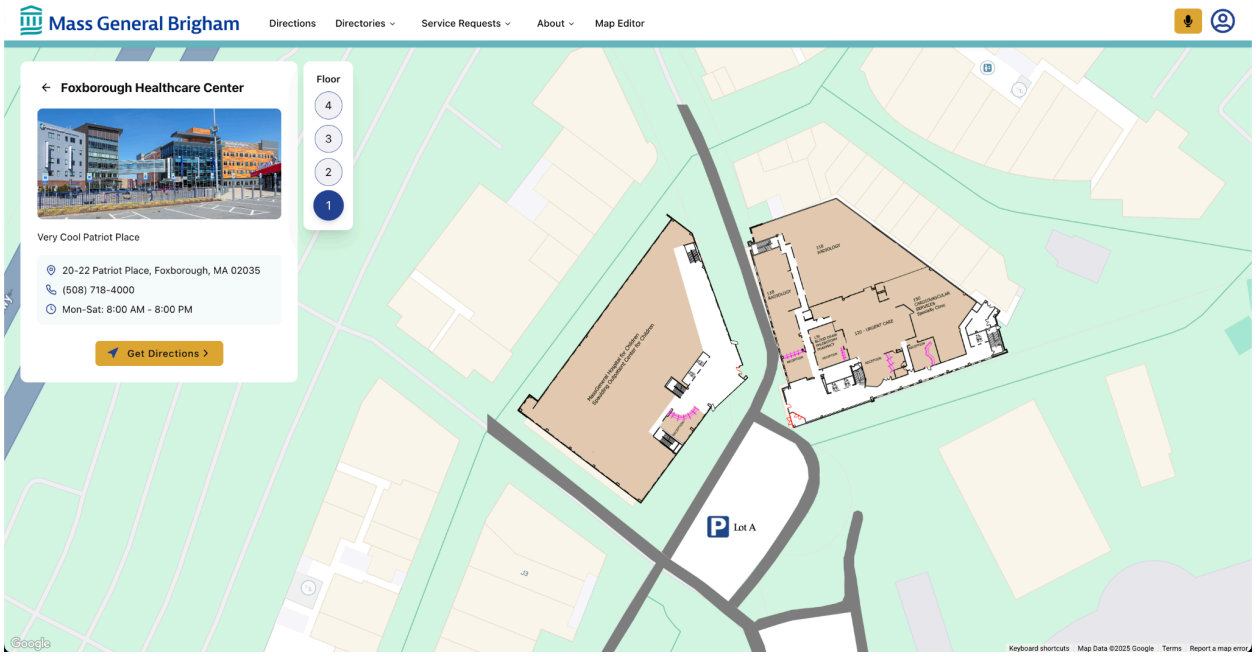
Changes to the algorithm selector have the potential to provide a more direct pathing, as shown above.



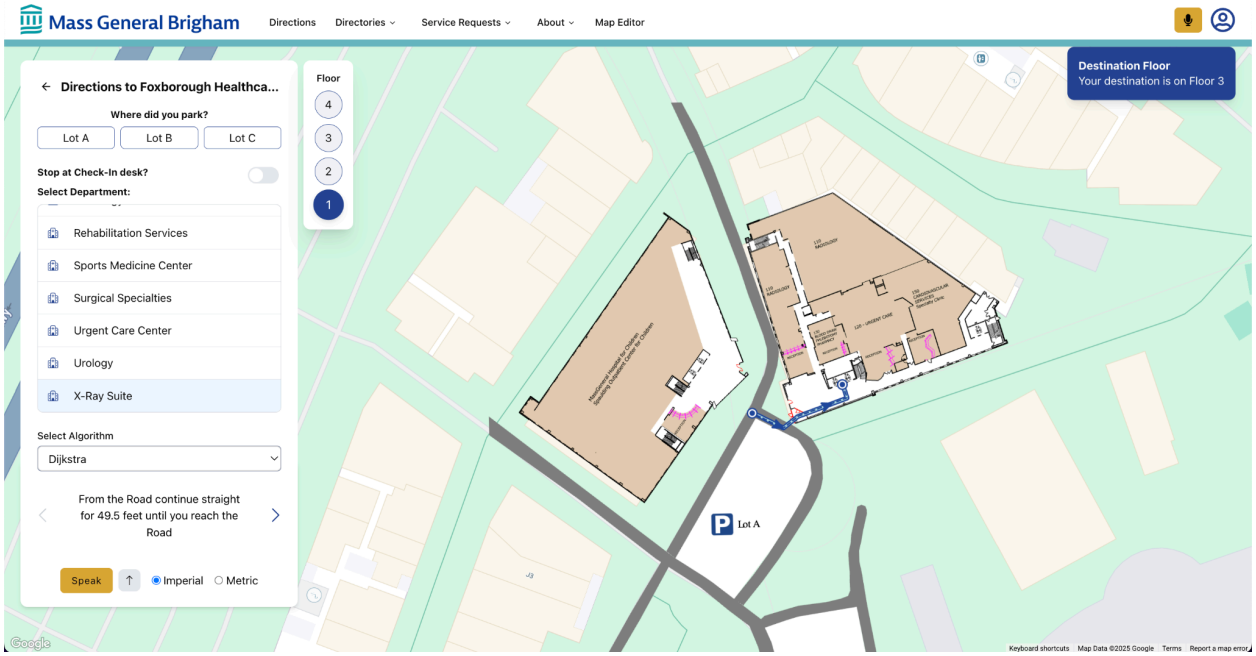
The “Stop at Check-In desk” selector causes the plotted course to alter to the check in desk. Unselecting this option returns your route to the selected department.



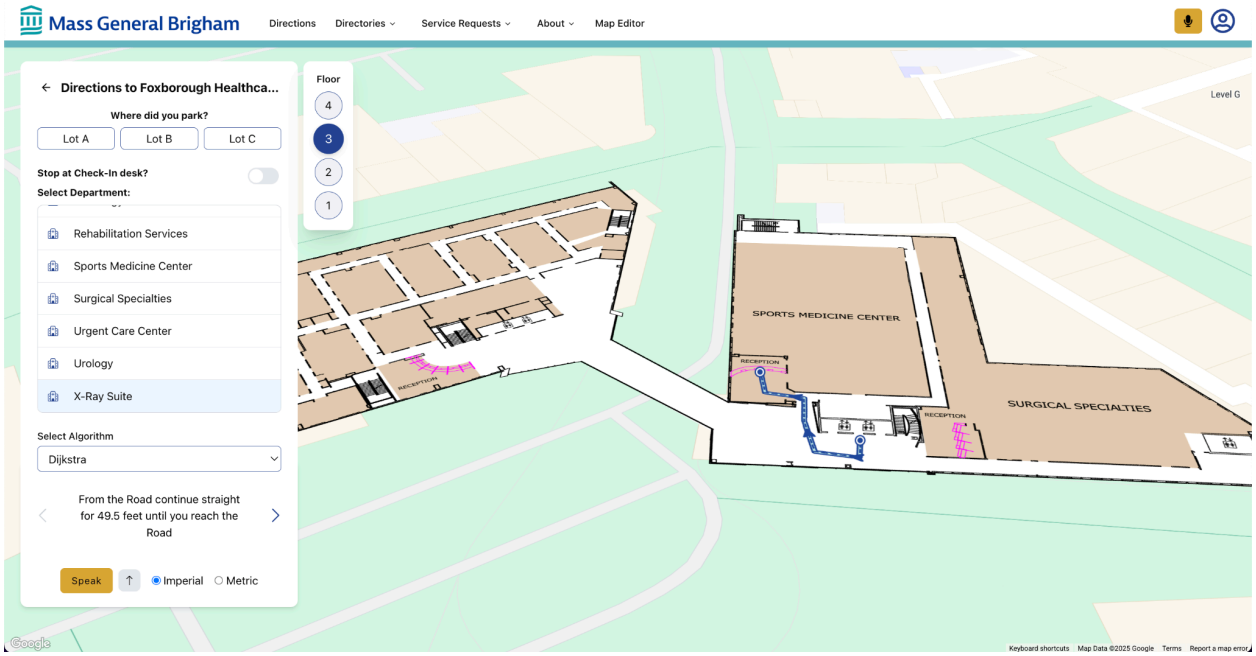
The “3D Map” selector at the top middle of the map allows a user to see a 3D and maneuverable representation of the hospital floor. Unselect the option to return to the previous visual format.



When a hospital with multiple floors is selected in the previous steps, a floor selector sidebar is created. This allows you to select which floor of the hospital is displayed on screen.



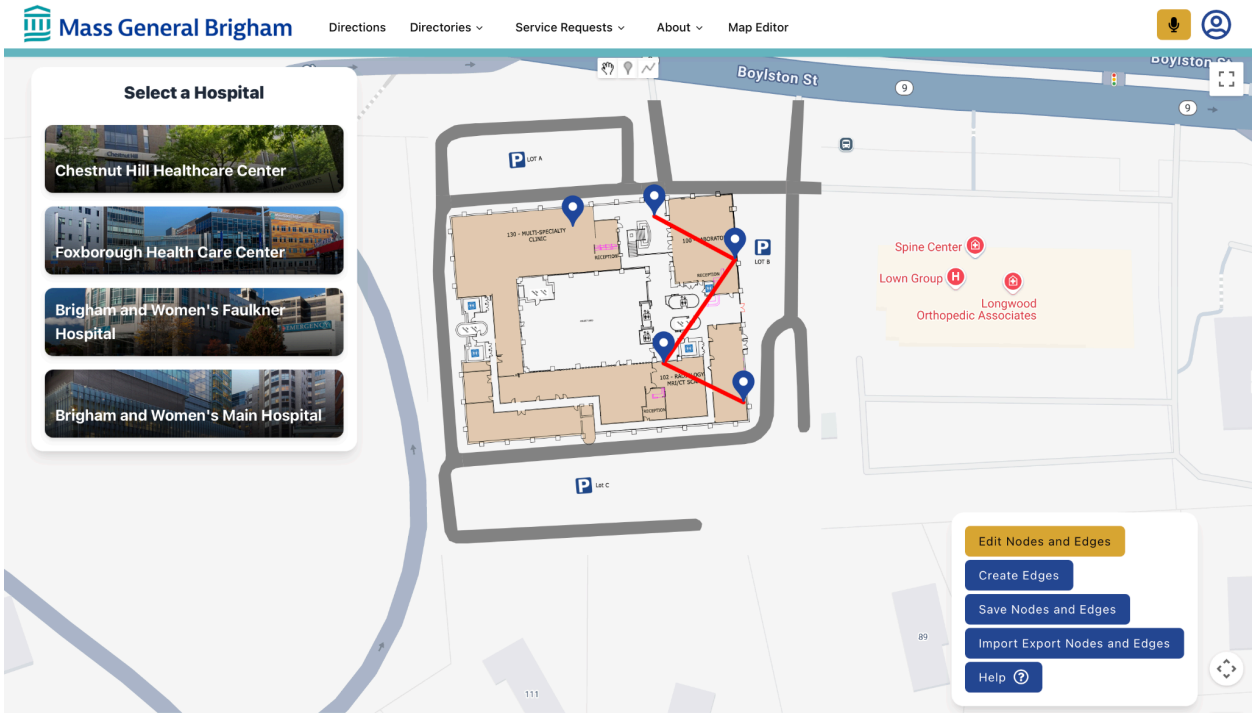
When a route is charted through the selection of a department that requires movement to another floor, a box in the top right will appear showing the destination floor.

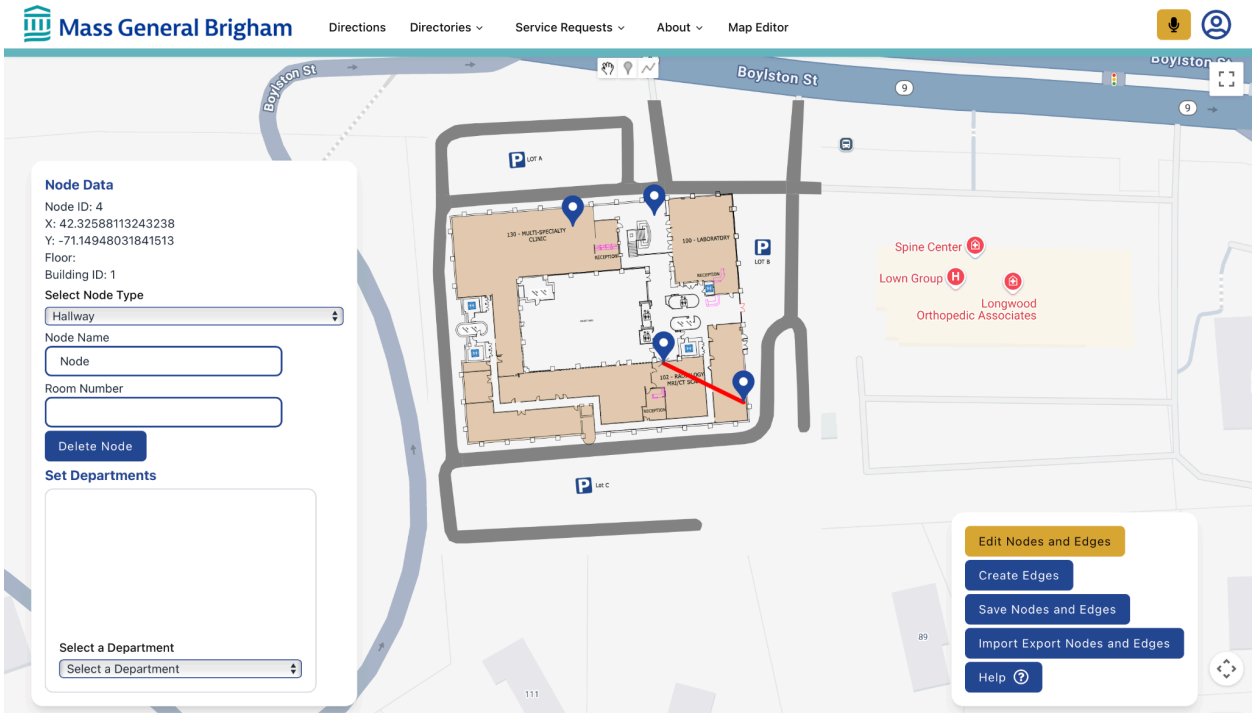


When you select that floor, in this case, 3, the rest of the plotted path is displayed. The text, speech, and icon directions provide instructions to use either stairs or elevators, depending on the path.

Map Editor

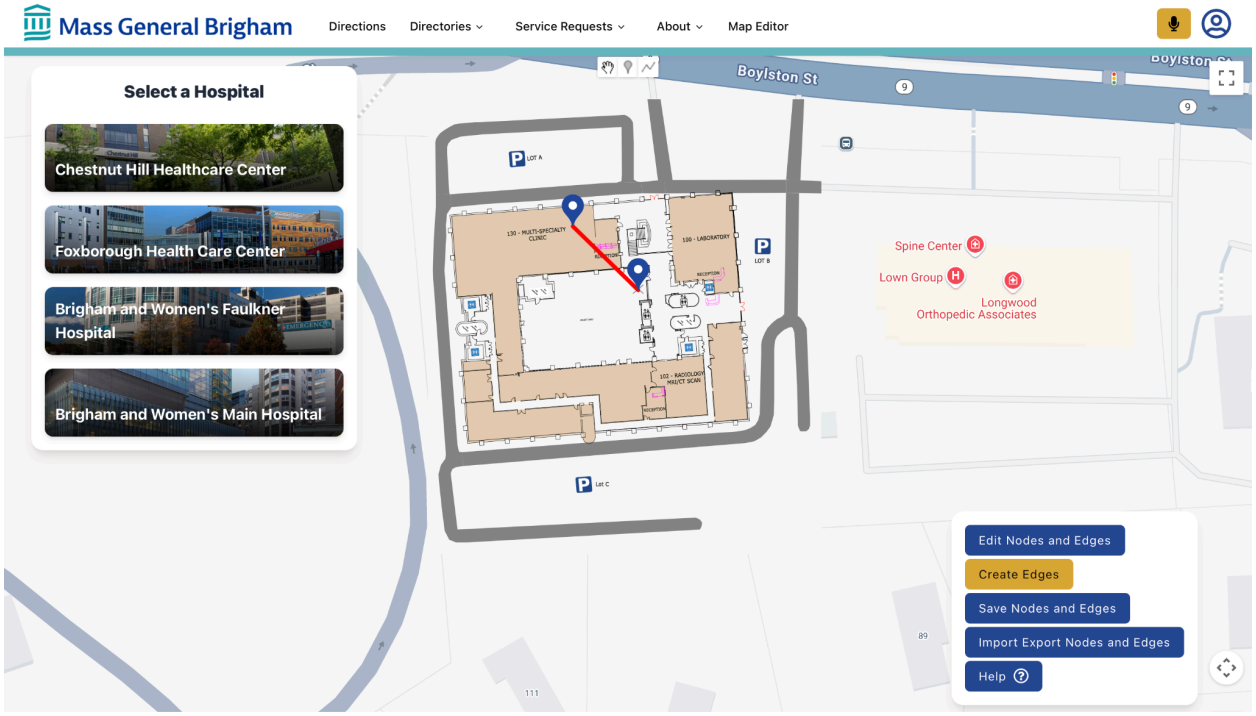
Add/Remove Nodes

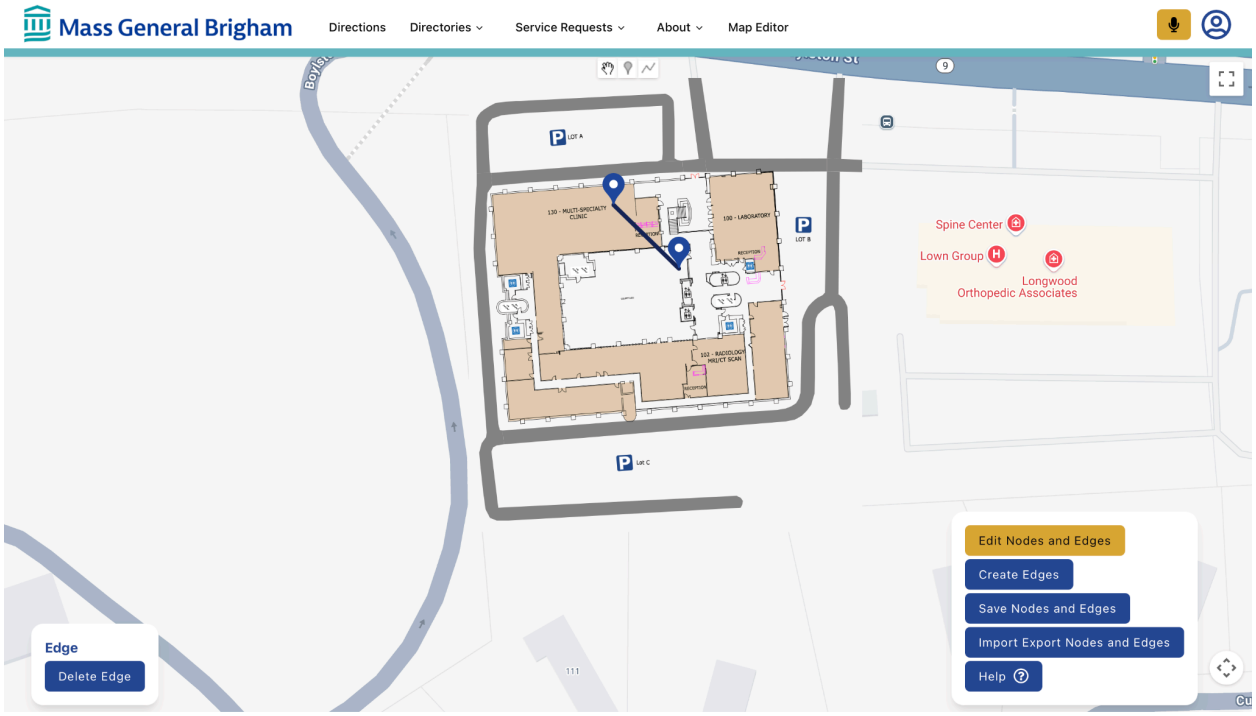




To add nodes to the map, click the Marker button (top-middle center) and then click anywhere on the map. If you want to add multiple nodes, select the Line button (top-middle right) and click to start a line—each additional click adds a new node. To finish, click again on the last point you placed; edges will be created automatically between the nodes. To remove a node, make sure you're in Edit Nodes and Edges Mode with the Hand tool selected (top-middle left), then select the node and click Delete Node in the Node Data menu. This will also remove any connected edges.

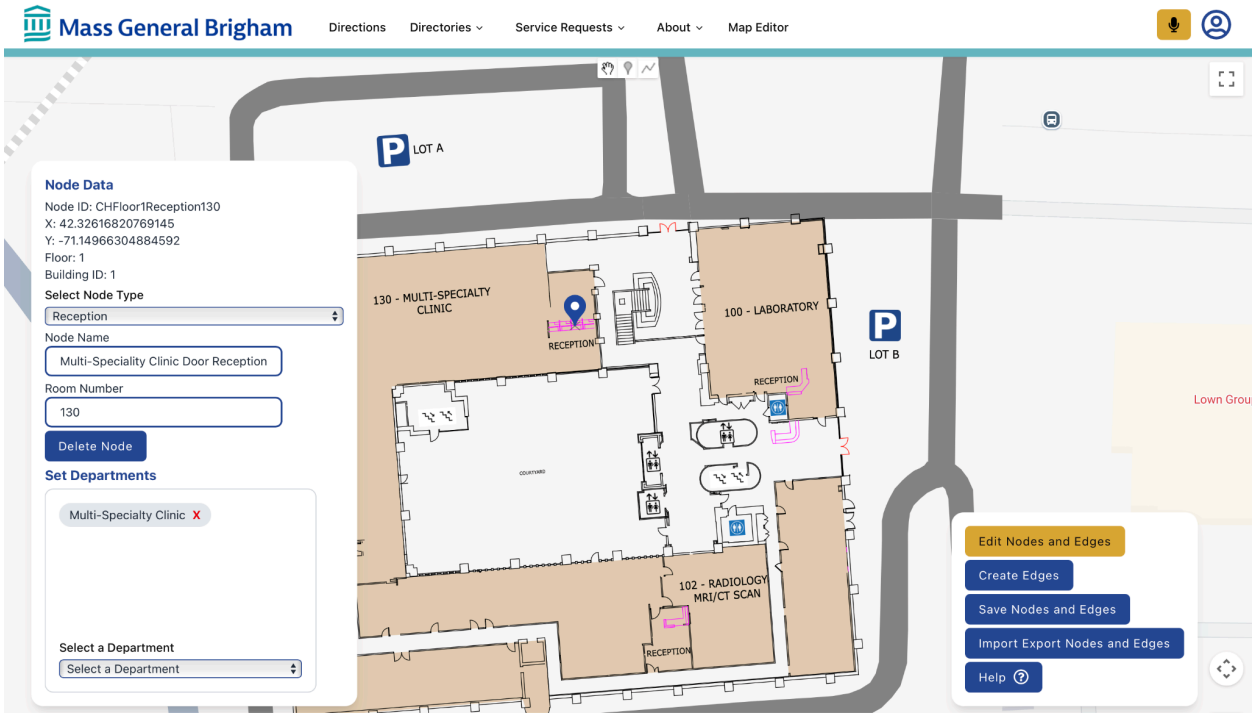
Add/Remove Edges





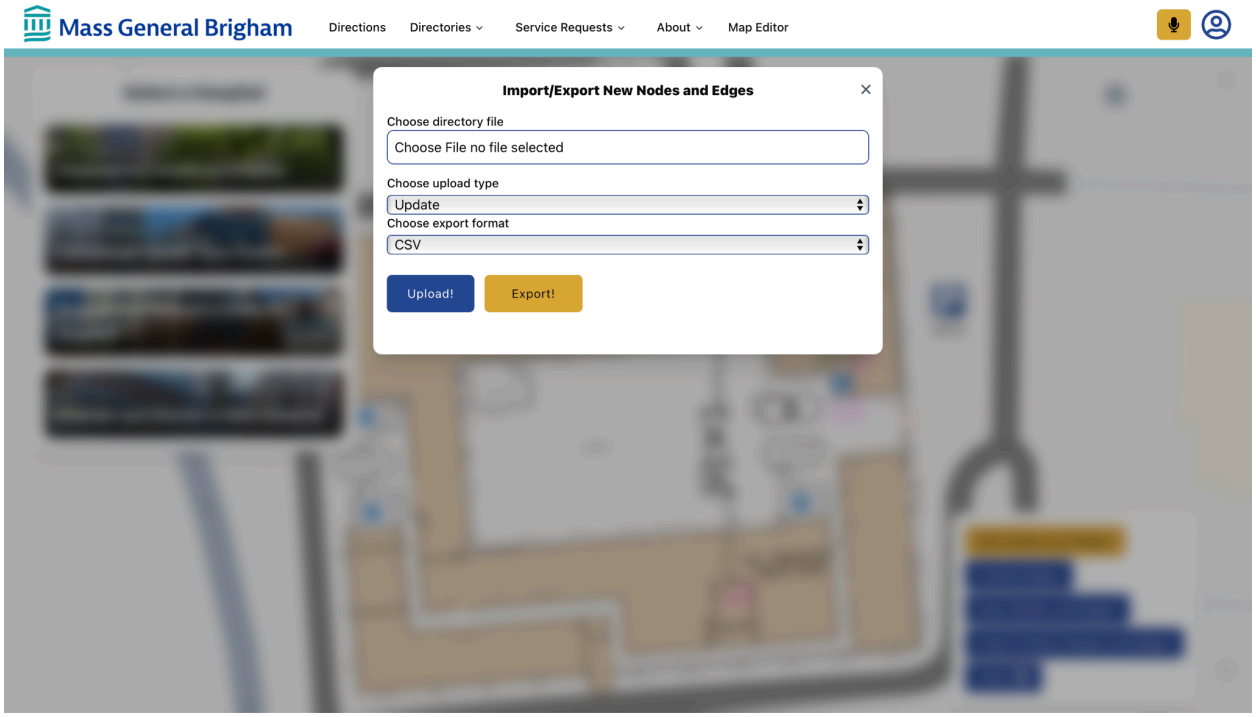
Edges can be added to a map by going into Add Edges mode and clicking two nodes, making sure the Hand (top-middle left) is selected to create an edge between them. To remove an edge, in Edit Nodes and Edges Mode, select an edge and it will be highlighted blue, then click the Delete Edge button in the bottom left of the screen.

Edit Node Properties



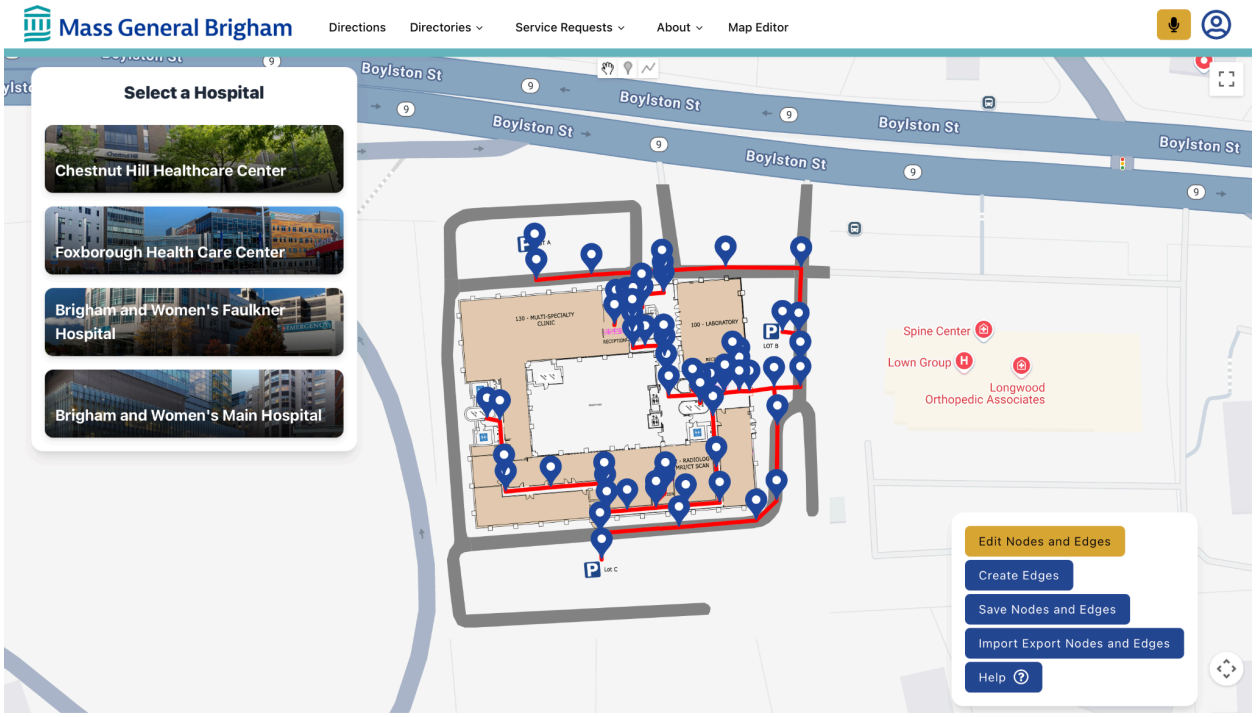
When in Edit Nodes and Edges Mode, and the Hand (top-middle left) is selected, click on a node, and the Node Data will appear. The node type, name, and room number can be changed. Additionally, you can select departments to be added to the node, which will be reflected in the directions navigation. Changes will not be saved until the Save Nodes and Edges button is pressed.

Import/Export Nodes and Edges



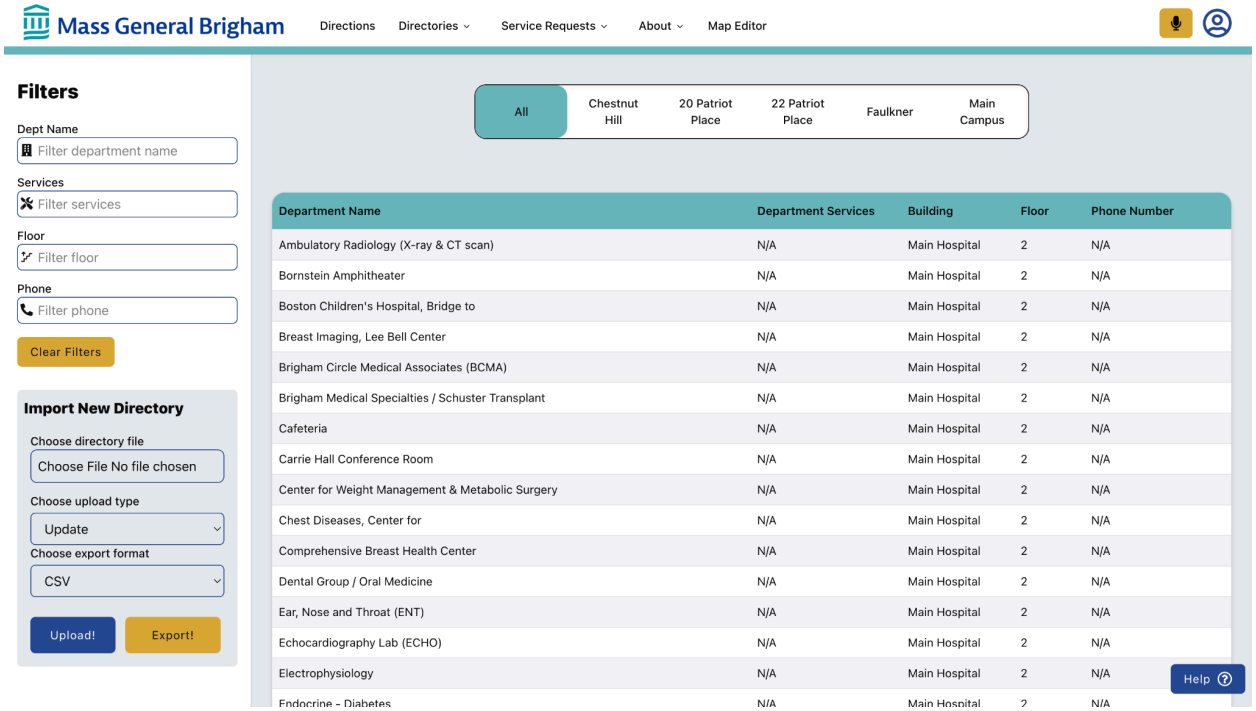
Clicking on the Import Export Nodes and Edges button will make this pop-up appear. Click inside the choose file box to upload either a CSV or JSON file. Next, select an upload type, either Update or Overwrite. Update will change the values of any existing nodes and insert any new nodes. **Overwrite will erase all previous node and edge data** and replace it with what is in the file. **When uploading a CSV, you must upload the nodes CSV first, then the edges CSV**. To Export existing data to either CSV or JSON, select the export format from the dropdown and press Export. JSON data will be one file including both nodes and edges, while CSV data will be one zip file with two CSV files, one with node data and another with edge data.

Save



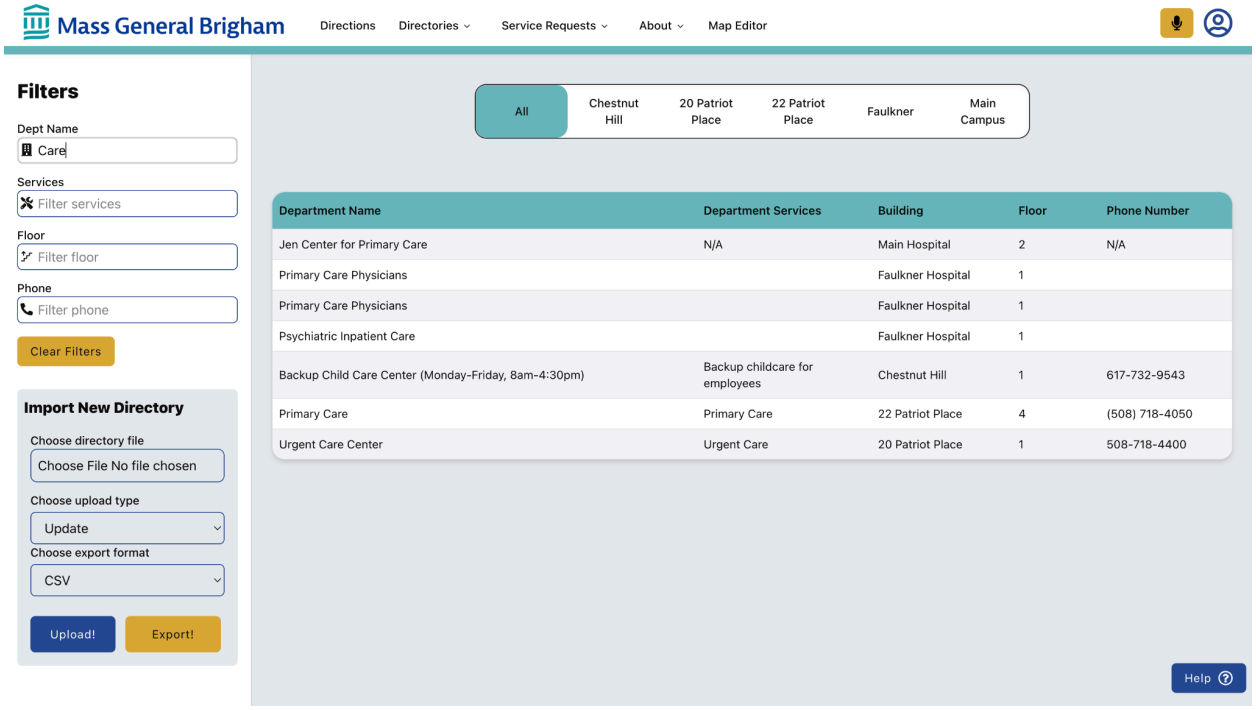
Once completing your changes, click the Save Nodes and Edges button and it will save all the node and edge data to the database. **When modifying a hospital map with multiple floors, make sure you save nodes and edges before changing floors, if not your changes will be lost.**

Directories



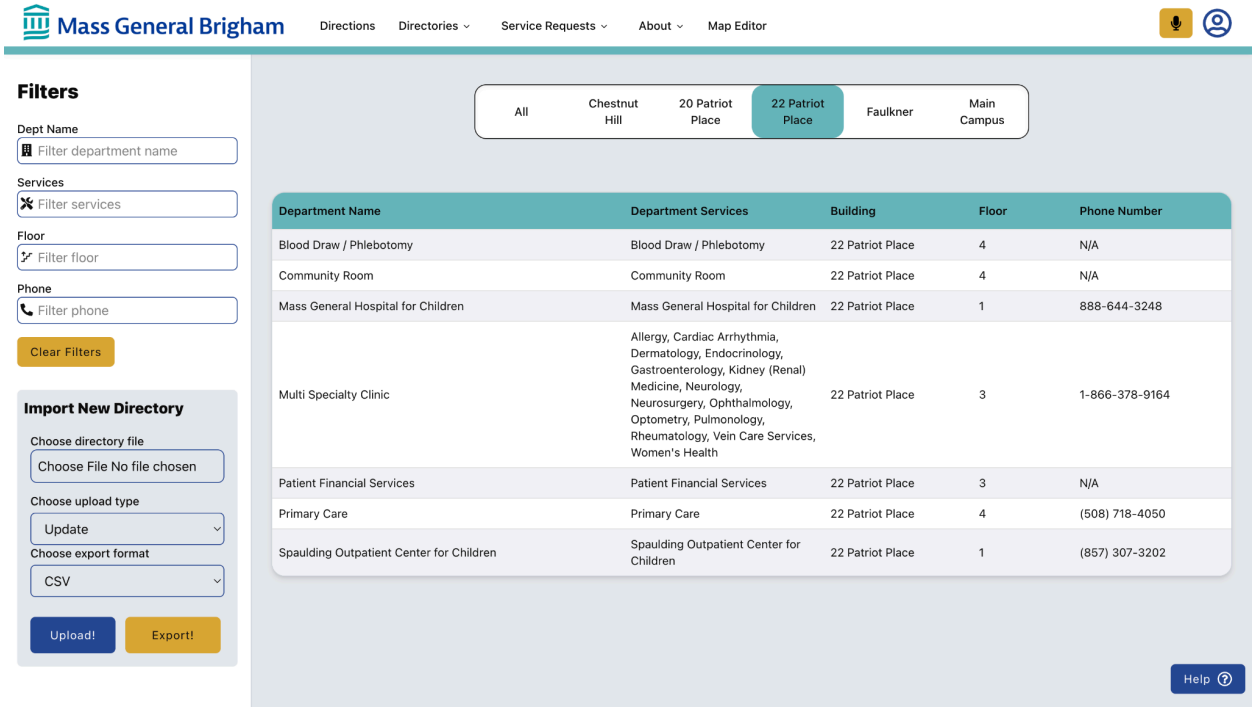
This page serves as the directory management interface for Mass General Brigham. It enables users to view, filter, and manage departmental information across different hospital locations. The page is structured with filter options on the left, a dynamic table of department listings in the center, and building-specific tabs to refine which data is displayed. This setup supports efficient navigation and maintenance of directory data.

Filters



The filters section allows users to narrow down visible directory entries by entering search terms for department name, services, floor, or phone number. Each filter field supports keyword-based matching and updates the table results in real-time as the user types, making it a live filtering experience. The "Clear Filters" button resets all filters to their default state, enabling users to quickly return to the full dataset.

Tables

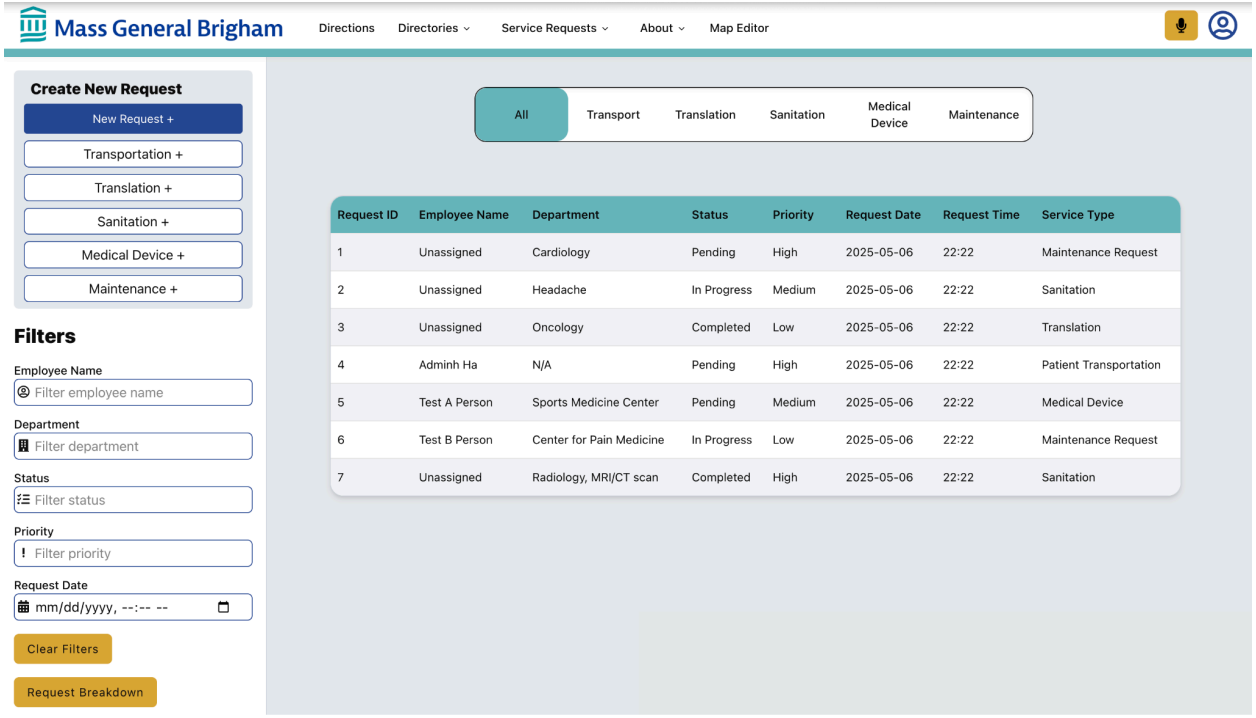


The table displays a list of departments with key details: department name, services offered, building location, floor number, and phone number. Each row corresponds to one department, and the table updates automatically based on applied filters or selected building tabs. The top row of building-specific buttons (e.g., Chestnut Hill, Faulkner) enables quick geographic filtering of department data.

Import/Export Directories

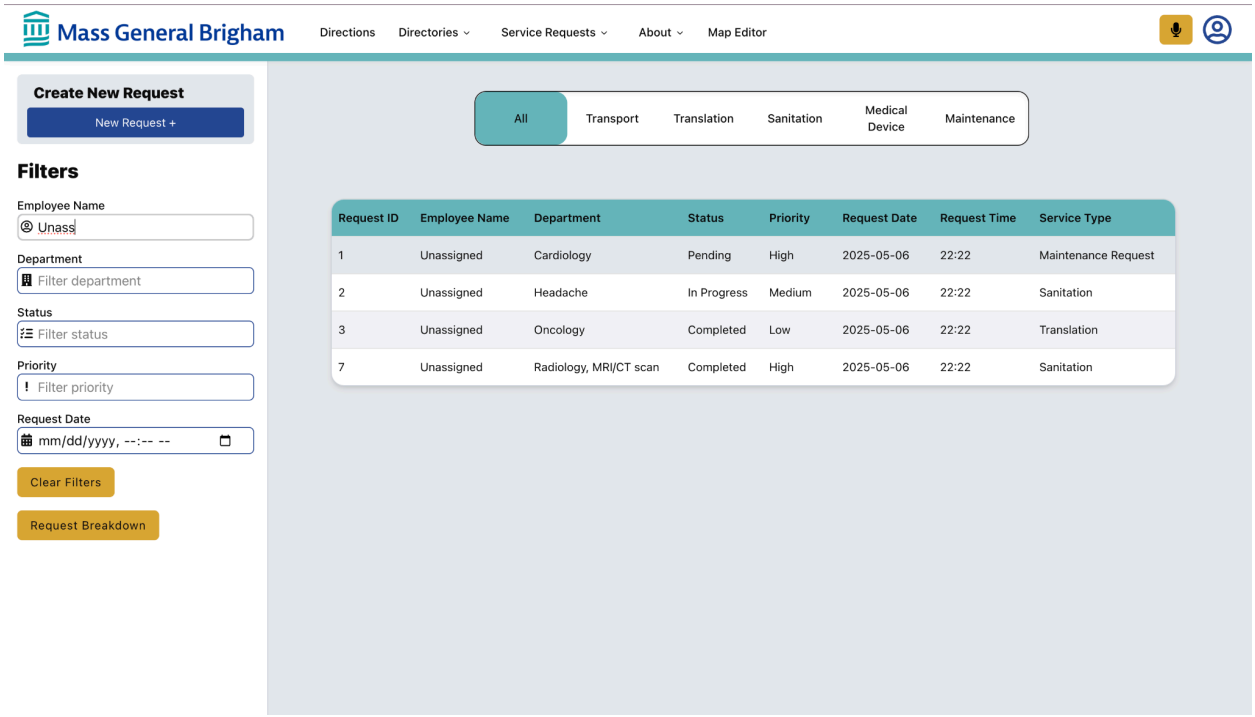
The import new directory section allows users to upload a new directory file in CSV format, but it is only visible to users with admin privileges. Admins can choose whether to update the existing data or completely replace it, effectively modifying or overwriting the current database for the directories. After upload, the new data is immediately reflected in the main table. This section also provides the ability to export the current list of directories into a CSV or JSON file, selected by the “Choose export format” dropdown, making it easy to back up or share the directory contents.

Service Requests



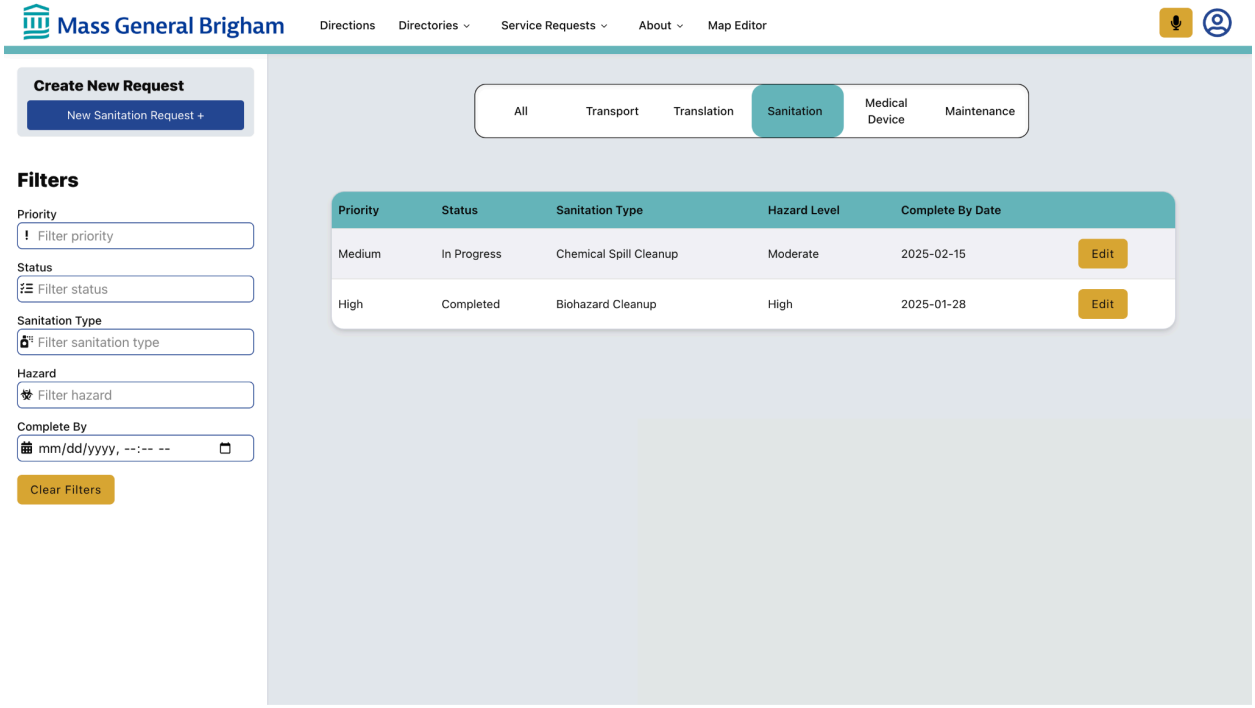
This page serves as a centralized interface for managing and monitoring hospital service requests at Mass General Brigham. Its core purpose is to streamline hospital operations by offering staff and administrators a clear, organized view of all active and completed service tasks across departments. From patient transport and sanitation to maintenance and translation requests, the page allows users to track, filter, and analyze real-time data on hospital needs. The interface is structured to support both individual task management and high-level oversight. On the left, users can narrow down the request list using detailed filters such as employee name, department, status, priority, and request date, while the main table dynamically displays matching entries. A form system simplifies the creation and updating of requests, ensuring data consistency across the platform. In addition, the Request Breakdown feature visualizes patterns in request distribution, helping hospital administrators make data-driven decisions. Altogether, this page functions as both a task manager and a decision-support tool, enhancing operational efficiency, accountability, and communication across the hospital network.

Filters



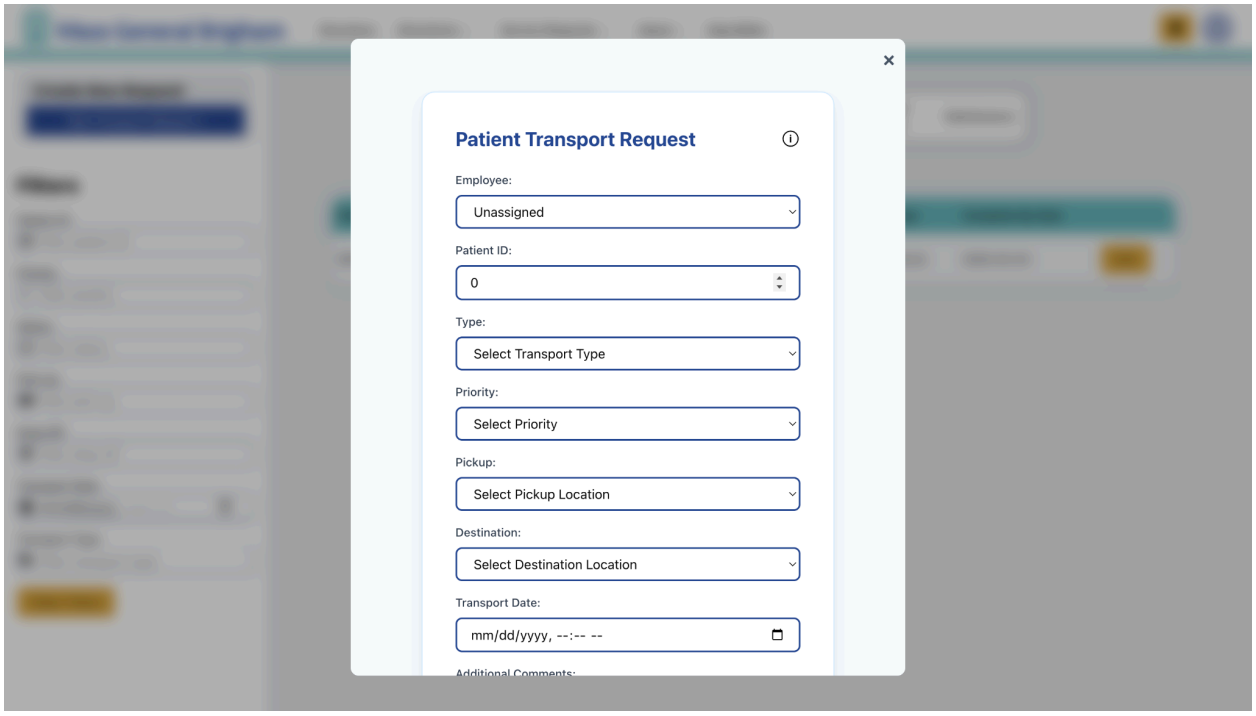
The Filters section provides dynamic, real-time control over which service requests are displayed in the table. It uses live filtering, meaning that as users type into input fields or select from dropdowns (for employee name, department, status, priority, and request date), the list of visible requests updates immediately without needing a manual search button. This allows for faster navigation and more responsive data exploration. To improve usability, a Clear Filters button is included at the bottom of the panel, which instantly resets all filters and restores the full list of requests. This setup enables users to seamlessly explore the dataset, isolate specific requests, and quickly reset the view for a broader operational perspective.

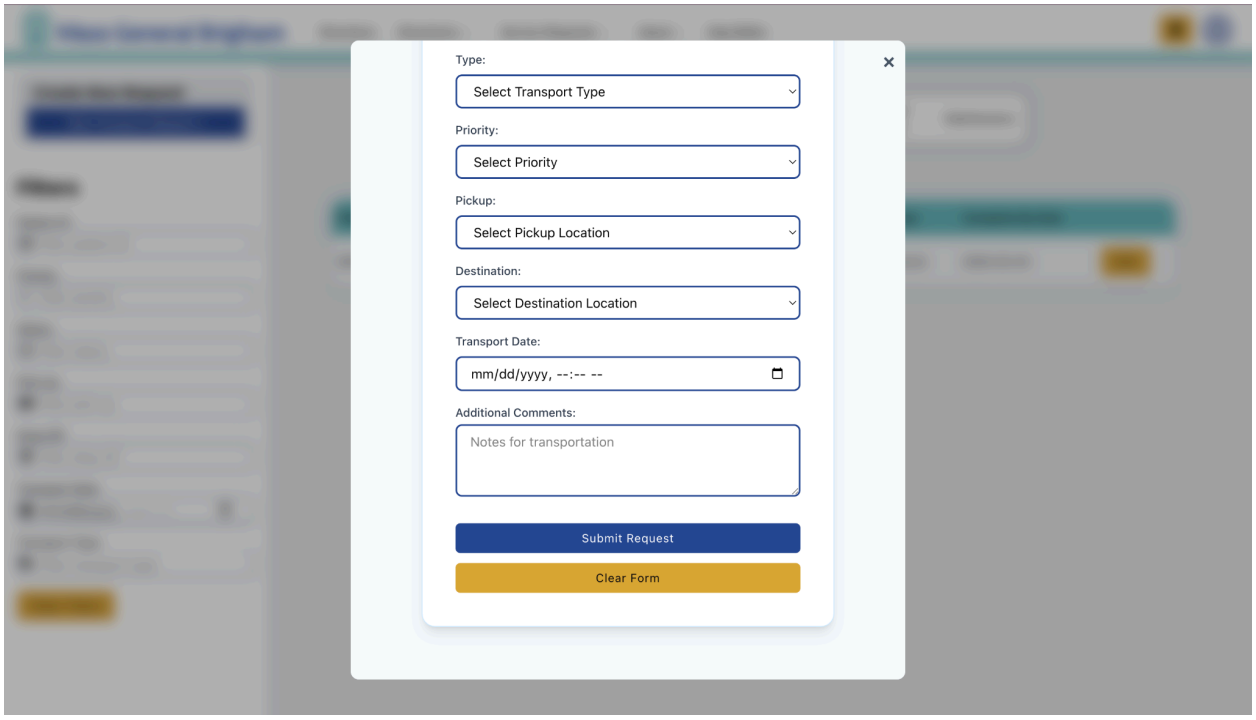
Tables



The Tables section displays all service requests in a structured, scrollable format that updates dynamically based on the user's selected filters or active tab. Each row in the table presents detailed information relevant to the currently selected service type. A row of tabs at the top allows users to quickly sort requests by type, such as Transport, Sanitation, Translation, and others, making it easy to isolate and focus on specific categories. For users with administrative privileges, the table also enables editing functionality, allowing them to click on a request and update its details through the form interface. This feature helps authorized staff manage workflows efficiently and keep data up to date, all within a single, cohesive page.

Forms

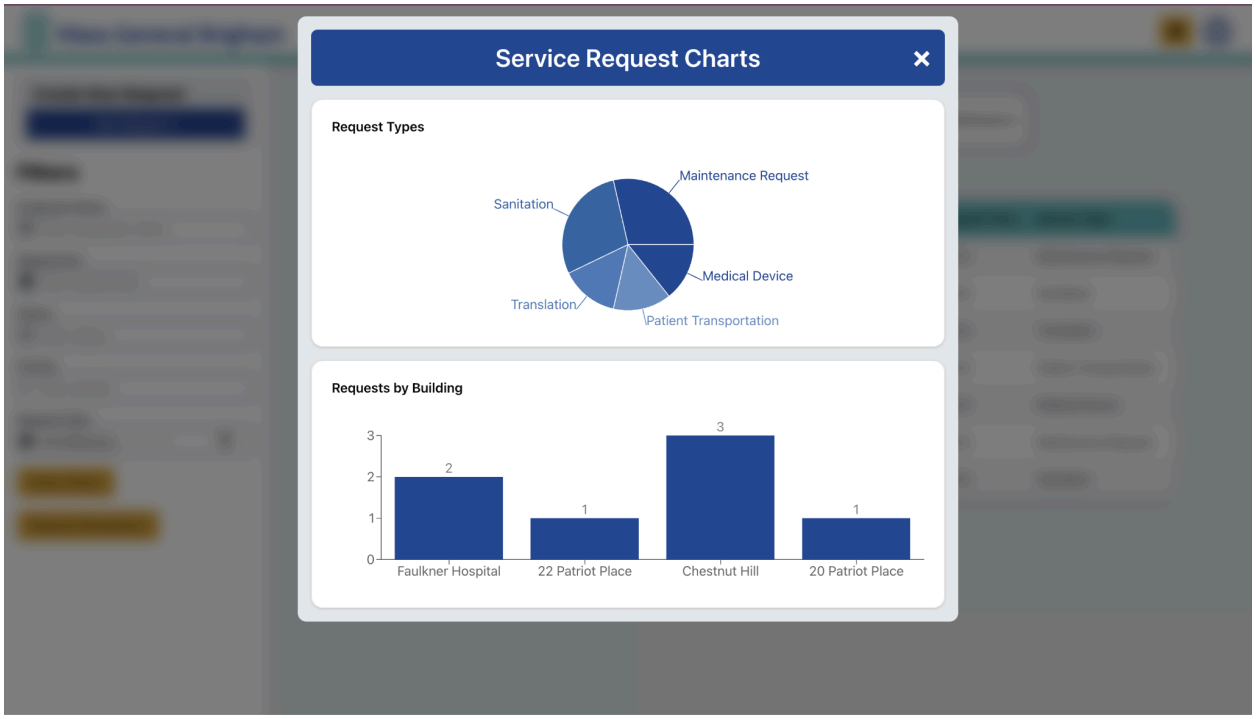




The Forms section is used to create and edit service requests, and it adapts dynamically based on the selected service type. Each type of service request—such as Transport, Sanitation, Translation, and others—has its own unique form with fields tailored to the information required

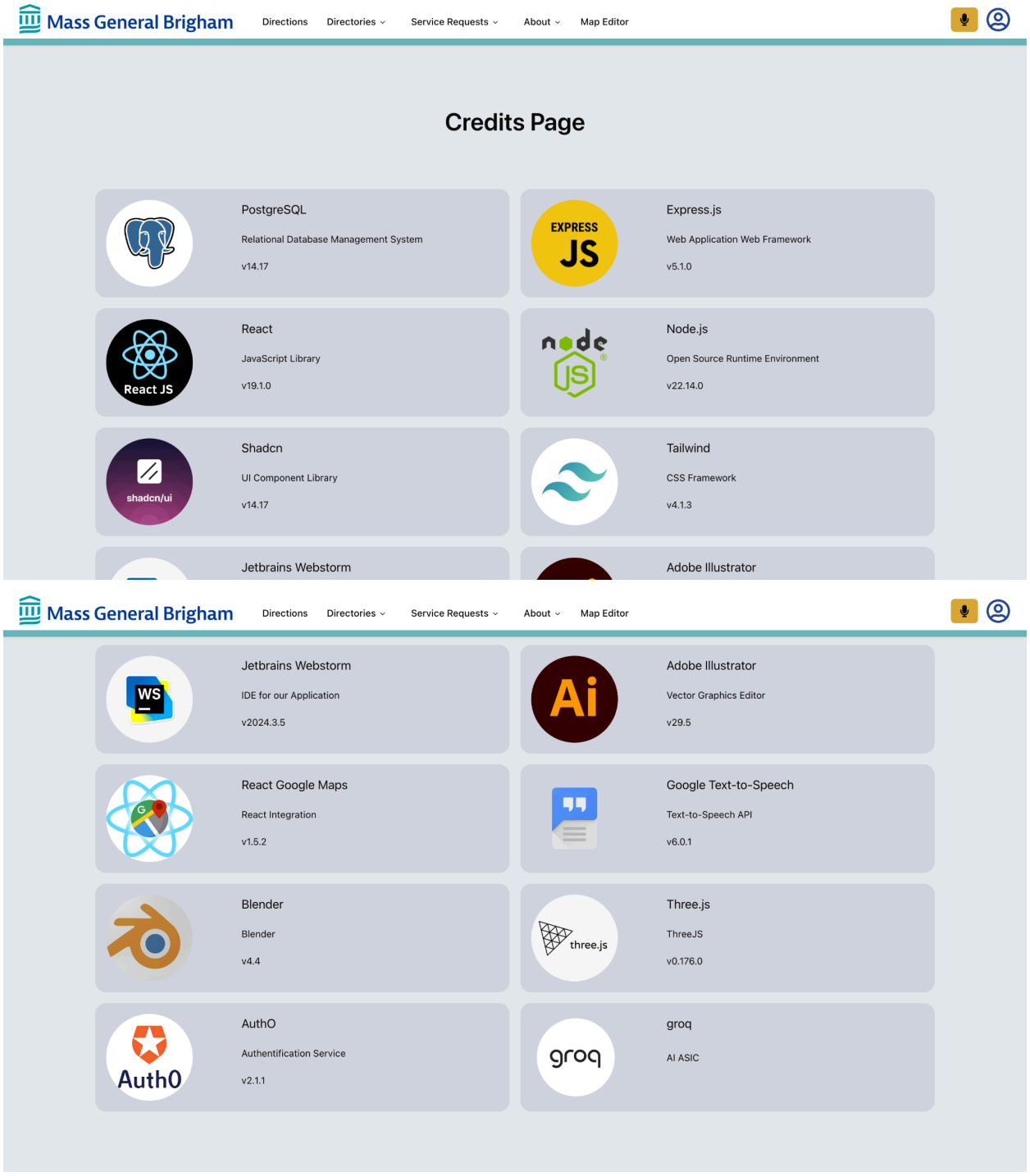
for that specific request. This ensures that all relevant data is captured accurately while keeping the form layout streamlined and intuitive. Each form includes a submit button to send the request to the database and a clear form button that resets all fields to their default values, allowing users to start over easily if needed. For users with administrative permissions, these forms also serve as an editing interface, enabling updates to existing requests directly from the table. This design supports both request creation and administrative task management within a single, consistent workflow.

Request Breakdown



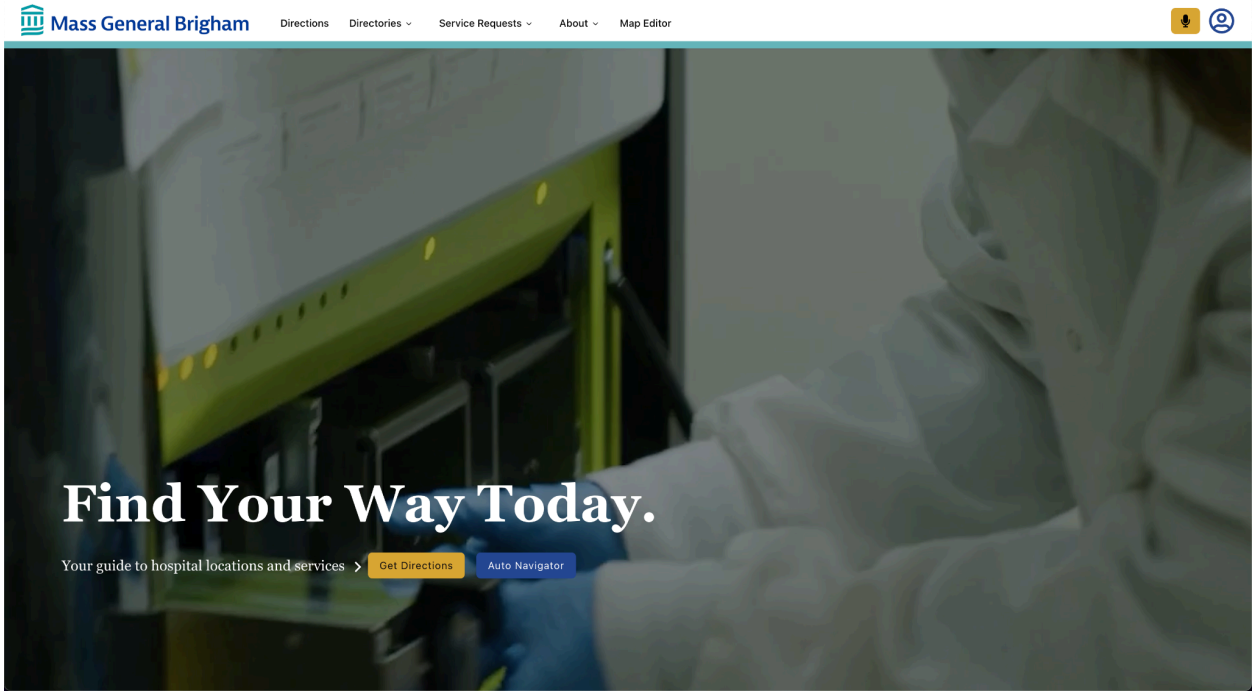
The Request Breakdown feature is designed to display service request data as meaningful visual insights. By clicking the corresponding button, users are presented with pie charts, bar graphs, or other data visualizations that summarize the distribution of requests across categories such as service type, priority level, or status. These visual summaries offer a high-level view of operational trends and potential bottlenecks, supporting more effective resource planning and decision-making. Clear color coding and consistent chart legends help ensure that the breakdowns are intuitive and easy to understand, even for users without a technical background.

Credits



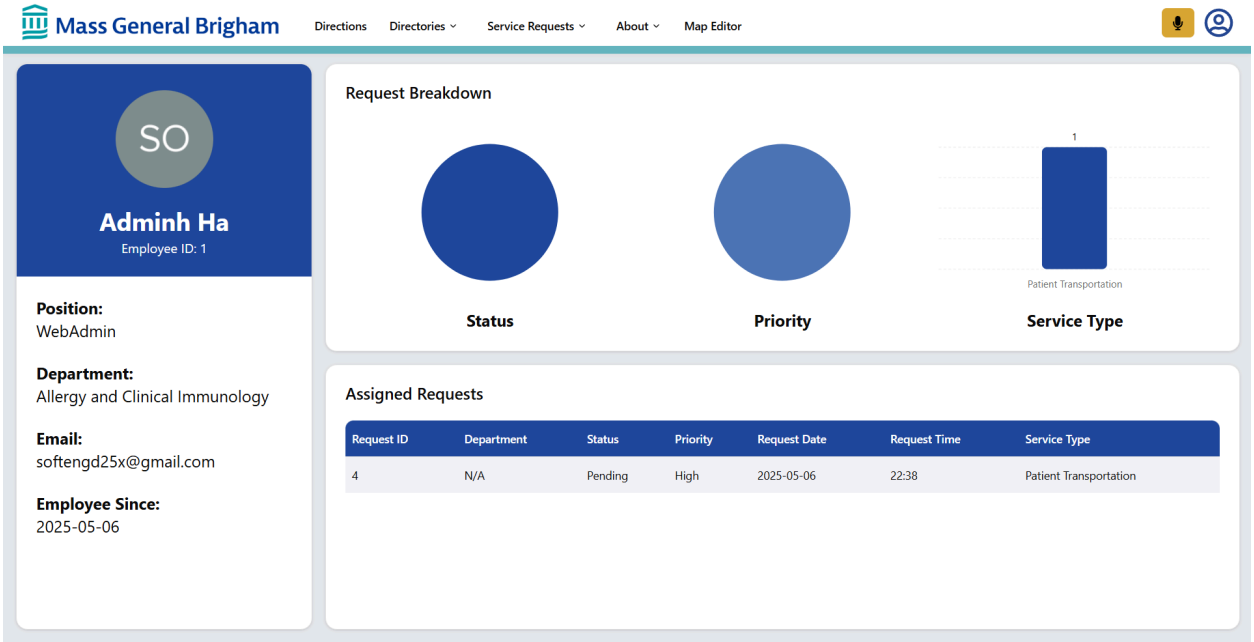
This Credits Page highlights the core technologies and tools used in the project, showing each software's name, purpose, and version. Clicking on any icon redirects users to the official page of that technology for more information.

Speech Button



The speech button is available on each page (shown in the top-right corner). The purpose of the speech button is to provide users with a different and additional way to interact with the application. Once a user presses the speech button, permission to use the microphone is prompted. Upon allowing microphone usage, the user can navigate the web application however they would like. The speech button allows full site navigation, including filtered directories, Directions, service request forms, and even the team about us page. The speech button can also be used as an accessibility service feature.

Account



When you arrive at the account page by clicking the user icon on the top-right and selecting "Account", it displays the account details of the person logged into the application, the service requests that are assigned to the person signed in, and graphs that display the service requests sorted by category.

View Employee Information

The employee logged into the application can see their account details. The top of the card displays the profile picture set in Auth0, the employee's first and last name, and their employee ID. At the bottom of the card displays the employee's position, department, email, and the date they became an employee.

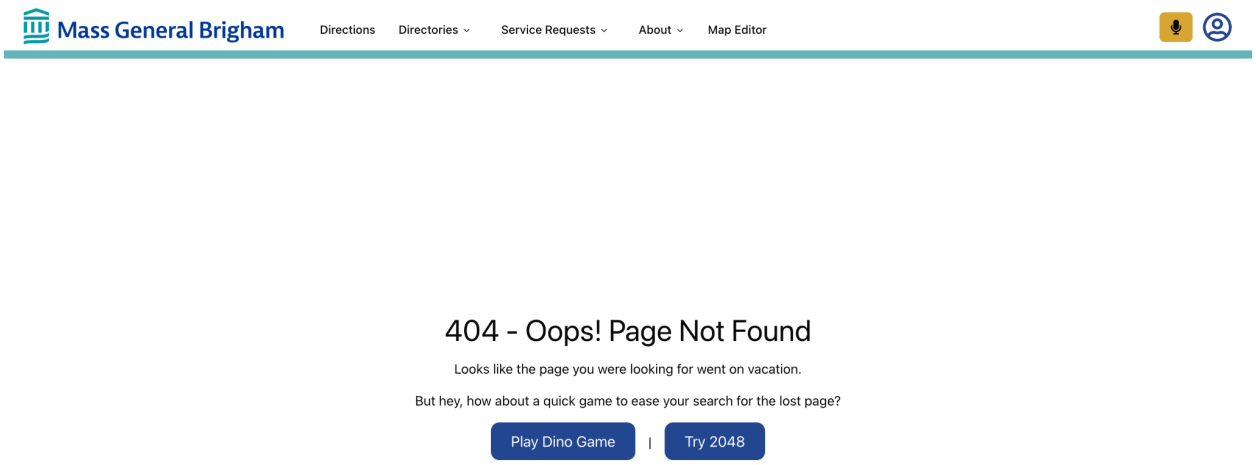
View Service Request Graphs (Status, Priority, Type)

Graphs displayed on the right sort the service requests assigned to the user currently logged into the application. The service requests are sorted in these graphs by status, priority, and service type.

View Service Request Table

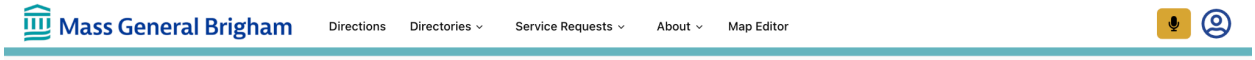
The service request table displays the assigned requests to the user currently logged into the application. Some of the fields displayed on the table include the department, status, priority, request date, and service type.

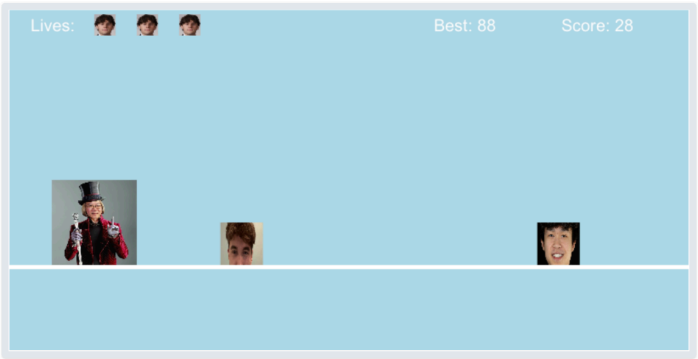
404



If a user attempts to reach a non-existent page, they will be directed to the 404 Page Not Found page, where they are given the option to play from a choice from two games.

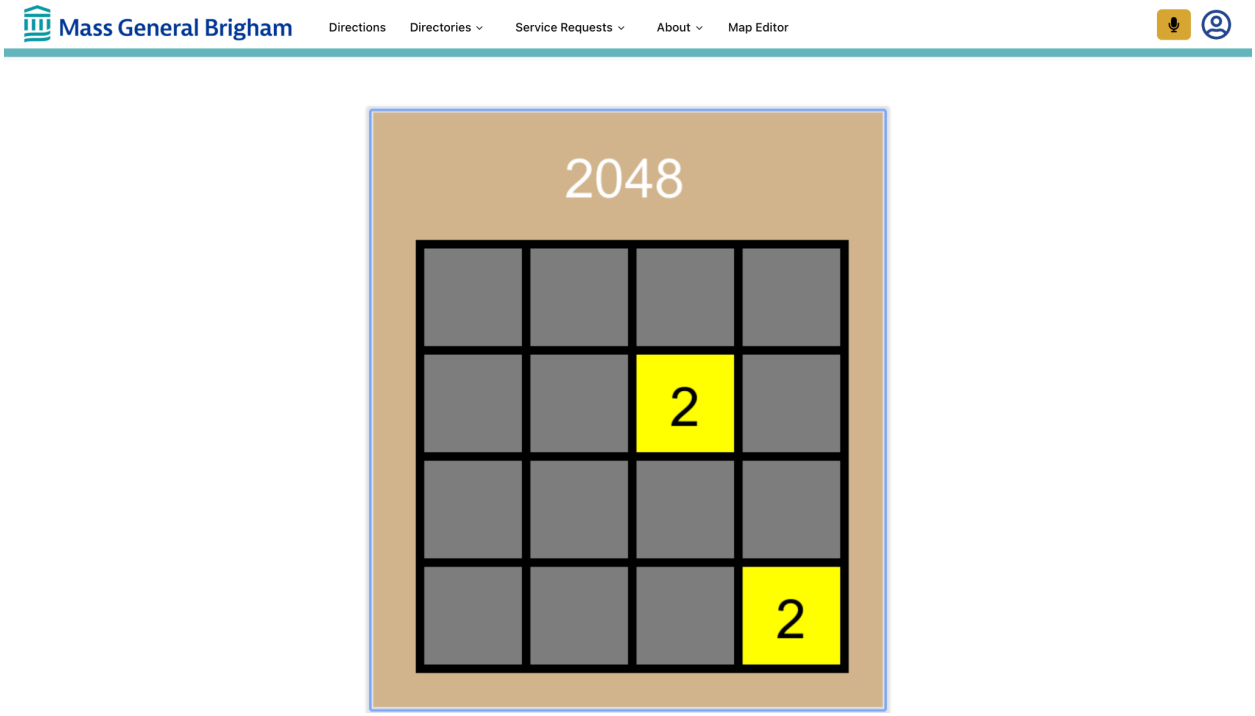
Dino Game





Help Professor Wong dodge the incoming Team C students. Press the up arrow to jump over the obstacles. You have three lives. Successfully jumping over a Team C member grants you 25 points, and every second survived grants 1 point. The longer you survive, the faster Team C will come after you.

2048



From the site's 404 page, you can access the 2048 game. Use the arrow keys to slide the tiles across the screen in the given direction. Merge tiles of the same value to get all the way up to the 2048 tile.

About

Meet the Devs

This page introduces the members of Team C at Mass General Brigham through a grid of interactive profile cards, each displaying a developer's name, role, and GitHub handle. The team includes lead and assistant software engineers, backend and frontend developers, a project manager, a documentation analyst, and support roles like a team coach and professor. At the

bottom, a “Special Thanks” section acknowledges key contributors and partner institutions. Clicking on any card flips it to reveal additional details about the developer, offering an engaging and informative way to learn more about the team.