CLAIMS

What is claimed is:

1. A method comprising:

receiving, at a transportation matching system, a set of transportation requests from requestor devices;

selecting between a multi-request transportation model and a single-request transportation model based on elapsed times corresponding to the set of transportation requests;

utilizing the multi-request transportation model to select a plurality of transportation requests from the set of transportation requests to provide to a provider computing device by comparing transportation routes for the set of transportation requests to a location of the provider computing device;

providing, for display on the provider computing device, an interactive digital map and selectable elements indicating the plurality of transportation requests; and

in response to receiving a selection of a selectable element of the selectable elements, transmitting navigation instructions to the provider computing device to a pickup location of a transportation request corresponding to the selectable element.

2. The method of claim 1, further comprising, for the transportation request, selecting a set of provider computing devices to receive the transportation request, the set of provider computing devices comprising the provider computing device and an additional provider computing device.

3. The method of claim 2, further comprising:

providing the selectable element indicating the transportation request for display via the provider computing device; and

providing an additional selectable element indicating the transportation request for display via the additional provider computing device.

4. The method of claim 3, further comprising providing the additional selectable element indicating the transportation request for display with an additional interactive digital map and additional selectable elements indicating an additional plurality of transportation requests via the additional provider computing device.

5. The method of claim 3, further comprising:

determining matching probabilities for provider computing devices; and

selecting a number of provider devices in the set of provider computing devices to receive the transportation request based on the matching probabilities.

6. The method of claim 4, further comprising, in response to receiving the selection of the selectable element via the provider computing device, removing the additional selectable element indicating the transportation request from the additional provider computing device.

7. The method of claim 1, further comprising:

for the transportation request, selecting between a multi-request transportation model and a single-request transportation model based on an elapsed time corresponding to the transportation request; and

utilizing the multi-request transportation model to select the plurality of transportation requests to provide to the provider computing device.

8. The method of claim 1, wherein providing the selectable elements for display on the provider computing device comprises providing a plurality of pickup location indicators and a plurality of transportation values corresponding to the plurality of transportation requests.

9. The method of claim 1, further comprising:

providing, for display via the interactive digital map, a first route corresponding to a first transportation request of the plurality of transportation requests; and

in response to selection of the selectable element, providing, for display via the interactive digital map, a second transportation route corresponding to the first transportation request.

10. A non-transitory computer-readable medium storing instructions that, when executed by at least one processor, cause a computer system to:

receive, at a transportation matching system, a set of transportation requests from requestor devices;

select between a multi-request transportation model and a single-request transportation model based on elapsed times corresponding to the set of transportation requests;

utilize the multi-request transportation model to select a plurality of transportation requests from the set of transportation requests to provide to a provider computing device by comparing transportation routes for the set of transportation requests to a location of the provider computing device;

provide, for display on the provider computing device, an interactive digital map and selectable elements indicating the plurality of transportation requests; and

in response to receiving a selection of a selectable element of the selectable elements, transmit navigation instructions to the provider computing device to a pickup location of a transportation request corresponding to the selectable element.

11. The non-transitory computer-readable medium of claim 10, further comprising instructions that, when executed by the at least one processor, cause the computer system to:

select a set of provider computing devices to receive the transportation request, the set of provider computing devices comprising the provider computing device and an additional provider computing device.

12. The non-transitory computer-readable medium of claim 11, further comprising instructions that, when executed by the at least one processor, cause the computer system to:

provide the selectable element indicating the transportation request for display via the provider computing device; and

provide an additional selectable element indicating the transportation request for display via the additional provider computing device.

13. The non-transitory computer-readable medium of claim 12, further comprising instructions that, when executed by the at least one processor, cause the computer system to:

provide the additional selectable element indicating the transportation request for display with an additional interactive digital map and additional selectable elements indicating an additional plurality of transportation requests via the additional provider computing device.

14. The non-transitory computer-readable medium of claim 12, further comprising instructions that, when executed by the at least one processor, cause the computer system to:

determine matching probabilities for provider computing devices; and

select a number of provider devices in the set of provider computing devices to receive the transportation request based on the matching probabilities.

15. The non-transitory computer-readable medium of claim 10, further comprising instructions that, when executed by the at least one processor, cause the computer system to:

select between a multi-request transportation model and a single-request transportation model based on an elapsed time corresponding to the transportation request; and

utilize the multi-request transportation model to select the plurality of transportation requests to provide to the provider computing device.

16. A system comprising:

at least one processor; and

at least one non-transitory computer-readable storage medium storing instructions that, when executed by the at least one processor, cause the system to:

receive, at a transportation matching system, a set of transportation requests from requestor devices;

select between a multi-request transportation model and a single-request transportation model based on elapsed times corresponding to the set of transportation requests;

utilize the multi-request transportation model to select a plurality of transportation requests from the set of transportation requests to provide to a provider computing device by comparing transportation routes for the set of transportation requests to a location of the provider computing device;

provide, for display on the provider computing device, an interactive digital map and selectable elements indicating the plurality of transportation requests; and

in response to receiving a selection of a selectable element of the selectable elements, transmit navigation instructions to the provider computing device to a pickup location of a transportation request corresponding to the selectable element.

17. The system of claim 16, further comprising instructions that, when executed by the at least one processor, cause the system to:

select a set of provider computing devices to receive the transportation request, the set of provider computing devices comprising the provider computing device and an additional provider computing device.

18. The system of claim 17, further comprising instructions that, when executed by the at least one processor, cause the system to:

provide the selectable element indicating the transportation request for display via the provider computing device; and

provide an additional selectable element indicating the transportation request for display via the additional provider computing device.

19. The system of claim 18, further comprising instructions that, when executed by the at least one processor, cause the system to:

provide the additional selectable element indicating the transportation request for display with an additional interactive digital map and additional selectable elements indicating an additional plurality of transportation requests via the additional provider computing device.

20. The system of claim 18, further comprising instructions that, when executed by the at least one processor, cause the system to:

determine matching probabilities for provider computing devices; and

select a number of provider devices in the set of provider computing devices to receive the transportation request based on the matching probabilities.