CLAIMS

1. A method of predicting journey time, the method comprising:

obtaining a set of initial speed profiles, each initial speed profile of the set of initial speed profiles corresponding to a respective road portion of a plurality of road portions on an initial map of a geographic area and comprising a set of speed values for the respective road portion, each speed value corresponding to a time interval, each road portion having an associated road type and wherein obtaining the set of initial speed profiles comprises generating a set of global speed profiles for the plurality of road portions by generating a default speed profile for each road type;

receiving a plurality of global positioning system data sets, each global positioning system data set corresponding to a respective journey made by a respective vehicle in the geographic area and comprising a set of geolocation indications and corresponding time indications;

determining speed data from the set of geolocation indications and corresponding time indications corresponding to journey segments along respective road portions;

updating initial speed profiles of the set of initial speed profiles using the speed data to determine a set of current speed profiles;

training a journey model using at least the set of current speed profiles; and

determining a predicted journey time for a journey using the journey model.

2. A method according to claim 1, wherein obtaining the set of initial speed profiles comprises looking up a set of previously updated speed profiles as the initial set of speed profiles.

3. A method according to any preceding claim, further comprising mapping the set of current speed profiles to a current map of the geographic area.

4. A method according to any preceding claim, wherein determining speed data from the set of geolocation indications and corresponding time indications corresponding to journey segments along the respective road portions comprises determining a double median absolute variation.

5. A method according to any preceding claim, further comprising filtering the global positioning system data sets.

6. A method according to claim 5, wherein filtering the global positioning system data sets comprises computing an accuracy threshold and discarding any of the set of geolocation indications and corresponding time indications that are below the accuracy threshold.

7. A method according to claim 6, wherein the accuracy threshold calculated from a mean or median accuracy of a global positioning system data set.

8. A computer readable carrier medium carrying processor executable instructions operable to cause a processor to carry out a method according to any one of claims 1 to 7.

9. A data processing system for predicting journey time, the data processing system comprising a processor, and program storage, the program storage storing computer program instructions operative by the processor to:

obtain a set of initial speed profiles, each initial speed profile of the set of initial speed profiles corresponding to a respective road portion of a plurality of road portions on an initial map of a geographic area and comprising a set of speed values for the road portion, each speed value corresponding to a time interval, each road portion having an associated road type and wherein obtaining the set of initial speed profiles comprises generating a set of global speed profiles by generating a default speed profile for each road type;

receive a plurality of global positioning system data sets, each global positioning system data set corresponding to a respective journey made by a respective vehicle in the geographic area and comprising a set of geolocation indications and corresponding time indications;

determine speed data from the set of geolocation indications and corresponding time indications corresponding to journey segments along respective road portions;

update initial speed profiles of the set of initial speed profiles using the speed data to determine a set of current speed profiles;

train a journey model using at least the set of current speed profiles; and

determine a predicted journey time for a journey using the journey model.

10. A data processing system according to claim 9, wherein the program storage stores computer program instructions operative by the processor to: obtain the set of initial speed profiles by looking up a set of previously updated speed profiles as the initial set of speed profiles.

11. A data processing system according to any one of claims 9 to 10, wherein the program storage stores computer program instructions operative by the processor to: map the set of current speed profiles to a current map of the geographic area.

12. A data processing system according to any one of claims 9 to 11, wherein the program storage stores computer program instructions operative by the processor to: determine speed data from the set of geolocation indications and corresponding time indications corresponding to journey segments along the respective road portions by determining a double median absolute variation.

13. A data processing system according to any one of claims 9 to 12, wherein the program storage stores computer program instructions operative by the processor to: filter the global positioning system data sets.

14. A data processing system according to claim 13, wherein the program storage stores computer program instructions operative by the processor to: filter the global positioning system data sets by computing an accuracy threshold and discarding any of the set of geolocation indications and corresponding time indications that are below the accuracy threshold.

15. A data processing system according to claim 14, wherein the accuracy threshold calculated from a mean or median accuracy of a global positioning system data set.