CLAIMS

1. A system for recognising and rewarding desirable commuting behaviour by subscribers to the system, said system comprising

   data storage means comprising an electronic register of subscribers to the system and an account for each,

   tracking means for tracking a subscriber travel event,

   computer means programmed to

      determine whether the travel event meets predefined commute-qualifying criteria for categorising it as a commute,

      determine a credit value for each commute according to predetermined value criteria and update the account of the associated subscriber with the value determined,

      compare an accumulation of a subscriber's credits with a reward-issuing threshold, and

      cause the subscriber to be notified of having qualified for a reward when the reward-issuing threshold is exceeded.

2. The system of claim 1 wherein the data storage means contains individual subscriber data and wherein a travel event is determined to qualify as a commute on the basis of comparing data of the tracked travel event with said individual subscriber data.

3. The system of claim 2 wherein the subscriber data comprises the subscriber address.

4. The system of claim 2 or claim 3 wherein the subscriber data comprises the subscriber's working hours.

5. The system of any one of claims 2 to 4 wherein the subscriber data comprises data relating to the subscriber's previously tracked travel events.

6. The system of claim 6 wherein the previously tracked travel data includes commuting trip beginning and end point locations associated with said subscriber.

7. The system of any one of claims 2 to 6, wherein the credit value is a function of a beneficial effect of a commute, computed according to pre-defined benefit criteria.

8. The system of claim 7 wherein the commute comprises segments and the credit value is determined taking into account a value for each segment.

9. The system of claim 8 wherein the credit value is determined taking into account the time when the or each commute segment took place.

10. The system of any one of claims 7 to 9 wherein credit value is determined taking into account the subscriber's degree of avoidance of public roads used by licensed motor vehicles.

11. The system of claim 10 wherein credit value is determined taking into account a threshold level of human effort deemed to be required in the commute.

12. The system of any one of the previous claims wherein the subscriber is an individual commuter.

13. The system of any one of claims 1 to 11 wherein the subscriber comprises a group of commuters.

14. The system of claim 13 wherein the subscriber is an employer of the commuters.

15. The system of any one of claims 1 to 14 wherein the tracking means comprises locating means for locating in real time the subscriber or individual members of a group of persons associated with the subscriber.

16. The system of claim 15 wherein the tracking means comprises transponder means uniquely associated with the subscriber and receiver means configured to detect the signal, the receiver means being located proximate to a commuter route.

17. The system of claim 16 wherein the commuter route is a dedicated route reserved for commuters from the group consisting of one or more of runners, pedestrians and riders of conveyances that are not combustion-engine driven and have no more than three wheels.

18. The system of claim 15 wherein the tracking means comprises a GPS enabled device uniquely associated with the subscriber.

19. The system of any one of claims 15 to 18 having means for communicating time- and location-related data to said computer means and wherein the computer means is programmed to process said data to detect changes in subscriber location over time and, on the basis of said changes, determine a means most likely used by the subscriber in changing location.

20. The system of any one of the preceding claims comprising programming instructions rendering the computer means capable of generating a profile of the subscriber from its historical commute data.

21. The system of any one of the preceding claims comprising registration means for registering subscribers to the system.

22. The system of any one of the preceding claims further comprising a plurality of dedicated cycling routes.

23. A method of recognising and rewarding desirable commuting behaviour by subscribers to a reward system, said method comprising steps of

providing data storage means comprising an electronic register of subscribers to the system and an account for each,

providing tracking means operable for tracking a subscriber travel event,

providing and operating computer means programmed to

determine whether the travel event meets predefined commute-qualifying criteria for categorising it as a commute,

determine a credit value for each commute according to predetermined

value criteria and update the account of the associated subscriber with the value determined;

compare an accumulation of a subscriber's credits with a reward-issuing threshold; and

notify the subscriber of having qualified for a reward when the reward-issuing threshold is exceeded.

24. The method of claim 23 including determining a travel event to qualify as a credit-earning commute on the basis of comparing individual subscriber data contained in the data storage means with data of the tracked travel event.

25. The method of claim 24 wherein the subscriber data comprises the subscriber address and the subscriber's working hours.

26. The method of claim 25 comprising the step of including, in the subscriber data, data relating to the subscriber's previously tracked travel events.

27. The method of claim 26 wherein the previously tracked travel data includes commuting trip beginning and end point locations associated with said subscriber.

28. The method of any one of claims 23 to 27, including computing the credit value as a function of a beneficial effect of a commute according to pre-defined benefit criteria.

29. The method of claim 28 including determining the credit value by taking into account a segment of the commute distance.

30. The method of claim 28 or 29 including determining the credit value by taking into account the time of day at which the commute segment took place.

31. The method of any one of claims 28 to 30 including determining the credit value by taking into account the subscriber's degree of avoidance of public roads used by licensed motor vehicles.

32. The method of any one of claims 23 to 31 wherein the tracking means

comprises locating means for locating in real time the subscriber or individual members of a group of persons associated with the subscriber.

33. The method of claim 32 wherein the tracking means comprises transponder means uniquely associated with the subscriber and receiver means configured to detect the signal, the receiver means being located proximate to a commuter route.

34. The method of claim 33 wherein the commuter route is a dedicated route reserved for commuters from the group consisting of one or more of runners, pedestrians and riders of conveyances that are not combustion-engine driven and have no more than three wheels.

35. The method of claim 34 wherein the tracking means comprises a GPS enabled device uniquely associated with the subscriber.

36. The method of any one of claims 33 to 35 including providing means for communicating time- and location-related data to said computer means and causing the computer means to process said data to detect changes in subscriber location and, on the basis of said changes, to determine a means most likely used by the subscriber in changing location.

37. The method of any one of claims 23 to 36 including allocating individual accounts to members belonging to a subscriber that is an organisation and aggregating credits earned and data gathered in respect of commutes by said members of that organisation for purposes of rewarding the subscriber on reaching a reward qualification threshold.

CLAIMS

1. A system for evaluating travel behavior by subscribers to the system, said system comprising:

   data storage comprising an electronic register of subscribers to the system and an account containing individual subscriber data for each subscriber;

   data-recording means configured for automatically gathering and retaining data relating to a subscriber's travel behavior while undertaking a journey;

   electronic memory storing a set of criteria for determining the desirability of a subscriber's travel behavior;

   a computer processor programmed to process said data automatically and:

      identify, from the data, use of one, or more than one, mode of travel by the subscriber during the journey and the or each mode of travel used, wherein each mode defines a journey leg,

      determine, by testing the data against the criteria, a value for each leg,

      update the account of the subscriber according to said value, and

      determine, from an accumulation of value in said account, said subscriber's eligibility for a reward.

2. The system of claim 1, comprising a profile of each subscriber generated from the individual subscriber data.

3. The system of claim 1 or claim 2, wherein the data retained comprises a record of changes in subscriber location over time.

4. The system of any one of the preceding claims, wherein the data retained includes beginning and end point locations for the or each leg from travel origin to destination.

5. The system of any one of the preceding claims, wherein the individual subscriber data comprises the subscriber's historical travel event data.

6. The system of any one of the preceding claims, wherein the individual subscriber data comprises an address associated with the subscriber.

7. The system of any one of the preceding claims, wherein the individual subscriber data comprises the subscriber's working/contact hours.

8. The system of any one of the preceding claims, wherein identifying mode of travel

comprises comparing the travel behavior data under evaluation with historical travel event data.

9. The system of any one of the preceding claims, wherein identifying mode of travel comprises comparing a subscriber's location data against a map.

10. The system of any one of the preceding claims, wherein identifying mode of travel comprises detecting changes in subscriber location over time.

11. The system of any one of the preceding claims, wherein a mode of travel used is human-powered.

12. The system of any one of the preceding claims, wherein a mode of travel used is external to a public transit network.

13. The system of any one of the preceding claims, wherein the criteria relate to mode of travel.

14. The system of any one of the preceding claims, wherein the criteria relate to a consequence associated with mode of travel.

15. The system of any one of the preceding claims, wherein the criteria relate to a consequence associated with the subscriber's travel behavior.

16. The system of any one of the preceding claims, wherein value is attributable to a journey or a journey leg according to one or more of the following criteria: mode, location, distance travelled, speed of travel, time/date of travel, peak hours, duration of travel, purpose of travel, special events, holidays, route taken, traffic/transit conditions, network/infrastructure demand, congestion, efficiency, resource consumption, use of space, parking, infrastructure costs, weather/environmental conditions, carbon emissions, pollution, city liveability, safety, risk, productivity, exercise, the subscriber's physiology/health/exertion, the subscriber's profile and the individual subscriber data.

17. The system of any one of the preceding claims, wherein the value is in a range comprising zero and negative values.

18. The system of any one of the preceding claims, including provision for penalising a subscriber for an accumulation of value associated with undesirable travel behavior in said subscriber's account.

19. The system of any one of the preceding claims, wherein the value is weighted.

20. The system of any one of the preceding claims, wherein the value accumulation is categorized by type.

21. The system of any one of the preceding claims, wherein the computer processor is programmed to process said travel behavior-related data and determine whether the journey qualifies as a qualifying travel event, by testing the data against qualifying travel event criteria.

22. The system of claim 21, wherein only qualifying travel events can generate values that are eligible for rewards.

23. The system of claim 21 or claim 22, wherein said qualifying travel event criteria comprise purpose of journey.

24. The system of claim 23, wherein the qualifying purpose of journey is to commute.

25. The system of any one of claims 21 to 24, wherein determining a qualifying travel event comprises comparing the travel behavior data under evaluation and other individual subscriber data against a map.

26. The system of any one of the preceding claims, wherein the computer processor is programmed for outputting value accumulation- and reward availability-related data to the subscriber.

27. The system of any one of the preceding claims, wherein the data-recording means comprises a wireless transmission-enabled device uniquely associated with the subscriber, said device having means for capturing and communicating said travel behavior-related data to said computer processor.

28. The system of claim 27, wherein the wireless transmission-enabled device is operable according to a short range wireless transmission standard.

29. The system of claim 27 or claim 28, wherein the subscriber-associated device has on board sufficient computational capacity to store data relating to the subscriber's travel events and data relating to reward eligibility criteria and to determine the subscriber's eligibility for a reward.

30. The system of any one of the preceding claims, wherein the computer processor is programmed to identify conformance by the subscriber to a pattern of location change behavior.

31. The system of any one of the preceding claims, wherein the data-recording means comprises a sensor for sensing the subscriber's activity.

32. The system of any one of the preceding claims, wherein the data-recording means comprises location-determining means for locating the subscriber at intervals.

33. The system of any one of the preceding claims, wherein the data-recording means

comprises location-determining means for locating the subscriber in real time.

34. The system of any one of the preceding claims, wherein the data-recording means comprises location-determining means comprising triangulation calculation means configured to process data from signal-transmitting apparatus selected from satellite-mounted apparatus, terrestrially-located apparatus, and a combination thereof.

35. The system of any one of the preceding claims, wherein the data-recording means is configured for automatic activation.

36. The system of any one of the preceding claims, wherein the data-recording means is programmed not to be activated during a preselectable time period.

37. The system of any one of the preceding claims, wherein the data-recording means comprises a transponder.

38. A system according to any one of the preceding claims, comprising a plurality of data-recording means in a communications network.

39. A system according to any one of the preceding claims, wherein the subscriber comprises a group of individuals and wherein the group has an account.

40. A system according to any one of the preceding claims, wherein the computer processor is programmed and configured for exchanging data with a database relating to any one or more of transportation, ticketing, events, sponsorships, institutions, private enterprise and public authorities.

41. A method for evaluating travel behavior by subscribers to a travel monitoring system, said method comprising steps of:

providing data storage comprising an electronic register of subscribers to the system and an account containing individual subscriber data for each subscriber;

providing and operating data-recording means configured for automatically gathering and retaining data relating to a subscriber's travel behavior while undertaking a journey;

providing electronic memory and storing therein a set of criteria for determining the desirability of a subscriber's travel behavior;

providing and operating a computer processor programmed to process said data automatically, access said memory and data storage, and:

identify, from the data, use of one or more than one mode of travel by the subscriber during the journey and the or each mode of travel used,

wherein each mode defines a journey leg,

determine, by testing the data against the criteria, a value for each leg,

update the account of the subscriber according to said value, and

determine, from an accumulation of value in said account, said subscriber's eligibility for a reward.

42. The method of claim 41, comprising causing said computer processor to generate a profile of each subscriber from the individual subscriber data.

43. The method of claim 41 or claim 42, comprising retaining data of a record of changes in subscriber location over time.

44. The method of any one of claims 41 to 43, comprising retaining data of the beginning and end point locations for the or each leg from travel origin to destination.

45. The method of any one of claims 41 to 44, wherein the individual subscriber data comprises the subscriber's historical travel event data.

46. The method of any one of claims 41 to 45, wherein the individual subscriber data comprises an address associated with the subscriber.

47. The method of any one of claims 41 to 46, wherein the individual subscriber data comprises the subscriber's working/contact hours.

48. The method of any one of claims 41 to 47, wherein the step of identifying mode of travel comprises comparing the travel behavior data under evaluation with historical travel event data.

49. The method of any one of claims 41 to 48, wherein the step of identifying mode of travel comprises comparing a subscriber's location data against a map.

50. The method of any one of claims 41 to 49, wherein the step of identifying mode of travel comprises detecting changes in subscriber location over time.

51. The method of any of claims 41 to 50, wherein a mode of travel used is human-powered.

52. The method of any of claims 41 to 51, wherein a mode of travel used is external to a public transit network.

53. The method of any one of claims 41 to 52, wherein the criteria relate to mode of travel.

54. The method of any one of claims 41 to 53 wherein the criteria relate to a consequence

associated with mode of travel.

55. The method of any one of claims 41 to 54, wherein the criteria relate to a consequence associated with the subscriber's travel behavior.

56. The method of any one of claims 41 to 55, wherein value is attributable to a journey or a journey leg according to one or more of the following criteria: mode, location, distance travelled, speed of travel, time/date of travel, peak hours, duration of travel, purpose of travel, special events, holidays, route taken, traffic/transit conditions, network/infrastructure demand, congestion, efficiency, resource consumption, use of space, parking, infrastructure costs, weather/environmental conditions, carbon emissions, pollution, city liveability, safety, risk, productivity, exercise, the subscriber's physiology/health/exertion, the subscriber's profile and the individual subscriber data.

57. The method of any one of claims 41 to 56, wherein the value is in a range comprising zero and negative values.

58. The method of any one of claims 41 to 57, including penalising a subscriber for an accumulation of value associated with undesirable travel behavior in said subscriber's account.

59. The method of any one of claims 41 to 58, wherein the value is weighted.

60. The method of any one of claims 41 to 59 including programming and operating the computer processor for categorizing the value accumulated by type.

61. The method of any one of claims 41 to 60, wherein the computer processor is programmed to process said travel behavior-related data and determine whether the journey qualifies as a qualifying travel event, by testing the data against qualifying travel event criteria.

62. The method of claim 61, wherein only qualifying travel events can generate values that are eligible for rewards.

63. The method of claim 61 or claim 62, wherein said qualifying travel event criteria comprise purpose of journey.

64. The method of claim 63, wherein the qualifying purpose of journey is to commute.

65. The method of any one of claims 61 to 64, wherein the step of determining a qualifying travel event comprises comparing the travel behavior data under evaluation and other individual subscriber data against a map.

66. The method of any one of claims 41 to 65, comprising programming and operating the computer processor for outputting value accumulation- and reward availability-related

data to the subscriber.

67. The method of any one of claims 41 to 66, wherein the data-recording means comprises a wireless transmission-enabled device uniquely associated with the subscriber, said device having means for capturing and communicating said travel behavior-related data to said computer processor.

68. The method of claim 67, comprising operating the wireless transmission-enabled device according to a short range wireless transmission standard.

69. The method of claim 67 or claim 68, wherein the subscriber-associated device has on board sufficient computational capacity to store data relating to the subscriber's travel events and data relating to reward eligibility criteria and to determine the subscriber's eligibility for a reward.

70. The method of any one of claims 41 to 69, comprising the step of operating the computer processor to identify conformance by the subscriber to a pattern of location change behavior.

71. The method of any one of claims 41 to 70, wherein the data-recording means comprises a sensor for sensing the subscriber's activity.

72. The method of any one of claims 41 to 71, wherein the data-recording means comprises location-determining means operable for locating the subscriber at intervals.

73. The method of any one of claims 41 to 72, wherein the data-recording means comprises location-determining means operable for locating the subscriber in real time.

74. The method of any one of claims 41 to 73, wherein the data-recording means comprises location-determining means comprising triangulation calculation means configured to process data from signal-transmitting apparatus selected from satellite-mounted apparatus, terrestrially-located apparatus, and a combination thereof.

75. The method of any one of claims 41 to 74, wherein the data-recording means is configured for automatic activation.

76. The method of any one of claims 41 to 75, comprising setting a particular time period during which operation of the data-recording means is not permitted.

77. The method of any one of claims 41 to 76, wherein the data-recording means comprises a transponder.

78. The method of any one of claims 41 to 77, comprising utilizing a plurality of data-recording means in a communications network.

79. The method of any one of claims 41 to 78, including configuring an account for a subscriber comprising a group of individuals whose travel behavior data is being gathered.

80. The method of any one of claims 41 to 79, comprising programming and operating the computer processor for exchanging data with a database relating to any one or more of transportation, ticketing, events, sponsorships, institutions, private enterprise and public authorities.

81. The method of any one of claims 41 to 80, comprising the step of electronically activating a reward following the subscriber being determined eligible for said reward.