What is claimed is:

1. A method of optimizing vehicular traffic across a defined area comprising the steps of:
   - interfacing to each available traffic regulation/guidance and monitoring mechanism;
   - monitoring traffic flow characteristics across the entire defined area, in real-time;
   - analyzing the monitored traffic flow characteristics to predict and/or detect traffic congestion and identify avoidable time delays;
   - determining functions required to be performed by a selected one or more of said traffic regulation/guidance mechanisms to avoid or mitigate traffic congestion and/or minimize travel delays; and
   - causing the selected traffic regulation/guidance mechanisms to implement the determined functions, wherein said monitoring traffic flow characteristics comprises physically positioning one or more dynamically relocate-able traffic sensing mechanisms.

2. The method as claimed in claim 1, wherein the interfacing to available traffic regulation/guidance and monitoring mechanisms comprises operatively coupling to each accessible existing mechanism as well as every new mechanism provided for use based on its location, and operational specifications.

3. The method as claimed in claim 2, wherein the interfacing to a traffic monitoring mechanism comprises an arrangement to obtain real-time traffic data from it and the ability to define its operational parameters wherever possible, and in the case of a traffic control/guidance mechanism comprises the arrangement to cause it to perform any function within its capabilities.

4. The method as claimed in claim 1, wherein the monitoring of traffic flow characteristics comprises the dynamic selection, deployment and obtaining of real-time data from the available monitoring mechanisms.

5. The method as claimed in claim 1, wherein the analysis of monitored traffic flow characteristics comprises processing the monitored flow characteristics using a combination of one or more known and/or heuristic and/or artificial intelligence techniques including reinforced learning, to detect and predict traffic congestion and avoidable time delays.

6. The method as claimed in claim 1, wherein the determining functions required to be performed is achieved by applying a combination of one or more known and/or heuristic and/or artificial intelligence techniques including reinforced learning to identify the actions required to prevent the occurrence of predicted traffic congestion as well as the corrective measures needed to minimize the impact of detected traffic congestion and avoid time delays.

7. The method as claimed in claim 1, wherein the causing selected traffic regulation/guidance mechanisms by defining and issuing control signals to each such mechanism/device in accordance with the identified individual operational characteristics and capabilities, in a manner that causes implementation of the determined function.

8. The method as claimed in claim 1, wherein the monitoring of traffic flow characteristics comprises analysis of real-time video from a set of one or more platforms located and equipped to provide continuous and unobstructed views of all vehicles in the entire assigned area.

9. The method as claimed in claim 8, wherein the location of the platform is at a height that avoids the shadowing effect of large vehicles on smaller vehicles and adjustable zoom capabilities in the video capture devices enable clear identification of global and selected vehicle trajectories.

10. The method as claimed in claim 1, wherein said monitoring includes:
    - destination parameters and journey requirements from one or more vehicles that elect to register for guidance services;
    - incorporating the destination parameters and journey requirements into the analyzing process;

- tracking the location and trajectory of each registered vehicle present in the monitored traffic flow; and
- guiding each said registered vehicle in scheduling its journey and reaching its destination in accordance with the requirements.

11. The method as claimed in claim 1, wherein the analysis of traffic flow characteristics incorporates the additional requirements imposed by expected/unexpected weather conditions, repair/construction work, natural emergencies, social events as well as other occurrences requiring the priority movement of specified vehicles.

12. The method as claimed in claim 11, wherein the additional requirements include travel planning and route guidance of vehicles that have registered to receive such a service and have parameters and requirements for their travel which are specified explicitly or are derived from observed patterns of past journeys.

13. A vehicular traffic management system for a defined area comprising:
- one or more monitoring mechanisms providing real-time data of traffic flow characteristics across the entire defined area;
- one or more traffic regulating/guiding mechanisms each with a defined interface for invoking any or more of a defined set of functional capabilities positioned at known locations in the defined area;
- a set of one or more analytical engines configured to predict and/or detect traffic congestion and traffic delays based on real time data obtained from each of the monitoring mechanisms;
- a set of one or more evaluation engines configured to determine functions required to be performed by a selected one or more of the available traffic regulating/guiding mechanisms in the defined area to avoid or mitigate the predicted and/or detected traffic congestion and to minimize travel delays; and
- a supervisory mechanism that operates the defined interface of each of the selected traffic regulating/guiding mechanisms and causes them to implement the determined functions, wherein the traffic regulating mechanisms include one or more vehicle-actuated isolated junction systems.

14. The vehicular traffic management system as claimed in claim 13, wherein the monitoring mechanisms include crowd-sourced vehicle location and movement data obtained from a plurality of vehicles in the defined area.

15. The vehicular traffic management system as claimed in claim 13, wherein the monitoring mechanisms include one or more tethered or moveable aerial platforms capable of providing real-time images and/or video of one or more regions in the defined area.

16. The vehicular traffic management system as claimed in claim 15, wherein one or more of the tethered or moveable aerial platforms are controllable in terms of the image capture and/or video functions.

17. The vehicular traffic management system as claimed in claim 15, wherein one or more of the moveable aerial platforms are controllable in terms of position as well as image capture and/or video streaming functions.

18. The vehicular traffic management system as claimed in claim 13, wherein one or more of the analytical engines utilize heuristic techniques and/or one or more of the known artificial intelligence methods, including Reinforced Learning.

19. The vehicular traffic management system as claimed in claim 13, wherein one or more of the evaluation engines employ one or more of the known artificial intelligence methods, including Reinforced Learning.

20. The vehicular traffic management system as claimed in claim 13, wherein one or more of the analytical engines and/or evaluation engines and/or supervisory mechanisms are implemented as distributed systems.

21. A vehicular traffic management system for a defined area comprising:
    - one or more monitoring mechanisms providing real-time data of traffic flow characteristics across the entire defined area;
    - one or more traffic regulating/guiding mechanisms each with a defined interface for invoking any or more of a defined set of functional capabilities positioned at known locations in the defined area;

- a set of one or more analytical engines configured to predict and/or detect traffic congestion and traffic delays based on real time data obtained from each of the monitoring mechanisms;
- a set of one or more evaluation engines configured to determine functions required to be performed by a selected one or more of the available traffic regulating/guiding mechanisms in the defined area to avoid or mitigate the predicted and/or detected traffic congestion and to minimize travel delays; and
- a supervisory mechanism that operates the defined interface of each of the selected traffic regulating/guiding mechanisms and causes them to implement the determined functions, wherein the traffic regulating mechanisms include one or more vehicle-actuated coordinated junction systems.