Invention

An evacuated tube transport (ETT) system comprises: Evacuated tubes along a travel route for both directions; capsules to transport occupants or cargo within the tubes; equipment providing continuous transfer to tube while preserving vacuum; capsule suspension that substantially eliminates drag; coordinated acceleration device; energy recovery braking; vibration control structures; tube alignment devices; automatic capsule switch and synchronization (885); automated operation, inspection, and maintenance; methods of construction; redundant data (835), safety and security systems. Low and high technology embodiments are comprehensively disclosed. Possibilities include replacement or augmentation of: vehicles, power lines, energy storage devices, power plants, heaters, air conditioning, water and sewer pipes, and communication cables and satellites. ETT provides continuous, environmentally benign, sustainable, local and international travel. Aerodynamic limitations, weather exposure, and obstacles are essentially eliminated; The system enables a quantum improvement in safety, speed and efficiency.