Bulk Data Transfer
- Low priority Big Data traffic.
- Upload Vehicle’s sensor measurements.
- Upload Massive CCTV frames of public transportation.

Design Framework
- Sessions “surviving” limited connectivity, frequent disruptions.
- Avoid overloading cellular Network and congested RSUs.
- Applications remain transparent to disruptions!

Transport in DTN
- Breaks end-to-end connectivity into multiple reliable hops.
- Sessions surviving disruptions in highly dynamic topologies.
- Application transparent to intermittent connectivity.
- Avoid congestion control, connection establishment signaling.
- Transfer pure data when contact appears.
- Avoid redundant retransmissions (custody transfer, reactive fragmentation, adjustments to Retransmission Timers).
- Flexible Architecture for interconnecting Heterogeneous Networks.

Applicability:
- Lack of End-to-End connectivity.
- Large propagation delays and/or frequent, long disruptions.
- Error-prone channels.
- Asymmetric data rates (uplink vs downlink).

Multi-hop Opportunistic Contacts

Heterogeneous Connectivity
- “Wiser” forwarding decisions thanks to LTE.
- Positive impact on redundant transmissions and overload avoidance.
- Achieve better bandwidth exploitation.

Design Issues
- Keep Congestion maps updated.
- Overhead?
- Resource allocation: Distributed or central?
- Criteria for choosing among: storing, forwarding (V2V), or even LTE upload when local RSU is congested.

Mobility Support
- Opportunistic Contacts: No knowledge of contacts duration; Use Reactive fragmentation in cases of partial Bundle transfer.
- Predicted contacts: Extract contact duration from localization information exchange (position, velocity, direction, ...); Proactively fragment Bundles to “fit” in this duration.
- LTE assistance: Broadcasts regional RSUs’ congestion maps to assist Bundle forwarding.