Smart Cities & Urban Air Mobility
ENAC + LiU collaboration

- Visits in both directions by students (undergraduate, graduate, PhD) and professors
- Joint publications in top international venues
- Collaborating on:
  - Unmanned aerial vehicles in Smart City airspace
  - Performance-based navigation for drones
  - Risk assessment for urban air transport
  - Design of economic mechanisms for Smart City operations
  - Transport subsidising
But...
But…
No funding :(
Urban Air Mobility, anyone?

Artwork by NASA

Phased Research Approach

**Phase 1 – Near-Term**
Mapping standard mission profiles to key risk variables

**Phase 2 – Mid-Term**
Planned mission profiles: Incorporating tools into flight planning to minimize risk

**Phase 3 – Far-Term**
Active mission profiles: Using enhanced automation to identify flight risks in real-time

Breunig, "A risk-based approach for sUAS airworthiness and safety certification." ICNS17
**Airspace Availability:** where can the vehicles fly?

**TOLA:** from/to where can the vehicles fly?

**Network design:** how to connect air to ground, what are the capacities?

Proposed joint research (funding opportunities sought)
Who if not leading Swedish and French air traffic researchers?

Academic Excellence in ATM (and UTM) Research group