• Julius Caeser attempted to manage urban logistics:
  “No heavy goods vehicles in Rome during the daytime except for the purposes of temple building or repair, or for removing demolition waste”
  (M Beard, SPQR 2015)
• Who drives innovation (and why?)
Freight and logistics fundamentals

Commercial activity: Power of procurement
Influencing the last mile

- Commodity supply chains
  - ‘Bread, beer, blood’
  - Volume/frequency

- Existing regulations: local, national, international
  - Vehicle – weights, dimensions, specifications (CAZ, DVS)
  - Driver – licencing, WTD
  - Operation – noise, health and safety (load and workers)
  - Kerbside – time, location, conflicting uses

- Locations
  - Production site, warehouse(s) and customer
Drivers of change

• Logistics activity
  • Seasonality
  • Customer trends
  • Retail led
    • Supermarkets, Amazon, ‘instant’ grocery
    • Delivery speed and ‘free delivery’
  • Cost v service (productivity and journey time reliability)
  • NB: Traditional operators v venture capital

• Property sector
  • Investor appetite (commercial v residential v industrial)
  • Leases/rental
  • Property supply
  • Industrial/logistics land availability
Public sector role

• Policy, strategy and regulation
  • People AND goods
  • ‘Consolidation centres and cargo bikes’ - define problem first
  • Avoid, shift, improve

• Land zoning, planning and development

• Control v responsibility
  • Operate or manage consolidated freight?

• Procurement (public sector 14% GDP in the EU)

• Behaviour change?

- Technology  + Academia