Hierarchical Taxonomy of Non-Empirical AI in Urban Studies Research
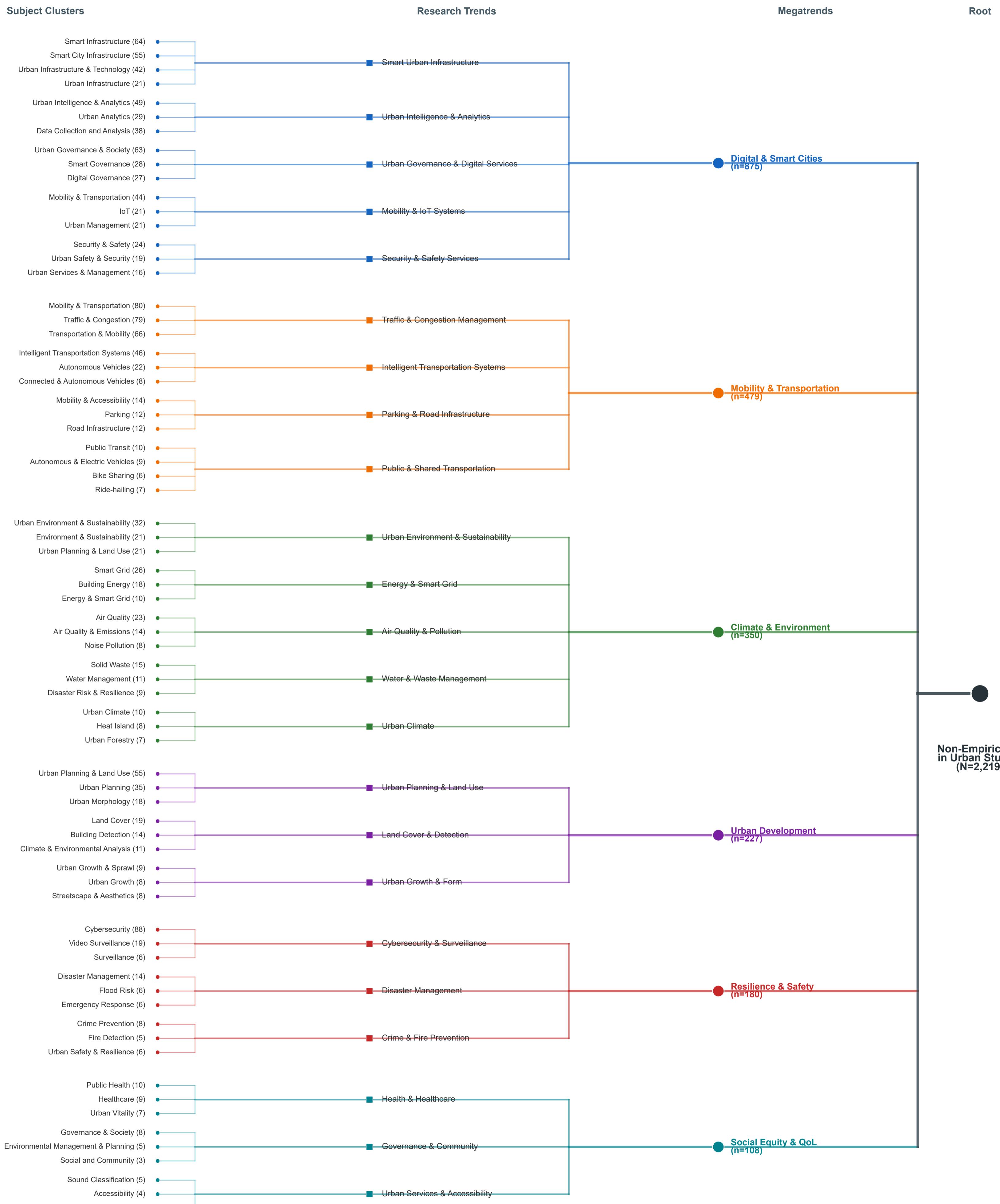
Subject Clusters → Research Trends → Megatrends → Root

Subject Clusters	Research Trends	Megatrends	Root

Digital & Smart Cities (n=875)

Smart Urban Infrastructure
- Smart Infrastructure (64)
- Smart City Infrastructure (55)
- Urban Infrastructure & Technology (42)
- Urban Infrastructure (21)

Urban Intelligence & Analytics
- Urban Intelligence & Analytics (49)
- Urban Analytics (29)
- Data Collection and Analysis (38)

Urban Governance & Digital Services
- Urban Governance & Society (63)
- Smart Governance (28)
- Digital Governance (27)

Mobility & IoT Systems
- Mobility & Transportation (44)
- IoT (21)
- Urban Management (21)

Security & Safety Services
- Security & Safety (24)
- Urban Safety & Security (19)
- Urban Services & Management (16)

Mobility & Transportation (n=479)

Traffic & Congestion Management
- Mobility & Transportation (80)
- Traffic & Congestion (79)
- Transportation & Mobility (66)

Intelligent Transportation Systems
- Intelligent Transportation Systems (46)
- Autonomous Vehicles (22)
- Connected & Autonomous Vehicles (8)

Parking & Road Infrastructure
- Mobility & Accessibility (14)
- Parking (12)
- Road Infrastructure (12)

Public & Shared Transportation
- Public Transit (10)
- Autonomous & Electric Vehicles (9)
- Bike Sharing (6)
- Ride-hailing (7)

Climate & Environment (n=350)

Urban Environment & Sustainability
- Urban Environment & Sustainability (32)
- Environment & Sustainability (21)
- Urban Planning & Land Use (21)

Energy & Smart Grid
- Smart Grid (26)
- Building Energy (18)
- Energy & Smart Grid (10)

Air Quality & Pollution
- Air Quality (23)
- Air Quality & Emissions (14)
- Noise Pollution (8)

Water & Waste Management
- Solid Waste (15)
- Water Management (11)
- Disaster Risk & Resilience (9)

Urban Climate
- Urban Climate (10)
- Heat Island (8)
- Urban Forestry (7)

Urban Development (n=227)

Urban Planning & Land Use
- Urban Planning & Land Use (55)
- Urban Planning (35)
- Urban Morphology (18)

Land Cover & Detection
- Land Cover (19)
- Building Detection (14)
- Climate & Environmental Analysis (11)

Urban Growth & Form
- Urban Growth & Sprawl (9)
- Urban Growth (8)
- Streetscape & Aesthetics (8)

Resilience & Safety (n=180)

Cybersecurity & Surveillance
- Cybersecurity (88)
- Video Surveillance (19)
- Surveillance (6)

Disaster Management
- Disaster Management (14)
- Flood Risk (6)
- Emergency Response (6)

Crime & Fire Prevention
- Crime Prevention (8)
- Fire Detection (5)
- Urban Safety & Resilience (6)

Social Equity & QoL (n=108)

Health & Healthcare
- Public Health (10)
- Healthcare (9)
- Urban Vitality (7)

Governance & Community
- Governance & Society (8)
- Environmental Management & Planning (5)
- Social and Community (3)

Urban Services & Accessibility
- Sound Classification (5)
- Accessibility (4)
- Tourism (3)

Non-Empirical AI in Urban Studies (N=2,219)

Legend:
- Digital & Smart Cities (39.4%)
- Mobility & Transport. (21.6%)
- Climate & Environment (15.8%)
- Urban Development (10.2%)
- Resilience & Safety (8.1%)
- Social Equity & QoL (4.9%)