Location Powers: Data Science

Session 4 Summary Outcomes/Applications

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Session 4: Outcomes/Applications

- Moderator: Jeremy Morley, Ordnance Survey UK

- Rapporteur: Ajay K Gupta, chair of OGC Health WG

- Wendy Martinez Presentation: Integration of Geospatial Data: Examples and Implications

- Panel on Outcomes :
  - Regan Smyth, NatureServe - Perspective: The Age of Precision Conservation: Applying AI and Collaborative Science to Prevent Species Extinctions
  - Megan Furman, Defense Digital Service, OSD
  - Steven Ward, The Climate Corporation
  - Edward Strocko, USDOT Bureau of Transportation Statistics

- Discussion Groups on Outcomes

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Session 4 – 1. What Works

- Merging *Standardized* Data from Disparate Sources:
  - Government (e.g., BLS, Census, DoT, CDC, Core of Engineers, NASS, FAA, Coast Guard, and many others)
  - Crowd Sourced (e.g., Waze)
  - Field Collected (e.g., NatureServe)
  - Private (e.g., Trucking, Shipping)

- For a broad spectrum of applications:
  - Road, Rail Safety
  - Emergency Management
  - Tracking of Contaminants
  - Natural Resource Management
  - Logistics

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Session 4 – 2. Open Questions

- Error modeling, bias

- Human knowledge & involvement
  - The calibrated "eyeball" test
  - The "sniff" test

- Data retention, curation, medium, stewardship

- Ethics, privacy

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- Need for more standards, data & collection, balanced against potential risks to innovation
  - Right Standards at the Right Time
- Model validity
- Communication on Models, Machine Learning
  - Not a "Human Replacement" but a "Force Multiplier"

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