The Ultimate Urban Circulator

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Florida Autonomous Vehicle Summit

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Automated Skyway Express

» 2.5 mile, bi-directional system
» 8 Stations
» Elevated guidebeam
» 6-8 minute headways
» 5000 trips on average weekday
» 6 am to 9 pm weekdays and special events
» Vehicles past midlife
» Structure and vehicles have remaining useful life
Automated Skyway Express

» Benefits:
  ▪ Speed
  ▪ Reliability
  ▪ Capacity
  ▪ Connectivity with fixed route bus

» Challenges:
  ▪ Vehicle obsolescence
  ▪ Doesn’t reach major existing and planned development
    o Cost and intrusiveness/feasibility of extensions
  ▪ Frequency
  ▪ Cost effectiveness (high cost per revenue mile)
A Vision for the Future

Insert Visualization
Benefits of U²C with AV Technology

» Uses existing elevated structure
  - Maintains high level of reliability in urban core
  - Ideal platform to deploy AV technology

» Flexibility
  - High frequency or high capacity
  - Elevated or at-grade

» Feasibility of extensions
  - Context Sensitive

» Cost effectiveness
  - Stations, guideway, vehicles and O&M less costly than current system

» Opportunity for future expansion and innovation
Autonomous Vehicle Examples

» Easymile
» Local Motors
» Meridian
» Auro
» Navya
» Ultra Global
» Woojin
» 2getthere
Key Considerations

» Conduct structural analysis
  ▪ Evaluate guidebeam removal
  ▪ Create new running surface
  ▪ Assess wall requirements on elevated structure

» Determine station modifications required

» Options for elevated-to-ground transition

» Identify dedicated lane opportunities

» Vehicle and operating/supervisory system

» Organizational management/capacity building

» Project delivery and funding strategy

» Applicability beyond U²C Program
Next Steps

» AV pilot and test track
» Complete Structural Assessment
» Transit Concepts and Alternatives Review (TCAR) Study
» Funding and project delivery plan
JTA AV Test Track

- December launch with Transdev/EasyMile
- Partner coordination -- City, Sports Management Group, Jacksonville Sheriff’s Office and Jaguars
- Can test various vehicles and explore application in pilots
- Gain public acceptance of technology
Funding and Project Delivery

- P3 Opportunity
- Potential Phasing Approach
- Innovative Financing/Funding
- Public and Private Sector Partners