



Miami-Dade Transportation
Planning Organization

IMPACT OF FUTURE TECHNOLOGY IN THE 2045 LRTP

FINAL REPORT – June, 2017
THE CORRADINO GROUP

APPENDIX A *Glossary of Terms*



A

AAA – American Automobile Association

AAAFTS – AAA Foundation for Traffic Safety

AASHTO – American Association of State Highway and Transportation Officials

ACC – Adaptive Cruise Control

ADA – Americans with Disabilities Act

AGV – Automated Guided Vehicle

AI – Artificial Intelligence

AINS – Autonomous Intelligent Network and Systems (initiative)

ANS – Autonomous Navigation System

APC – Automated Passenger Counting

APTA – American Public Transportation Association

ARPA – Advanced Research Projects Agency

ARTBA – American Road and Transportation Builders Association

ATD – Advanced Technology Demonstration

AV – Autonomous Vehicles

AVL – Automatic Vehicle Location

B

BRT – Bus Rapid Transit

BSP – Bus Signal Priority

BTS – Bureau of Transportation Statistics

C

CAFÉ – Corporate Average Fuel Economy

CAIT – Center for Advanced Infrastructure and Transportation

CFIRE – National Center for Freight and Infrastructure Research and Education

CIFTS – Center for Intermodal Freight Transportation Studies

CMAQ – Congestion Mitigation and Air Quality Improvement

CMS – Center for Multimodal Solutions for Congestion Mitigation

CO₂ – Carbon Dioxide

CTIS – Center for Transportation Infrastructure and Safety

CV – Connected Vehicles

CWS – Collision Warning System

D

DEER – Driving Evaluation, Education, and Research Center

DMV – Department of Motor Vehicles

DOT – Department of Transportation

DSRC – Dedicated Short-range Communications

E

EDR – Event Data Recorder

EHF – Extremely High Frequency

ELINT – Electronic Intelligence

EMC – Electromagnetic Compatibility

EMS – Emergency Medical Services

EPA – U.S. Environmental Protection Agency

EV – Electric Vehicles

F

FCC – Federal Communications Commission

FDOT – Florida Department of Transportation

FHWA – Federal Highway Administration

FMVSS – Federal Motor Vehicle Safety Standard

FTA – Federal Transit Administration

G

GBS – Global Broadcast System

GEOS – Geosynchronous Earth Orbit Satellite

GHG – Greenhouse Gas

GIFT – Geospatial Intermodal Freight Transportation

GIG – Global Information Grid

GIG-BE – Global Information Grid-Bandwidth Expansion

GIS – Geographic Information System

GPS – Global Positioning System

GREET – Greenhouse Gases, Regulated Emissions, and Energy Use in Transportation

H

HMI – Human Machine Interface

HOT – High-Occupancy Toll

HOV – High-Occupancy Vehicle

I

ICE – In-Car Entertainment (Infotainment)



IIHS – Insurance Institute for Highway Safety

IoT – Internet of Things

IP – Internet Protocol

ISO – International Organization for Standardization

ITI – Intermodal Transportation Institute

ITS – intelligent Transportation Systems

ITS America – Intelligent Transportation Society of America

J

JWICS – Joint Worldwide Intelligence Communications System

K

Kbps – Kilobits per second

kWh – kilowatt-hours

L

LADAR – Laser Detection and Ranging

LIDAR – Light Detection and Ranging

LOA – Level of Autonomy

LOS – Line of Sight

LRT – Light Rail Transit

LTA – Left-turn Assist

M

MARS – Mobile Autonomous Robot Software

MATC – Mid-America Transportation Center

METRANS – National Center for Metropolitan Transportation Research

MHz – Megahertz

MISTI – Materials in Sustainable Transportation Infrastructure

MIT – Massachusetts Institute of Technology

MMS – Mission Management System

MPG – Miles per Gallon

MPH – Miles per Hour

MPO – Metropolitan Planning Organization

MTC – Midwest Transportation Consortium

N

NASA – National Aeronautics and Space Administration

NCHRP – National Cooperative Highway Research Program

NCIT – National Center for Intermodal Transportation

NCTR – National Center for Transit Research

NHTSA – National Highway Traffic Safety Administration

NIATT – *National Institute for Advanced Transportation Technology*

NOAA – *National Oceanic and Atmospheric Administration*

NRC – *National Research Council*

NTAD – *National Transportation Atlas Database*

NTC – *National Transportation Center*

NTIA – *National Telecommunications and Information Agency*

NTSB – *National Transportation Safety Board*

O

O&S – *Operations and Support*

OBU – *On-Board Unit*

OCU – *Operator Control Unit*

OEM – *Original Equipment Manufacturer*

P

PCBs – *Polychlorinated Biphenyls*

Perceptor – *Perception for Off-road Robotics*

PHEV – *Plug-in Hybrid Electric Vehicle*

R

R&D – *Research and Development*

RF – *Radio Frequency*

RFID – *Radio Frequency Identification*

ROV – *Remotely Operated Vehicle*

S

S&T – *Science and Technology*

SAE – *Society of Automotive Engineers*

SATCOM – *Satellite Communications*

SAVs – *Shared Autonomous Vehicles*

SHF – *Super-high Frequency*

SLAM – *Simultaneous Localization and Mapping*

SRS – *Standardized Robotics System*

T

TAD – *Travel Assistant Device*

TCA – *Transformational Communications Architecture*

TDM – *Transportation Demand Management*

TOC – *Traffic Operations Center*

TOM – *Transportation Demand Management*

TRB – *Transportation Research Board*

TSA – *Transportation Security Administration*

TSP – *Transit Signal Priority*

TPO – *Transportation Planning Organization*

TTI – *Texas Transportation Institute*

U

UAV – *Unmanned Aerial Vehicle*

UHF – *Ultra High Frequency*

UMTRI – *University of Michigan Transportation Institute*

USDOT – *U.S. Department of Transportation*

UTC – *University Transportation Center*

UTCM – *University Transportation Center for Mobility*

V

V/C – *Volume to Capacity*

V2I – *Vehicle to Infrastructure*

V2V – *Vehicle to Vehicle*

V2X – *Vehicle to Technology*

VHF – *Very High Frequency*

VIN – *Vehicle Identification Number*

VMS – *Vehicle Management System*

VMT – *Vehicle Miles Traveled*

W

WNW – *Wideband Network Wave Form*

X

XUV – *Experimental Unmanned Vehicle*





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