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Robert G. Schiffer, AICP, FPC President
Principal Transportation Planner/Modeler

PROFESSIONAL BACKGROUND

Mr. Schiffer is a proven leader in the transportation planning community. He has logged countless volunteer hours for the Transportation Research Board (TRB), the Institute of Transportation Engineers (ITE), and the American Planning Association (APA). His experience encompasses transportation planning studies in 28 states and commonwealths for national, statewide, regional, municipal, subarea, and private sector clients. He has worked on 35 MPO long-range transportation plans, over 30 subarea transportation plans, more than 50 travel demand model updates, and numerous studies of travel patterns and behaviors. *Rob also serves as National Practice Leader in Travel Demand Forecasting for Metro Analytics.*

TRAVEL DEMAND MODELING/ANALYSIS OF TRAVEL PATTERNS

FHWA Traveler Behavior and Census Transportation Planning Products (CTPP) Technical and Administrative Support – Project Manager on FHWA task order providing technical assistance and administrative support for the CTPP program to the FHWA Office of Planning. Tasks include developing data tabulations and profiles; delivering technical assistance on traveler behavior datasets; providing administrative support for the CTPP program to FHWA Planning; attending and preparing minutes for quarterly meetings of the AASHTO Census Transportation Solutions (ACTS) Board; and producing a newsletter 3 times per year on CTPP issues for distribution to MPOs, State DOTs, FHWA field office and others.

Iowa Statewide Planning Model Update, Iowa Statewide – Project Manager on an update of the Iowa Statewide Travel Model. The first phase of this project was leading a workshop on the model's strengths, weaknesses, opportunities, and threats (SWOT). He subsequently used the SWOT assessment to scope out, recommend, budget, and schedule the model update. He led the addition of new model features, an updated base year model validation, and year 2050 traffic forecasts.

Travel Demand Model Calibration/Validation, St. Cloud, MN – Subconsultant Project Manager on calibrating and validating the St. Cloud travel demand forecasting model. This project builds on a previous model improvement project led by Mr. Schiffer focused on a new model structure, assumptions, and file formats. This study involves implementing previous model improvements into a new base year travel demand model, calibrating the model to a recently completed household travel survey and using best practices for model validation. A particular challenge is addressing variations in pre-, post-, and active COVID data used in the model.

I-75 Commercial Vehicle Lanes (CVL) Impact Study, McDonough, GA – Subconsultant leading all travel demand modeling on a study of planned truck only lanes on I-75 south of Atlanta. Mr. Schiffer generated a new Cube application based on the Atlanta Regional Commission (ARC) model. His set of 40 Cube application steps are focused solely on vehicle components of the model, including 4 truck purposes and 3 external passenger trip purposes. This model version uses a set of 2050 external trip adjustment factors to match 2048 traffic estimates from a previous GDOT CVL study.

Montgomery 2022-2027 Transit Development Plan Update, Montgomery, AL – Subconsultant Project Manager on an update to the M-Transit TDP. His efforts on this project are focused on implementing a transit onboard survey, along with summarizing demographic data and relevant metrics from the region's travel demand model that he recently updated for the Montgomery MPO. For the onboard survey, he developed a sampling plan, provided input on the survey instrument, conducted field observations, and summarized survey findings.

Huntsville MPO Regional Commuter Study, Huntsville, AL – Project Manager for a study focused on identifying regional commuting patterns in northern Alabama and southern Tennessee, using big data O/D analyses with a special emphasis on 40,000 employees of the Redstone Arsenal. The Arsenal is a garrison for the US Army Materiel Command, Army's Aviation

EDUCATION

- M.S., Urban and Regional Planning, Transportation Specialization
Florida State University, 1984
- B.A., Geography and Urban Studies,
Memphis State University, 1982
(now University of Memphis)

CERTIFICATIONS

- American Institute of Certified Planners, Since 1987, #040968

EXPERIENCE

- 40 years, transportation planning & travel demand modeling/forecasting
- ✓ 6 years at FuturePlan Consulting
- ✓ 34 years at other consulting firms
- ✓ Located in Tallahassee, Florida

SPECIALIZATIONS

- travel demand modeling, long-range transportation plans, travel behavior & origin-destination travel surveys, site impact traffic studies, forecasting corridor multi-modal travel demand, freight studies.

and Missile Command, the Missile Defense Agency of the Department of Defense, and NASA's Marshall Space Flight Center. Big data analysis included commute patterns for different time periods, truck origins and destinations, and a pre- and post-COVID 19 assessment of trip making and temporal distribution patterns.

St. Cloud APO Travel Demand Model Improvements, St. Cloud, MN – Project Manager on an update of the St. Cloud Area Planning Organization travel demand forecasting model. Tasks included updating traffic analysis zones; external trips; highway networks; trip generation, distribution, and assignment; post-processing; and model validation. External trips were revised to reflect big data on O/D patterns. Trip generation models were modified from an ITE vehicle trip approach to person trips from NHTS 2017, with the addition of new socioeconomic attributes, a new auto occupancy step, and time-of-day model.

Fayetteville-Raleigh Passenger Rail Feasibility Study, Raleigh, NC – Provided guidance on use of the Capital Area MPO model in conjunction with a direct demand model to forecast transit ridership for a proposed future intercity rail corridor connecting Raleigh and Fayetteville, North Carolina.

Walton County Mobility Plan, DeFuniak Springs, FL – Provided travel demand and travel pattern analyses for preparation of a mobility plan and fee for fast growing Walton County in Northwest Florida. He led travel demand modeling and travel behavior analysis using big data on trip O/D patterns along with the Northwest Florida Regional Planning Model.

RECENT MPO LONG-RANGE TRANSPORTATION PLANS

Valdosta-Lowndes MPO 2050 MTP, Valdosta, GA – Client Project Manager for the 2050 update of the Metropolitan Transportation Plan (MTP) for the Valdosta-Lowndes MPO (VLMPO). He is overseeing all aspects of this plan update, including existing multi-modal conditions, stakeholder outreach, equity analyses, base and horizon year socioeconomic data, travel demand model applications, identification of 2050 transportation project needs, and prioritization of 2050 projects.

Dougherty Area Regional Transportation Study 2050 MTP, Albany, GA – Supporting the 2050 update of the Metropolitan Transportation Plan (MTP) for the Albany MPO, officially designated as the Dougherty Area Regional Transportation Study (DARTS). He is leading the refinement of base year 2020 and horizon year 2050 socio-economic data for the two-county MPO region, overseeing travel demand model applications, and supporting the 2050 needs assessment.

Montgomery MPO 2045 LRTP, Montgomery-Prattville, AL – Primary subconsultant on the Montgomery MPO's 2045 Long-Range Transportation Plan Update. His responsibilities included leading development and validation of a Cube Voyager transportation planning model, incorporating big data on origin/destination (O/D) patterns, applying the model for future conditions, recommending needed future transportation projects and evaluating project performance for prioritization.

Eastern Shore MPO 2045 LRTP, Fairhope-Daphne-Spanish Fort, AL – Primary subconsultant on the Eastern Shore (AL) MPO's 2045 Long-Range Transportation Plan Update. His responsibilities included support on socioeconomic data development, leading an update and validation of the Cube Voyager transportation planning model, incorporating big data on O/D patterns, applying the model for future conditions, recommending needed future transportation projects and evaluating project performance.

Huntsville MPO 2045 LRTP, Huntsville, AL – Sole subconsultant on the Huntsville Area MPO's 2045 Update to their Long-Range Transportation Plan. His responsibilities included updating the Cube Voyager transportation planning model application, refinement and validation of the model, technical support and troubleshooting with MPO staff on use of the model, testing and evaluating long-range transportation projects, and summarizing travel demand metrics.

REGIONAL FREIGHT STUDIES

Albany Regional Freight Profile, Albany, GA – Supported a study to develop a freight profile for the Albany MPO, officially designated as the Dougherty Area Regional Transportation Study. Mr. Schiffer led analysis of truck travel patterns using the Georgia Statewide Model, DARTS MPO model, Census Transportation Planning Products, Freight Analysis Framework, and the Regional Integrated Transportation Information System and its Trip Analytics tool. He also authored much of the study documentation and presented study materials to the MPO's Freight Advisory Committee.

City of Stonecrest Freight Cluster Study, Suburban Atlanta, GA – Supported a study to develop a freight plan for a suburban community east of Atlanta, along the I-20 corridor. He prepared a sub-county truck O/D matrix using the NHTS (National

Household Travel Survey) Origin/Destination beta tool and compared future truck volumes from the Atlanta Regional Commission model, the Georgia Statewide Model, and the Freight Analysis Framework.

Metro-South CID Freight Cluster Study, Suburban Atlanta, GA – Supported a study to develop a freight plan for a Community Improvement District southeast of Atlanta, near the I-285 and I-675 interchange. He assessed alternate big data sources for obtaining truck O/D flows; designed a zone system for data summary; analyzed resulting O/D matrices from ATRI (American Transportation Research Institute); summarized findings; and led desire line mapping of truck flows.

Erie Regional Planning Commission Regional Freight Profile, Sandusky, OH – Supported developing a freight profile for the Erie Regional Planning Commission. Mr. Schiffer led analysis of truck travel patterns using the ERPC MPO model and the Freight Analysis Framework; authored portions of study documentation; and coordinated report production.

North Alabama Regional Council of Governments Inland Port Study, Decatur, AL – Conducted origin-destination analysis using big data to summarize heavy-duty and medium-duty truck travel flows between seven counties and several municipalities in northern Alabama.

RELEVANT TRANSPORTATION RESEARCH EXPERIENCE

NCHRP 08-173 Impacts of E-Commerce on Travel and Land Use – Serving as panelist to review and comment on deliverables from a national research study of transportation and land use impacts from the growth in e-commerce throughout the U.S.

American Planning Association Transportation Planning Division Grant: Comparing Model Forecasts to Traffic Counts, National – Mr. Schiffer received a grant from the APA TPD to compare model forecasts from over 20 years ago (many from Florida studies) to actual recent traffic counts. The goal is to identify how well four-step models estimate traffic growth.

FHWA/TRB Joint Expert Meeting: Emerging Trends, Role of Changing Consumer Preference in Mobility – Served as a panelist for a symposium held at TRB's offices in Washington, DC. Vehicle connectivity, on-demand ride services, shared mobility, and vehicle automation were discussed in terms of travel behavior and travel pattern impacts.

NCHRP 08-122: MPO Strategies for Future Success – Assisted with quality control and document review on this research study designed to help Metropolitan Planning Organizations (MPOs) succeed in the 21st-century. The end product is a comprehensive resource to inform and guide the evolving roles and functions of MPOs.

NCHRP 20-44 Right Sizing Transportation Investments – Helped implement alternate economic forecasts into the Iowa Statewide Travel Analysis Model (iTRAM) for use in testing model sensitivity to alternative economic futures. Tools were also added to compute and map user benefits from transportation strategies in support of updating iTRAM for Iowa DOT.

NCHRP 20-125: Incorporating Resilience in Transportation Networks – Supporting research into using travel demand models to assess the resilience of transportation systems, including assessing failure probability of roads under multiphase events; integrating hazard data and risk models with travel demand models for evacuation planning; probabilistic risk and resilience assessment methodologies for bridges; and accounting for uncertainty in travel models.

NCHRP Project 8-36, Task 89 – Evaluating and Communicating Model Results: Guidebook for Planners – Project Advisor on this report to make the modeling process more understandable to planning practitioners and minimize the potential for misinterpretation, misrepresentation, and misapplication of forecasts.

NCHRP Report 735: Long-Distance and Rural Travel Transferable Parameters – Principal Investigator on this study to develop and document transferable parameters for long-distance and rural trip-making for statewide models. The resulting NCHRP Guidebook serves as a supplement to NCHRP “quick response” guidance on urban model parameters and highlights parameter ranges for rural and long-distance trip-making. The study included extensive analysis using the 2008 National Household Travel Survey, 1998 American Travel Survey, and other sources to document key rural and long-distance travel.

NCHRP Report 716: Travel Demand Forecasting: Parameters and Techniques – Project Advisor on this update to NCHRP 365 that queried 69 MPO models and synthesized a set of transferable model parameters for use when locally specific data are not available for model estimation. The parameters presented in this report, largely based on analysis using the 2008 NHTS, are also useful to practitioners who are modeling urban areas that have local data but wish to check the reasonableness of model parameters estimated from such data.

NCHRP Project 8-36, Task 91: Validation and Sensitivity Considerations for Statewide Models – Principal Investigator on this study focused on establishing validation standards and procedures for statewide models, describing common practices, reasonableness, sensitivity, validation, modal issues, freight integration and integrated transportation/land use models. Documentation on nearly every available statewide model within the U.S. was obtained to identify typical model inputs, outputs, and results.

NCHRP Project 8-36, Task 70: Scoping Study for Statewide Travel Forecasting National Model – As Principal Investigator, Mr. Schiffer prepared specifications for developing a national travel demand forecasting model to assist states in estimating external freight and passenger trip flows for use in statewide models.

TRB Transportation Research Circular E-C075, Statewide Model Peer Exchange – Co-author of this Research Circular that summarized a 2004 Statewide Model Peer Exchange. The Exchange included a series of presentations by different states and consultants that featured each statewide model and discussed how statewide models could be improved in the future. He is now assisting with an updated peer exchange planned for 2022.

CORRIDOR/SUBAREA STUDIES

Cape Coral Multimodal Transportation Master Plan, Cape Coral, FL – The City of Cape Coral Master Plan will result in a list of implementable transportation projects with a 20-year horizon that support people of all ages and abilities. Mr. Schiffer is using the FDOT District One Regional Planning Model (D1RPM) v. 2.0 to provide growth metrics and test scenarios.

Selmon Expressway/US 301 Extension Sketch Level Analysis – Using the Tampa Bay Regional Planning Model (TBRPM) v. 9.3 to estimate future traffic for a planned extension of the Leroy Selmon Expressway to be elevated above the US 301 corridor in southeast Hillsborough County, Florida. These efforts included a subarea validation of the TBRPM using traffic counts on area roadways and adding parallel and intersecting local streets to the model network along with centroid modifications. Iterative model runs were needed to sufficiently enhance model validity in this area. The future build network alternative required recoding sections of US 301 as directional links on either side of the tolled expressway extension, along with ramp connections between at-grade US 301 and the elevated section, and coding toll model assumptions for the new corridor.

I-95/SR 442 Interchange Modification (IMR) Report, New Smyrna Beach, FL – Subconsultant leading subarea validation of the Central Florida Regional Planning Model (CFRPM) for application in traffic forecasting for a proposed IMR along a pair of high growth roadways.

SR 123 Corridor Study, Dothan-Ozark, AL – Subconsultant leading validation of an expanded Southeast Wiregrass Area Metropolitan Planning Organization (SWAMPO) travel demand model for traffic forecasting on a proposed highway expansion study.

Starkey Road Corridor Study – Using the Tampa Bay Regional Planning Model (TBRPM) v. 9.3 to estimate future traffic along the CR 1 corridor in Pinellas County, Florida. These efforts included a subarea validation of the TBRPM using detailed traffic counts on area roadways, adding parallel and intersecting local streets to the model network along with centroid modifications. Iterative model runs were needed to enhance model validity and test future network alternatives.

Madison County Transportation Master Plan, Huntsville, AL – Using 2045 traffic forecasts, identified missing roadway corridor segments that could reduce forecasted congestion in outlying areas. Ran the model for alternative land use scenarios and a scenario with the recommended future roadway connections and produced a variety of 2045 traffic metrics and visuals.

Palm Beach Gardens Mobility Plan and Mobility Fee, Palm Beach Gardens, FL – Conducted subarea model extractions of the Activity-Based Southeast Florida to summarize vehicle-miles traveled and demographic characteristics. Scripting was completed to summarize 2015 and 2045 trip flows for a series of 117 planning districts. StreetLight InSight data were used to summarize current origin/destination patterns among a set of 40 analysis districts and five road impact fee zones.

Treasure Coast Area Mobility Plans, Port St. Lucie and Indiantown, FL – Conducted subarea model extractions of the Activity-Based Treasure Coast Regional Planning Model to summarize vehicle-miles traveled and demographic characteristics. Scripting was completed to summarize 2015 and 2045 trip flows for a series of 27 planning districts in Martin County and 39 districts in St. Lucie County. StreetLight InSight data were used to summarize current origin/destination patterns for a set of 20 analysis districts in Martin County and 32 districts in St. Lucie County.

Alachua County Mobility Plan, Gainesville, FL – Providing travel demand and travel pattern analyses for preparation of a mobility plan and fee for Alachua County in North Central Florida. He is leading travel demand modeling and travel behavior analysis using big data on trip O/D patterns along with the Alachua County Regional Planning Model.

Okaloosa County Mobility Plan, Crestview, FL – Providing travel demand and travel pattern analyses for preparation of a mobility plan and fee for Okaloosa County in Northwest Florida. He is leading travel demand modeling and travel behavior analysis using big data on trip O/D patterns along with the recently updated Northwest Florida Regional Planning Model.

Corridor N Completion Analysis & Impact Study, Meyersdale, PA – For the Southern Alleghenies Planning & Development Commission (SAP&DC), supported use of the Pennsylvania Statewide Travel Forecasting Model to evaluate impacts of constructing the last remaining segments of US 219 in southern Pennsylvania and northern Maryland.

Central Florida Mobility Plans: Longwood, Oviedo and St. Cloud, FL – Mr. Schiffer used the Central Florida Regional Planning Model (CFRPM) v. 7.0 to extract subarea model networks and summarize vehicle-miles traveled (VMT) for the cities of Longwood, Oviedo, and St. Cloud and surrounding highways. The CFRPM was also used to identify key demographic characteristics within these cities for multiple analysis years and surrounding analysis districts for additional summaries.

Avalon Park Traffic Impact Study, Daytona Beach, FL – Reviewed the Avalon Park due diligence work previously prepared by the prime consultant to determine if any issues were overlooked based on model results for internal capture. Specifically, reviewed socioeconomic data inputs for the specific zones associated with this development, evaluated the internal roadway network coding (focusing on the centroid connector coding that could affect network access times internal to the project), and evaluated the resulting trip table to confirm what the CFRPM projected for internal capture.

Olympus Sports & Entertainment Traffic Impact Study, Clermont, FL – Provided travel demand modeling services for a traffic impact study of the proposed Olympus Sports and Entertainment development, to be located along US 27 in Lake County, south of Clermont, Florida. Resulting traffic forecasts were used to identify impacts on existing and proposed future roadway corridors. The project required refinement of the CFRPM and coordination with multiple government agencies and representatives of adjacent properties also planned for future development.

I-70 Rocheport Bridge, Missouri DOT – In support of a successful grant application to finance replacement of the I-70 Rocheport Bridge, used the multi-state Institute for Trade and Transportation Studies (ITTS) Southern Highway Interactive Freight Traffic Model (SHIFT) to estimate vehicle-miles traveled (VMT) with and without this bridge under varying scenarios.

Southwest Florida Mobility Plans: Lake Wales, FL and Sarasota County, FL – Using the D1RPM v. 2.0 to extract subarea model networks, summarize 2015 and 2045 vehicle-miles traveled (VMT) and compute vehicle-miles of capacity for Mobility Plans in Lake Wales and Sarasota County. Lake Wales included analysis of existing and proposed future city limits.

Grissom Parkway PD&E Study, Port St. John, FL – Subconsultant leading travel demand modeling and traffic forecasting on a residential street connecting Cocoa with Titusville, near the Kennedy Space Center. A subarea validation of the Central Florida Regional Planning Model (CFRPM) was conducted to enhance the simulation of available traffic counts prior to forecasting 2045 traffic estimates.

I-95 Maytown Road Interchange Justification Report (IJR), Oak Hill, FL – Subconsultant supporting approval of a proposed new interchange on I-95 in southern Volusia County, Florida. Provided an evaluation of CFRPM forecasts in the vicinity of the interchange and scripted an innovative approach to apply ITE Trip Generation rates to zones located in a large, proposed development adjacent to the interchange. This modification enabled the model to better reflect traffic impact studies.

St. Augustine Mobility Plan and Mobility Fee, St. Augustine, FL – Conducted subarea model extractions of the Northeast Florida Regional Planning (Activity-Based) Model to summarize vehicle-miles traveled and key demographic characteristics within the St. Augustine city limits and surrounding areas of St. Johns County, Florida.

SR 78 Project Development & Environmental (PD&E) Study, North Fort Myers, FL – Subconsultant providing oversight on travel demand modeling and traffic forecasting based on the FDOT District 1 Regional Planning Model (D1RPM).