S. MICHAEL CORLETT

role

Principal of ***Planning Technologies, l.l.c.***

education

Master of Science, Computer Science, University of New Mexico, 1988
Bachelor of Science, Civil Engineering, Northwestern University, 1971

professional experience

Mr. Corlett has 33 years of professional experience in transportation planning, including numerous transit and transportation studies as well as socioeconomic analysis, modeling, and forecasting. Mike is also an accomplished software developer and has been heavily involved with a number of innovative Geographic Information Systems applications. He has extensive expertise in the ESRI GIS product line, including its programming and scripting languages. He also has considerable experience with a variety of programming languages, including VB.NET, Python, Javascript, DHTML, C++, VB/VBA. Since 1996 Mr. Corlett has been the principal partner of planning technologies, a technology firm specializing in the delivery of GIS-solutions for land use and transportation planners.

prior project experiences

MAJOR GIS SYSTEM APPLICATIONS FOR TRANSPORTATION PLANNING & MODELING

- ✓ ***M2Probe:*** Original Principal Developer of ***m2probe*** for the Bernalillo County Public Works Department and other agencies. M2probe is a travel demand forecasting analysis extension to ArcView desktop GIS that facilitates mapping and analysis of forecast studies using the EMME/2 software package. The ArcView extension is heavily used by MPOs in Albuquerque and Phoenix to analyze travel demand forecasts in corridor and transit studies.

- ✓ ***M2Probe Network Editor:*** Principal Developer of ***M2Probe Network Editor***, for the Mid-Region Council of Governments. The network editor is an added plug-in for M2Probe that provides a complete feature-rich editing environment for EMME/2 travel demand networks, all operating on the ArcView 3 desktop GIS platform.

- ✓ ***TRAM: Transportation Accessibility Model:*** Principal developer of the TRAM extension to ArcView desktop GIS. This package generates travel time contours and provides various measures of accessibility via any urban travel mode (auto, bicycle, pedestrian, and transit), working with a regional urban transportation network database. Transit accessibility can be measured according to actual published timetables, thereby accurately reflecting the quality of scheduled connections. For use in Environmental Justice and Title VI reports for the region as well as a wide range of other applications, including the regional Metropolitan Transportation Plan (MTP). Recently played a prominent role in station location studies for the Railrunner extension to Santa Fe.

- ✓ ***Land Use Analysis Model (LAM)***: Principal developer for the GIS based Land Use Analysis Model (LAM) – an urban growth simulation model for creating land use forecasts and socioeconomic projections, principally for transportation models. The model is driven by real estate economics rules and emulates developer decisions, while observing environmental and planning policy constraints. The model has been significantly enhanced in a series of projects over the years, and is the principal forecasting technology in use in Albuquerque and Phoenix, and recently coming on-line in Tucson (Known as "SAM" in Arizona).

- ✓ ***Other Relevant Transportation GIS Implementations:***
  - ❖ *Pedestrian Accessibility Metrics*
  - ❖ *Metropolitan Transportation Plan Automated "Metrics" Package*
  - ❖ *Transit Network Coverage Editor*

TRAVEL DEMAND FORECASTING and RELATED STUDIES

- ✓ ***Albuquerque-Santa Fe Commuter Rail Model:*** Developed the regional commuter rail model to support planning for new commuter rail services in the Albuquerque – Santa Fe regional corridor. This model adapted methods and databases acquired in existing urban models in operation in the Albuquerque metropolitan area (MRCOG) and those in place in the Santa Fe metropolitan area. At the core of the model lies a multinomial mode choice mechanism that addresses HOV as well as commuter rail – the first such model developed for New Mexico.

- ✓ ***Level A Transportation Study for Mesa del Sol:*** Built the study area model (from MRCOG databases and procedures) and responsible for forecasts generated on behalf of circulation and impact studies done for Mesa del Sol.

- ✓ ***Other Relevant Projects***:
  - ❖ *Regional Major Investment Study*, New Mexico State Highway Department
  - ❖ *High Capacity Corridors Transportation Study*, City of Albuquerque Transit Department
  - ❖ *Gibson Corridor East Transportation Investment Study*, City of Albuquerque
  - ❖ *4th Street Corridor Study*, Village of Los Ranchos de Albuquerque
  - ❖ *Level A Transportation Analysis*, Mesa del Sol, for the New Mexico State Land Office
  - ❖ *Development of the Year 2000 "Base" Modeled: MRCOG*
  - ❖ *Oversight Advising Consultant on Travel Demand : MRCOG*
  - ❖ *Implementation of the Albuquerque Area Travel Demand Forecasting Model(1992-95): MRCOG*

OTHER GEOGRAPHIC INFORMATION SYSTEMS PROJECTS

- ❖ *Bernalillo County Public Works Department On-Call Services*:
- ❖ *Automated Mapping System* for the City of Aztec Planning Department, NM;
- ❖ *"True" Street Network Needs Analysis* for the City of Albuquerque GIS Management Committee;
- ❖ *Kirtland Air Force Base General Plan*, for the 377th Civil Engineering Group, United States Air Force, Albuquerque, NM; .
- ❖ *DOT Commercial Vehicle Operation Project*, for the State of Colorado Department of Transportation, Denver, CO;
- ❖ *Parking Management Model*, for the Downtown Fort Worth, Inc., Fort Worth, TX;