Scott Kelley, PE, PTOE
Greenlight Traffic Engineering
Principal/Owner/Co-Founder

Professional Summary

Scott is a registered civil engineer in multiple states, as well as a Professional Traffic Operations Engineer (PTOE). He has 22 years of experience in the areas of traffic engineering planning, safety, design, operations, and maintenance, as well as research, training, and expert witness services for tort liability crash cases. Scott is a creative problem solver with a track record of finding opportunities to provide value to clients.

Scott's experience includes Design Concept Reports (DCRs), traffic impact studies/analysis (TIS/TIA), strategic transportation safety plans (STSPs), road safety audits (RSAs), traffic safety studies, all-way stop-control warrant and traffic signal warrant studies, ADA compliance studies, intersection alternatives analysis, traffic signal timing and progression analysis, traffic simulation and visualization modeling, life-cycle cost analysis, benefit-cost analysis, intersection horizontal geometrics, bike and pedestrian design; traffic control, signing, pavement marking, traffic signal, and lighting design. In addition, Scott has led several large-scale asset management projects that have moved agencies into compliance with federal requirements for various traffic control and pedestrian facilities including signing retroreflectivity, pavement marking retroreflectivity, and pedestrian signal indications.

Experience
Years of Experience: 22
Years with the Firm: 8

Education
BSE, Civil Engineering
Arizona State University, Tempe, AZ, 2003

Registrations
Professional Engineer, Arizona #48269
Professional Engineer, California #73357
Professional Engineer, Colorado #49774
Professional Engineer, Florida #97440
Professional Engineer, Nevada #28679
Professional Engineer, New Mexico #26755
Professional Engineer, North Carolina #49651
Professional Engineer, Pennsylvania #PE096630
Professional Engineer, Texas #148940
Professional Engineer, Utah #13493787-2202
Professional Engineer, West Virginia #24423

Certifications
Professional Traffic Operations Engineer #3230

Memberships
Institute of Transportation Engineers, 2001

Scott has served as a contractor for several local agencies throughout his career. These roles include Acting Assistant City Traffic Engineer for the City of Goodyear and Project Manager for the Arizona Department of Transportation (ADOT) Statewide Project Management Group.

Scott has provided expert witness services to attorneys for cases in Arizona, California, Nevada, New Mexico, Pennsylvania, Texas, and Washington in the areas of traffic and transportation.

Work Experience

Greenlight Traffic Engineering, LLC, 2017-Present

Principal and Co-Founder

Traffic Impact Analysis On-Call, Casa Grande, AZ: Senior Project Manager responsible for oversight of TIA reviews assigned by Casa Grande's City Traffic Engineer. Worked with City staff to identify critical issues on each study; managed Greenlight staff to perform TIA reviews, analysis and calculations spot checks, and recommendations; performed senior review of prepared comments for the City's use. Managed and reviewed 15 TIAs over a 2-year period. TIAs ranged from very small letters to very large, regional developments with 20-year buildouts.

Traffic Impact Analysis Reviewer, Coolidge, AZ: Traffic Engineer for reviewing the Blackwater Convenience Store Traffic Impact Analysis (TIA) as a 3rd Party Reviewer for the City. Reviewed the developer's TIA and provided comments and support to City staff for incorporation into the TIA update.

Traffic Impact Analysis Checklist, Goodyear, AZ: Scott led the development of a checklist intended for use by the City of Goodyear Civil Engineering staff in review of private development traffic impact analyses (TIAs). Project tasks included review of local agency TIA requirements, Goodyear-approved TIAs, sample checklists provided by Goodyear, and checklists developed by other municipal agencies nationally. The checklist was developed to provide a succinct format for reviewers to review several different levels of TIAs (e.g., Category I, II, III, IV) for structure, text, tables, and analysis.

Traffic Impact Analysis for Real Estate Development, Southwestern United States (AZ, CA, CO, NV, NM, TX,): Scott has led and sealed hundreds of TIAs over the course of his career. He has developed TIAs for the various sectors including: multifamily apartments, hotels, industrial, manufacturing, logistics, single-family residential, restaurants, small to very large mixed-use developments, truck stops, warehousing, retail/shopping, among many other uses. Scott has completed or reviewed TIAs in all the states where he is currently licensed as a Professional Engineer.

35th Avenue, I-10 to Camelback Road Design Concept Report, Phoenix, AZ: The City of Phoenix was awarded a $17M BUILD Grant to improve operations and safety, particularly for pedestrians, along this corridor. Greenlight provided 30% design for 3 miles of lighting and ITS, as well as 9 traffic signals and 3 HAWKs. Text for the DCR was also prepared to summarize design elements and identify opportunities and constraints to be considered during final design. In addition, this corridor was evaluated for advanced technology implementation including vehicle to infrastructure, speed harmonization, and adaptive signal control among other applications.

83rd Avenue/Ludlow Drive Traffic Signal, Peoria, AZ: The design of this project included a new traffic signal warranted by a future apartment slated for construction on the east side of 83rd Avenue. The traffic signal work included preliminary coordination with a separate project that was under construction at the 83rd Avenue/Thunderbird Road intersection to ensure that north/south negative left-turn offsets were avoided at the Ludlow Drive intersection. Additional work included utility coordination to avoid overhead power, developing electrical load calculations, an ITS splice diagram, single line diagram, traffic signal, signing, and pavement marking plans, as well as cost estimating.

Jomax Road Design Concept Report, Peoria, AZ: As Project Manager, Scott led the traffic study portion of the DCR and guided staff in performed the traffic analysis. The analysis of the Jomax Road alignment from El Mirage Road to Tierra Del Rio Boulevard was completed in two parts: first the number of through lanes were determined, and second, intersection sizing was determined. In coordination with the City of Peoria and Maricopa Association of Governments (MAG), six different volume scenarios were developed and evaluated for near-term, mid-term and long-term horizons. Using the City's criteria for roadway segment and intersection level of service, Scott and his team developed recommendations for the necessary improvements and implementation timeframes for accommodating future traffic.

75th Avenue / Paradise Lane Intersection Improvements, Peoria, AZ: This traffic signal modification was driven by the construction schedule of an adjacent commercial property. The City advanced the design using their traffic

engineering on-call to construct a new southbound right-turn lane and move a traffic signal pole on the northwest corner. The City also used this design to install a new traffic signal control cabinet and upgrade controller equipment.

Town Center Grid Traffic Signal Optimization Project, Queen Creek, AZ: The Town of Queen Creek (Town) received grant funding through the Maricopa Association of Governments (MAG) to coordinate 15 traffic signals within the Town's Center Grid. Through MAG's Safety and Intelligent Transportation System (ITS) On-Call, Greenlight was selected to complete this important project. Scott led his team in the development of traffic signal coordinated timing plans to progress traffic through the area. Time of day plans were completed for Friday evening, as well as Saturday and Sunday midday peaks for Rittenhouse Road, Ellsworth Loop Road, Ocotillo Road, and Ellsworth Road. Green band for directional and bi-directional travel was achieved on project corridors. In addition to developing the coordinated timing, the Scott and his worked with agency staff to implement timing and confirm that the plans operated as expected. The new plans are already reducing travel time through the corridor, as well as reducing side street delay.

Traffic Operations Equipment RFP, Glendale, AZ: Scott worked with the City of Glendale to develop a list and associated specifications for of over 200 items regularly used for City traffic operations and maintenance. The categories of items included signing, pavement marking, traffic signals, intelligent transportation systems (ITS), and traffic control. In addition to coordination with City traffic staff, Scott worked with the Glendale procurement officer to develop a bidders list and the request for proposal (RFP) to advertise the project.

Amec Foster Wheeler, 2013-2017
Senior Traffic Engineer

Mesa Rail Roundabout Hazard Risk Assessment, Mesa, AZ: Traffic Safety Engineer for the design-level Road Safety Assessment (RSA) and report documentation. A unique roundabout design is planned at the intersection of Main Street and Horne Avenue located on the future light rail line. Valley Metro had concerns regarding the operations of the roundabout during light rail passage and contracted our team of safety and roundabout experts. The team was able to review and prepare a thorough report within a week to keep the project moving forward.

Panoche Valley Solar, Fresno, CA: Traffic Engineer for the design of a traffic control plan to convey large tractor-trailer vehicles across 21 miles of rural 2-lane road. Little Panoche Road is a winding road with degrading pavement and dirt shoulders. It provides 2 access points into the 2,506-acre construction site with several culvert crossings and bridges. The narrow turns required special checks using turn templates for the trucks, as well as the development of special provisions for the use of steel plates at the bridge and culvert crossings to protect the aging structures from the 200,000-pound trucks fully loaded with solar panels. Our extensive traffic control plan provided a 30,000-foot view for the majority of the project and was supplemented by detailed plans where turns and pavement widths were constricted. This approach proved effective for the use by the contractor.

LHMPO Strategic Transportation Safety Plan, AZ: Traffic Safety Engineer responsible for assisting with the development of the regional transportation safety plan. Tasks included analyzing crash data, establishing vision and goals, developing data-driven safety emphasis areas and associated mitigation strategies, network screening methodology, an implementation plan, and benefit/cost ratios for the highest priority locations identified in the Safety TIP.

SCMPO Strategic Transportation Safety Plan, AZ: Traffic Safety Engineer responsible for assisting in the development of the SCMPO STSP and a 10-year Safety Transportation Improvement Program. This effort includes analyzing crash data and developing data driven safety emphasis areas and associated mitigation strategies, performance measures, network screening methodology, an implementation plan, and benefit/cost ratios for the highest priority locations identified in the Safety TIP.

Ocotillo Road – Crismon to 218th Place, Queen Creek, AZ: Traffic Engineer for the design of the traffic signal, street lighting, signing, and pavement marking related to the widening of the roadway from a 3-lane section to

a 5-lane section. To save the Town money, much of the equipment on the existing poles was able to be reused with the new design. In addition, intersection lighting was upgraded to LED.

PAG Strategic Transportation Safety Plan, AZ: Traffic Safety Engineer responsible for assisting in the development of the PAG STSP. This plan was developed in coordination with law enforcement and regional partners to identify strategies and issues to overcome current reporting practices and their impact on the analysis of crashes in the region. The tasks that were part of this plan included inventorying existing safety performance and programs, developing vision and goals, identifying data-driven safety emphasis areas and associated mitigation strategies, applying network screening methodologies, and developing an implementation plan framework.

Mohave 6 Points Roundabout, Mohave County, AZ: Traffic Engineer for the design of a 4-leg roundabout that replaced a hazardous 6-leg intersection. The roundabout design was subjected to an extensive public involvement process where various alternatives for access management were presented. Ultimately the public settled on a design that balanced access to local business and circulation. For construction, a simplified 2-phase construction sequence was identified, which helped minimize both construction cost and user costs by minimizing detouring during construction. The project also included signing, sign formatting, and pavement marking for the roundabout.

Main Street HAWKs, Quartzsite, AZ: Traffic Engineer for the design of 2 High Intensity Activated Crosswalk (HAWK) beacons, also known as Pedestrian Hybrid Beacons. The 2 HAWKs were located at Main Street / McDonald's Driveway and Main Street / Palo Verde Avenue. The design team was able to coordinate with ADOT and the City of Tucson to obtain salvaged materials for much of the signal equipment. Materials included poles, mast arms, cabinets, indications, and more. This helped save the Town upwards of $100,000 in construction costs. In addition, ADA-compliant ramps were custom designed to fit within extremely constrained locations to ensure access was provided for all users. This project also includes construction administration.

YMPO Strategic Transportation Safety Plan, AZ: Traffic Safety Engineer for the development of the first comprehensive Regional Strategic Transportation Safety Plan (YRSTSP) for the YMPO region. The plan addresses the necessary steps and elements from a regional transportation planning perspective to reduce the risk of death or serious injury to all transportation users in the YMPO region. The STSP was developed in close coordination with the Arizona Strategic Highway Safety Plan (SHSP). This effort includes analyzing crash data, developing data-driven safety emphasis areas and associated mitigation strategies, performance measures, network screening methodology, an implementation plan, and benefit/cost ratios for the highest priority locations identified in the Safety TIP.

US 6 / Garrison St, Lakewood, CO: Traffic Engineer for a design-build project to replace two traffic signal related to the larger bridge reconstruction on US 6. Due to the phasing of construction, the project required three separate signal designs. The first design was for a diagonal temporary span wire signal that both minimized cost and was positioned to avoided conflict with final poles and mast arms. The final two signal designs were fit into intersections that were very constrained by utilities. Working with the contractor, CDOT and the local agency, the team was able to locate the pole foundations and bore conduit without any complications.

Kolb/Valencia Design Stage RSA, Tucson, AZ: Traffic Safety Engineer for a Road Safety Assessment (RSA) that included safety review of 1 mile of a River Road and 3 intersections at Oracle Road, 1st Avenue and Stone Avenue. This project involved stakeholder meetings, field reviews and presentation of results. The field review during various times of day to develop a perception for the types of traffic safety issues that might be occurring. Field work included participants from local jurisdictions that helped provide unique perspectives on the types of issues present, this in turn helped develop recommendations for an agency presentation and a final report delivered to the City of Tucson.

Broadway Road Design Stage RSA, Tucson, AZ: Traffic Safety Engineer for the first "design stage" Road Safety Assessment (RSA) conducted in the City of Tucson. The focus of this RSA was incorporating the proposed cycle track (a.k.a. separated bike lane) into a major roadway widening project. The RSA team worked with

representatives from multiple law enforcement and government agencies to review the existing field conditions and the proposed design. Numerous recommendations were presented to improve the safety for all road users including: eliminating negative left-turn offsets; cycle track dimensions and driveway/intersection treatments; raised pedestrian crossings; and pedestrian and vehicle signal timing modifications.

Downtown Links Design Level RSA, Tucson, AZ: Traffic Safety Engineer for a "Design Stage" Road Safety Assessment (RSA). In addition to the typical stakeholder meetings, review of existing site conditions and crash data analysis, this design stage RSA included a traffic engineering safety review of the 30% plans for the proposed Downtown Links corridor. The RSA team was able to identify concerns related to the primary intersection that would be impacted: Aviation Parkway / Broadway Road. The intersection was originally constructed and intended to function as a single point urban interchange (SPUI); however, changes in the regional transportation network left SPUI ramps remaining in a depressed, at-grade T-intersection condition, necessitating a hybrid design to add a 4th intersection leg for the Downtown Links corridor. The multi-disciplined team worked together to provide recommendations to the stakeholders to improve safety for all road users prior to the construction of the project.

River Road RSA, Tucson, AZ: Traffic Safety Engineer for a corridor Road Safety Assessment (RSA) that included safety review of a 1-mile segment of River Road, including signalized intersections at Oracle Road, 1st Avenue and Stone Avenue. This project involved stakeholder meetings, crash data analysis, field reviews and presentation of results. The field reviews were conducted during various peak, off-peak, and night times to develop a perception for the types of traffic safety issues facing transportation users along the corridor. Field work included participants from local jurisdictions that helped provide unique perspectives on the types of issues present, this in turn helped develop recommendations for an agency presentation and a final report delivered to the City of Tucson.

Highway Safety Improvement Program (HSIP) Program Management, AZ – ADOT Statewide Project Management: Project Manager for 18 HSIP projects assigned by the head of ADOT Statewide Project Management. With resources in short supply, AMEC was called upon to assist in the ominous task of managing local government projects that had received federal funds. In just over 2 months, these projects were shepherded through an extensive process to obtain federal authorization for design and construction. The total value of funds authorized was just over $3.3 million. In addition, ADOT Sr. Project managers requested that Mr. Kelley remain on task as many of the projects moved into post design and others moved into the design phase for an additional fiscal year.

I-10, Dragoon Road to Johnson Rd, Benson, AZ - ADOT: Project Manager for a critical Highway Safety Improvement Program (HSIP) project to protect motorists from collisions with vertical rock faces by removing large rock outcroppings and constructing guardrail and concrete barrier. Responsibilities included managing the diverse stakeholder group, meeting a tight deadline and incorporating the many "special" aesthetic elements requested by the client (e.g., weathering steel, colored concrete, etc.). These dynamics made this project both challenging and exciting. Through a concerted effort Scott and his team were able to work through the project comments and deliver the project on time and under budget.

HSIP Before/After Studies, Statewide, AZ – ADOT: Traffic Safety Engineer for the analysis of 3 projects to determine the impacts of HSIP-funded improvements around the state of Arizona. An intersection and two corridor projects were evaluated using Highway Safety Manual (HSM) before/after methodology that employs Empirical Bayes (EB) techniques to correct for regression to the mean bias. Odds ratios were also calculated to determine if there was a statistically significant reduction in crashes after the countermeasure was implemented.

Casa Grande Safe Routes to School, Casa Grande, AZ: Project Engineer for the scoping documents and development of plans to improve access for students traveling to and from school by foot or bicycle. This project included analysis of various scenarios for implementing solar LED lighting along 3,800 feet of unlit path. It also involved working closely with the vendor to determine appropriate lighting specifications, and coordination with

the City to gain concurrence on pedestrian lighting assumptions. These upfront coordination efforts assisted in preliminary design of light spacing for the development of early-stage cost estimates. This project also included reconstruction of 10 ramps to provide ADA accessibility and safe routes to school. This role also included working with project subconsultants to procure professional services, as well as taking the lead in necessary coordination to execute utility, right-of-way and environmental clearances.

Lake Pleasant Parkway Traffic Signal Coordination, Peoria, AZ: Project manager for the development of four coordinated time of day that included retiming of 16 individual traffic signals. Scott led a team of junior and mid-level engineers through all steps needed for developing and implementing coordination on this heavily traveled corridor. As part of this project, Scott worked with City staff to implement traffic signal timing in the TOC. As timing was input into the City's Maxview system, yellow, all-red and pedestrian clearance intervals were updated based on a previous study commissioned by the City. Scott worked in tandem with these changes to dynamically rerun Synchro on-site to recalculate optimum timing splits and offsets. At the conclusion of the project, Scott and team performed a benefit-cost analysis and estimated that the project had a benefit-cost ratio of 26:1.

Tucson ADA Inventory and Transition Plan, Tucson, AZ: Scott assisted the City of Tucson development of an Americans with Disabilities Act (ADA) Self Evaluation and Transition Plan. This Transition Plan identified barriers that limit access to persons with disabilities within the City's public right-of-way, and develop a prioritized strategy for implementing improvements to address these barriers. During Phase 1 of the ADA Inventory and Transition Plan, a semi-automated (LiDAR) approach was used to collect data for the 4200 lane miles of streets in the City. This data was supplemented by manual collection of supplemental ADA features. The data collected was processed and extracted to provide a baseline inventory of all ADA elements within the City. Phase 2 used this inventory to identify features that are not ADA-compliant. From there, a transition plan was developed outlining the deficiencies, costs, and a proposed implementation plans for correcting non-compliant features.

Verde Village Connectors, Cottonwood, AZ: Scott prepared the traffic study for this project that evaluated potential changes in traffic patterns with the construction of one or more proposed connector roads. The study evaluated 7 different alternatives and developed screening methodology that accounted for multiple metrics to determine a recommended project. As a follow-up to this project, Scott led and participated in a road safety assessment (RSA) with Yavapai County to evaluate additional safety concerns within the Verde Village community.

Safe Routes to School Action Plan and Bullard Avenue Task Force, Surprise, AZ: Traffic Safety Engineer for the safety review and recommendations for the Bullard Avenue enhancements. The City requested that the team provide recommendations to maximize the safety potential for a project that would implement cycle tracks and traffic signals at two school crossings. As part of this work, Scott assisted the City in a presentation to the Citizens Task Force group. This group was championed by the City and included community members from all walks of life. Scott presented recommendations, data for anticipated safety improvements, and responded to citizen questions.

SR 90 / Buffalo Soldier Trail Traffic Signal, Sierra Vista, AZ, ADOT: Traffic Engineer for the development of a traffic signal design and related signing, pavement marking and traffic control plans. Prior to design, the existing traffic signal was operating at capacity. Roadway widening resulted in the need to remove all existing traffic signal equipment on each leg of the intersection. The intersection also experiences a large proportion of trucks during the peak hour, creating challenges for sizing curb returns, designing a free-flow westbound right-turn lane, and analyzing light levels for a large intersection. Scott worked with the roadway designers to balance all elements, including maintaining the traffic signal during construction. The final product ensured adequate maneuvering for trucks while maintaining appropriate light levels and increased capacity.

SR 210, Sign Rehabilitation, Tucson, AZ: Traffic Engineer for scoping documents and design through 60% for sign rehabilitation. The project included completing an inventory of existing overhead and ground-mounted signs, sign formatting and coordination with ADOT Southern Area traffic.

Stanley Consultants 2008-2013

Traffic Engineer

Superstition Boulevard at SR 88, Apache Junction, AZ: Developed a traffic technical memorandum that presented an intersection alternative analysis to evaluate and recommend intersection improvements and safety enhancements. The existing 49° skew at the intersection of SR 88 at Superstition Boulevard was a primary factor in degrading operations. Analyses of traffic signal and roundabout alternatives were prepared as well as 30% designs of each. In addition, Scott used the Highway Safety Manual (HSM) to determine the relative impacts each alternative will have on predicted crash rates. He recognized that the intersection could not ultimately be resolved with either intersection type without a realignment of the roadway geometry, especially for large trucks that may be navigating a roundabout.

Black Mountain Boulevard, Phoenix, AZ: Developed a VISSIM model to simulate traffic that uses new ramps tying northbound and southbound SR 51 into Black Mountain Boulevard north of SR 101L. This project featured a large-scale effort to model several alternatives across multiple scenarios. A focus of the study and major selling point of the project was addressing the decrease in travel times that the public would experience because of the new access off of the freeway.

63rd Avenue at Beardsley Road HAWK Striping Modifications, Glendale, AZ: Project Engineer for the design of approximately ¼-mile of striping modifications to narrow the existing westbound SR 101L frontage road from two lanes to one lane in a permanent condition. The City wanted this project to provide a more conducive environment for pedestrians and bicyclists using the HAWK crossing. The design included using an array of tubular markers, reflective RPM's and large channel markers to deter and prevent motorists from entering the tapered lane section. The project also included a traffic control plan for work during striping operations. The project had a custom special provision so it could be done in accordance with ADOT standards and completed on a short schedule to ensure it was finished within the contract work for the 63rd Avenue pedestrian bridge.

Consolidated Canal Multi-Use Path Pedestrian Signals, Mesa, AZ: Scott served at the traffic engineer for the preparation of signal plans for the final design of three pedestrian crossings along the Consolidated Canal Multi-Use Path within the City of Mesa. Signal designs included ADA ramp evaluation and design, median improvements for pedestrian refuge and signal pole protection, and photometric analysis to assist with placement of lighting. This project also required utility potholing to secure pole locations, overhead electric conflict resolution, signing and marking modifications and lighting design. Utility stakeholder coordination was a large component of this project due to the proximity to the Canal and overhead transmission lines.

I-17, Cordes Junction, Cordes Junction: Traffic Engineer for the traffic portion of this multi-discipline CMAR project to construct a new hybridized system interchange that also included a diamond TI and two roundabouts. The two roundabouts were designed to accommodate a significant proportion of large trucks and were customized to fit with 1-way interchange ramps. The overall project tasks included traffic control, signing, marking, lighting, FMS plans, cost estimate and specifications. Additional responsibilities included design of traffic control plans, coordinating with CMAR team and ADOT to execute all project tasks and monitoring budget and schedule. This project was especially challenging because of the fast-paced nature of the schedule to meet the deadline for the State Board review of the GMP.

Central Avenue Traffic Study, Avondale, AZ: Scott prepared the final traffic study for a Road Diet project from Van Buren Street to Western Avenue. The project reduced the existing five-lane roadway to a three-lane roadway, as well as added bike and pedestrian facilities including a multi-use path. The biggest challenge encountered was finding the appropriate traffic analysis tool for a multi-use project that was acceptable to the City. Scott preformed the research and reviewed the analysis and report to ensure accurate results.

Airport Road Roundabout, Payson, AZ: This project consisted of the design and preparation of construction sequence, traffic control, signing and pavement marking plans. The SR 87 at Airport Road roundabout was the second roundabout to be successfully designed and constructed on SR 87 within the Town of Payson and helped address the skew at the intersection and provided a much-needed pedestrian crossing. The construction sequence plans provided a suggested method for contractor construction of the roundabout, which are typically

more complicated than standard intersections due to the construction of the central and splitter islands. Traffic control consisted of five phases of construction including several sub-phases and detour plans. Signing included appropriately designing and locating standard and custom sign formats for roundabout guidance at the existing Tyler Parkway roundabout (upgrade), as well as the Airport Road roundabout for new installation. Sign summary plans were prepared to detail sign size, location and other general characteristics for installation and removal for all signs within the project limits. Pavement marking was also designed for the Tyler Parkway (upgrade) and Airport Road roundabout. During construction worked with ADOT, the contractor and the pavement marking subcontractor to ensure correct placement of roundabout striping.

RBF Consulting 2003-2008
Traffic Engineer

PSHIA Sky Train MOT, Phoenix, AZ – Phoenix Sky Harbor International Airport: Reviewed the contractor-prepared traffic control plans for construction of the Phoenix Sky Harbor Airport Sky Train. Also assisted Aviation staff with additional tasks including attendance at meetings and on-site evaluation of traffic control areas of concern.

City of Goodyear On-Call Traffic Review, Goodyear, AZ: As part of the City's On-Call contract, Scott was requested to serve in-house with Goodyear Public Works and Traffic Operations staff. He reviewed plans and studies for development, assisted in coordination with local elementary schools to determine needs, and resolved field and office issues as they arose. Additional services included supplemental review of traffic control permits submitted to the City, development of design standards and providing input on both City and Privately funded projects. Scott served the City of Goodyear under this contract for nine months, a portion of which was from outside of the City's offices in a development plan review role.

T3 Pinch Point, Phoenix, AZ – Phoenix Sky Harbor International Airport: Project Engineer for the design layout and preparation of multiple exhibits to address an ongoing congestion issue on the west end of Terminal 3. The exhibit work was used to build consensus among a large group of Phoenix Sky Harbor stakeholders. The final design implemented a low-cost improvement that channelized traffic and mitigated congestion in the area. The final design met the needs of the airport staff and served to reduce the conflict points and recirculating traffic in the area.

Uptown Sedona Enhancement Traffic Circulation Analysis, Sedona, AZ: Conducted a traffic circulation study that enhanced streetscape and pedestrian facilities on SR 89A. The project improved the aesthetics and commercial viability of the Uptown area and was extended approximately 350 feet north of the SR 179/SR 89A intersection to north of the La Vista Motel. The traffic circulation study entailed analysis of existing conditions and multiple alternatives for SR 89A. Alternatives included combinations of roundabouts, intersection signalization and removal of signals. A parking accumulation and utilization study was also conducted. Close coordination with City staff, City Council, ADOT and the SR 179 project were key components of this project.

19th Avenue at Thunderbird Road Intersection Improvements, Phoenix, AZ: Performed the traffic capacity analysis for improvements to this busy intersection for the City of Phoenix. As part of this project, analyses, reports and conceptual drawings were developed to satisfy requirements for the Congestion Mitigation Air Quality (CMAQ) evaluation process. Based on the findings in the study portion of this project, northbound and southbound right-turn lanes were selected for design and were ultimately constructed at this tightly constrained intersection.

Select Publications

Reducing Human Driver Error and Setting Realistic Expectations with Advanced Driver Assistance Systems, Scott Kelley, PE, PTOE, Development Team, SAE EDGE Research Report, EPR2023016, ISBN 978-1-4686-0624-0, July, 2023

Select Presentations

"Traffic Impact Analysis," Arizona State University, Senior Design Capstone, Guest Lecturer, 2005 to 2010

"Using LiDAR for Compliance Analysis in 3 Dimensions," Conference on Roads and Streets, April 2015

"Network Screening with SPFs," ITE Arizona Section Monthly Luncheon, November 2016

"Peoria Traffic Signal Technology," ITE/IMSA Spring Conference, March 2017

"How Safe are the Streets in Your Region," ITE Western District Conference, June 2017

"Integrating Automation into Peoria's Signal Coordination Program," ITE/IMSA Spring Conference, September 2017

"Driving Towards Zero Fatalities | Regional Strategic Transportation Safety Plans," ITE/IMSA Spring Conference, February 2018

"Traffic Engineering Consulting," University of Arizona Guest Lecturer, December 2018

"Strategic Transportation Safety Plans and Road Safety Audits," Northern Arizona University Guest Lecturer, April 2019

"ADOT Statewide Light Pole Slip-Away Base Replacement Prioritization," ITE Western District Conference, June 2019

"Traffic Safety and Traffic Engineering Consulting," Northern Arizona University Guest Lecturer, April 2021