

Appendix C -Resume of Michael J. Wallwork, P.E.

Alternate Street Design, P.A.

Michael J. Wallwork, P.E., President/Transportation Engineer

My 25 years of experience in traffic engineering, road construction, transportation design, traffic calming, presentations and training courses have included a wide range of projects ranging from single intersection design to large scale road projects that integrate attractive landscaping with pedestrian, bicycle and vehicle facilities. My perspective is that streets and highways are transportation corridors for all people that can be designed to benefit motorists, transit, pedestrians, bicyclists, and people with disabilities.

Over the years, I have developed a set of principles for effective techniques based on first-hand experience in the design and field observation of roundabout and traffic calming operation. These principles form the foundation for the design work I am involved with in various cities. I share my expertise about calming traffic and improving traffic conditions by presenting training courses, design charrettes, workshops, and presentations to communities across the U.S. so people can make informed decisions regarding transportation issues.

Traffic Calming

My involvement began with in the development of Local Area Traffic Management (LATM) projects in Australia in the early 1970's when traffic calming was a new concept. We had to develop both the process and the measures by trial and error. Local Area Traffic Management is more than just slowing traffic; it is about controlling vehicle speed, motorist, pedestrian and bicyclist safety, traffic volumes, noise, trucks and aesthetics.

Since coming to the U.S. in 1988, I have helped communities prepare traffic calming concept plans for their neighborhoods. Some examples are: Missoula, Montana; Dover, Delaware; Boca Raton, Clearwater (9), Gainesville (3), Jacksonville, and Orange County (4) in Florida; Colorado Springs, Colorado, Austin, Texas; Honolulu, Hawaii (21); Ballwin, Wildwood, Liberty, Missouri; Lawrence, Overland Park (3), Kansas, Wildwood, etc. I also incorporate traffic calming as an integral part of other projects.

I have helped communities prepare new layouts for both minor and major roads to provide calmer, safer traffic flow in an attractive environment so all people, pedestrians, bicyclists transit riders can use the road safely with minimal delay. I have also been involved in LATM projects on Main Streets across the US. Some notable arterial road projects are in Palo Alto and West Hollywood, California; West Palm Beach, Fort Walton Beach, Florida; St Louis, Missouri; and Brattleboro, Vermont. I also have worked with community groups to prepare layouts for various roads and other projects where traffic calming was included as an integral part of the project.

Whenever I undertake a LATM project, it is done through the public involvement process. In a public workshop, residents are assisted in identifying the problems and their objectives. Then they are educated about the various treatments that are available and their advantages and problems. The public is then asked to prepare and present their own LATM plan to the group. Based on this input, I prepare conceptual plans that are presented to residents for their approval at a second meeting. Consensus has been reached in all of the LATM projects that I have been involved in.

Roundabout Design

I have been instrumental in designing and promoting roundabouts in the United States that are now enjoying favorable response from drivers, pedestrians, engineers, and safety professionals. The roundabout is not the solution in every problem. My 25 years of experience with roundabouts enables me to provide appropriate advice about the feasibility and layouts for successful roundabouts for pedestrians, vehicles, bicyclists, and emergency vehicles.

Layouts Completed

Freeway Interchange Roundabouts:

- Kansas
 - US 75 and 46th St. Interchange in Topeka,
 - US 50 and K 15 Interchange in Newton,
 - I-35 and First Street in Topeka,
 - I-70 at Rice Road
- Phoenix, Arizona, Happy Valley Road Interchange
- Lane County Washington
- Gig Harbor, Washington
- Columbia, Missouri

High Speed Rural Intersections:

- Mt Pleasant, SC
- Plutte County, Missouri,
- Miami, Kansas,
- Nassau County, FL (2), etc.

Single and Multi-lane Urban Roundabouts:

More than 400 layouts completed in three countries, Australia, Cayman Islands, and Canada and the US. The most notable is in Clearwater Beach, FL, where a two-lane roundabout and a four lane arterial road replaced four separate intersections, three of which were signalized, and an eight-lane one-way pair of roads with a spectacular gateway that included a massive fountain in the central island. It is handling up to 58,500 vehicles per day and 4,000 to 8,000 pedestrians.

Presentations More than 815 roundabout presentations and 42 roundabout training courses have been presented to public sector agencies and commissions, political leaders, and citizens in more than 35 states.

Specialized Traffic Engineering

Relevant Experience

Walkable Communities:

Dan Burden of Walkable Communities and I developed and presented the Walkable Community Design course over 100 times in nine states.

Access Management:

As Access Management Engineer for the Florida Department of Transportation in District 2, I reviewed road plans and permits to comply with Access Management Rule 14-97. This rule reflects innovative engineering design concepts for access and road conditions per my recommendations. I have successfully settled cases for the Florida Department of Transportation before they went to trial and served as an expert witness for the 1995 challenge to rewrite Access Management Rule 14-96 that made median openings a traffic control device.

Intersections:

I am a strong supporter of compact intersections where roundabouts are not the best traffic control devices. This form of intersection design includes low-speed,

right-turn slip lanes to reduce accidents involving pedestrians and to assist large trucks in making right-hand turns. The result of this design philosophy is shorter traffic signal cycles and less delay to all users.

Traffic Signal Design:

During my 25 years as a traffic engineer, I have designed and/or redesigned thousands of intersections in Melbourne, Australia, Columbia, South Carolina, and Northeast Florida. They range from simple two-phase signals to major intersections up to 90,000 vehicles per day.

Americans with Disabilities Act (ADA) Street Design:

While working as a traffic engineer in Melbourne, Australia, I was an active supporter for both the Victorian School for the Blind and the Yoralla Society, (an organization that supported people with physical disabilities). Through my participation in these organizations, I developed an appreciation and understanding of the special needs of disabled people. I also invented a wheelchair loop, which detects pedestrians in wheelchairs and activates a special longer pedestrian cycle without the pedestrian having to press a button. Because I am accustomed to the design standards in Australia, which exceed the ADA requirements, I can assist clients meet ADA standards and provide a better design for all transportation customers.

Road Layouts:

Santa Monica Boulevard, West Hollywood, Main Street Zephyr hills, Florida, Mt Diablo Road, Lafayette, CA. Putney Road, Brattleboro, Clayton Road, Ballwin, Missouri, Route 109, Wildwood, Missouri, etc.

Design Charrettes, Community Consensus Building:

In keeping with my philosophy of providing community involvement in community projects, I participate in an increasing number of projects that involve building community consensus. In these projects, I primarily provide citizens and professionals with latest design philosophies and opportunities and then help the community prepare its own designs.

Transit Design

During my 12 years as a Traffic Engineer in Melbourne, Australia I built, then programmed traffic signals along light rail routes where the light rail either was in a median or shared a travel lane with motor vehicles. During this time transit priority was added to all traffic signals for both bus and light rail vehicles. Then compensation phases were added to the side streets to compensate them for time lost when time was transferred from the side street to the transit vehicles. I also did the traffic engineering for the extension of two light rail routes along variable road corridors four lane undivided to six lane-divided roads for 8 and 10 miles. I also did the traffic engineering design for the conversion of two heavy rail commuter rail routes to light rail and their connection to the on street light rail system.

I also designed a number of roundabouts on major four-lane arterial roads that carried 20,000 to 50,000 vehicles per day with light rail. The light rail vehicles

went through the center of the roundabout, and/or turned left or right through the roundabouts.

As a District Traffic Engineering, I was responsible for undertaking traffic engineering improvements to improve transit operation travel times and on-time arrival for 15 separate light rail routes that entered my District.

Contributing Author

Florida Pedestrian Safety Plan: 1992, Florida Department of Transportation, Tallahassee, FL
Walkable Communities: Twelve Steps for an Effective Program, 1993, Florida Department of Transportation, Tallahassee, FL
Preventing Injuries through Traffic Calming - Conference Syllabus, Annual California Conference on Childhood Injury Control, September 16 - 19, 1996
Traffic Calming: - USA Today, May 2, 1997
Roundabouts: Landscape Architect and Specifier News, March 1998
A Citizen's Guide to Traffic Calming in Honolulu: City of Honolulu 1999
Civilizing Traffic, The Manual, Neighborhood Traffic Calming in Honolulu, 1999
Street Design Guidelines for Healthy Neighborhoods, Center for Livable Communities, 1999
Traffic Calming, The Traffic Safety Toolbox, Institute of Transportation Engineers, Washington. 1993.

Author

Traffic Signals: An Analysis and Design, 1984, Traffic Engineering Practice, 3rd Edition, Department of Transportation, Monash University, Melbourne, Australia
Analysis of Pedestrian Crashes in Two-way Left-Turn Lanes: FDOT, 1992
Traffic Calming: The Traffic Safety Toolbox, Institute of Transportation Engineers, Washington. 1993.
Roads are for People: A new Direction in Road Design, 1995, Landscape Architect and Specifier News, Tustin, CA
Community Redevelopment, Growth Management Short Course: Orlando, Florida, April 1996
Traffic Calming - Georgia Section I.T.E., Atlanta, Georgia, 1996
Roundabouts: Planning Commissioners Journal, spring 1997
Advocating Safe Passage, 1996, Landscape Architect and Specifier News, Tustin, CA
Coming to Your Town, (Roundabouts), Public Works Magazine, October 2000

Honors and Recognition

Personal	1992 recipient of the <u>Jon S. Beasley award</u> , presented by the Florida's Department of Transportation for "Outstanding performance" related to the development and presentation of more than 40 Pedestrian Safety training courses.
Roundabout	<u>Clearwater Beach Roundabout</u> in Clearwater First Place <i>Future of the Region</i> , Tampa Bay Regional Planning Council Clearwater Acacia Road roundabout First Place, <i>Community Safety</i> , Suncoast Safety Council.
Roads	<u>Santa Monica Boulevard</u> design won American Institute of Architects (AIA) Institute Honor Awards for 2001 Regional and Urban Design. <u>North Greenwood Avenue</u> , Clearwater, 2002 Charles A. McIntosh, Jr. award of Distinction