

**STEVEN SILKUNAS**  
1607 Dade Street  
Fernandina Beach, FL 32034  
267 664 3674

silkunas@gmail.com

## **SUMMARY**

Steven Silkunas has over 40 years of experience in transit and rail planning, including “hands-on” experience as a vehicle operator, road supervisor, scheduler, planner and director. Mr. Silkunas’ career has been one of innovation—making a good better—through the application of non-transit principles and techniques to transit and intermodal operating and revenue problems. In addition to his direct contributions, Mr. Silkunas has contributed to the transportation profession in leadership positions with Transportation Research Board and the American Public Transportation Association.

## **PROFESSIONAL EXPERIENCE**

Ipse

Independent Advisor    October 2012    to    Present

Harral Winner Thompson Sharp Klein

Senior Consultant    October 2012    to    Present

Southeastern Pennsylvania Transportation Authority

Philadelphia, PA

Director, Business Development	November 1997	to	October 2012
Chief Officer, Frontier Division	September 1996	to	November 1997
Director, Technical Services & Research	September 1989	to	September 1996
Manager, Technical Analysis	September 1985	to	September 1989
Manager, Schedules	September 1986	to	August 1987
Senior Operations Planner	May 1981	to	September 1985
Operations Planner	December 1979	to	May 1981
Traffic Analyst	June 1979	to	December 1979
Service Supervisor	April 1976	to	June 1979
Vehicle Operator	November 1975	to	April 1976

## **MAJOR ACHIEVEMENTS**

For a private investment consortium developed a market potential analysis of automatic vehicle location devices and their application in public transport.

For Ferrovias Central Andina (FVCA), assisted in a “reality check” evaluation of prior technical feasibility studies for building and operating a commuter railroad in the densely populated Lima, Peru metropolitan area.

As a consultant to a contractor for the State of New York, recast Amtrak schedules to take advantage of the operating efficiencies of turbo trains. Resultant schedules provided increases

# STEVEN SILKUNAS

## MAJOR ACHIEVEMENTS (Continued)

in frequency of service and reductions in platform hours. This effort allowed the State of New York sufficient information to renegotiate with Amtrak.

Revised SEPTA fare tariffs for charter service to gain full compensation for services. Of note, the tariffs included provisions for delayed, late and last-minute reservations. Working with the Claims and Legal Departments, successfully applied charter rates to substitute service when caused by a third party.

For SEPTA, investigated various modal options for streetcar service in Philadelphia. The study, of which he was the primary author, used present value analysis as an evaluation tool to deal with disparate vehicle and infrastructure issues. This study shaped SEPTA's surface rail investment decision (\$150 million in 1981 dollars) for the next two decades. The report, when issued, was highly controversial. Subsequent review by independent expert evaluators over the next 15 years called the work "technically excellent," and was deemed by one FTA administrator "the gold standard for planning."

Directed the research, planning, and analytical efforts of a 120-person technical services and research department with multimodal responsibilities (bus, light rail, metro, commuter rail) encompassing management, professional, and hourly employees. Developed nationally recognized programs in the monitoring of on-time performance and passenger counting for scheduling, planning and marketing. Converted manual processing techniques to computer-assisted techniques. Created a comprehensive report on route performance. Developed and implemented a service quality auditing program at the operator level.

Initiated the use of market research for determining viability of service offerings. The efficacy of the research was validated in the Bucks County Service Improvement Plan, and resulted in a 27 percent increase in ridership. Pioneered business outreach as a component in the marketing of service delivery. Developed relationships with Chambers of Commerce, Boards of Realtors and other organizations.

Lead SEPTA person working with the National Transit Institute to present an education workshop on the intricacies of bus rapid transit for transit practitioners and a diverse group of allied interests.

## EDUCATION

Bachelor of Arts (Philosophy), Cum Laude, 1973  
Saint Charles, Philadelphia, Pennsylvania

Master of Business Administration, 1981  
LaSalle University, Philadelphia, Pennsylvania

# STEVEN SILKUNAS

## EXPERIENCE

### *FTA Bus Transit Workshop*

Lead SEPTA person working with the National Transit Institute to present an education workshop on the intricacies of bus rapid transit for transit practitioners and a diverse group of allied interests.

### *Evaluation/Recommendation of Senior Citizen Identification Methods (2005 to 2012)*

Technical Advisor to the Pennsylvania Department of Transportation in a Transit Research Project to establish a common means of identifying senior citizens within the Commonwealth and to coordinate the disparate needs of various bureaus within the Department, transit providers and users.

### *Regional Transportation Initiative (2001 to 2003)*

Coordinated communications efforts between SEPTA and five local transportation management associations, particularly with respect to public timetables and information distribution.

### *CMAQ Parking Study (2001 to 2002)*

Project manager on study to attract passengers and vehicles to stations with adequate parking capacity. Improvements included web site information and marketing.

### *A/C Transit Bus Rapid Transit (1999)*

As part of a study team of national experts provided guidance on the conversion of a local bus service to bus rapid transit in a corridor already served by rapid transit (BART).

### *Philadelphia College Student Retention Efforts (1999 to 2012)*

Liaison with representatives from academic, non-profit and governmental units to attract and retain students in the Philadelphia area.

### *Seamless Service Committee (1999 to 2005)*

Developed a template for reviewing service delivery vis-à-vis Authority goals and customer expectations. Reviewed operational constraints. Recommended development or revision of standard operating plans.

### *PennPass/University Pass (1998 to 2012)*

Developed concept for university pass programs (subscription and universal). Constructed multiple pricing scenarios. Involved in missionary outreach effort including development of presentation materials. Project manager for pass implementation effort at the University of Pennsylvania.

### *Bucks County Report (1998 to 1999)*

Provided pre-planning market research for transit service for a suburban Philadelphia county. Findings published in "Defining the Role of SEPTA in Lower Bucks County: A Market-Based Approach." Presented findings at public meetings in Bucks County.

## STEVEN SILKUNAS

### EXPERIENCE (Continued)

#### *Passenger Census Studies (1988 to 1996)*

Planned and directed effort to enumerate passenger boardings and alightings by location, direction, and time. Incorporated measurements of utilization. Developed schedule and methods to allow for system counts on programmed basis. Efforts undertaken included Regional Rail, Market-Frankford Subway Elevated, Broad Street Subway and Subway Surface.

#### *Historical On-Time Performance (1995)*

Constructed a project to provide a historical overview to on-time performance on selected indicator routes within the system.

#### *Technology and Operations Analysis (1980 to 1996)*

Reviewed secular technologies for possible transit applications. Recommended Changes (e.g., fareboxes, control centers, etc.) to benefit from advancements in technology. Provided assistance in the development and review of specifications. Analyzed and recommended methods and technologies (e.g., automatic vehicle location, automatic passenger counting, inductive loops, GIS, etc.) for use at SEPTA.

#### *Regional Ridership Analysis Report (1991 to 1996)*

Initiated, designed, and developed the definitive study to determine ridership by county of origin and destination. Prior to this ridership by county was based on "best guess" estimates. A measurement called "service penetration" (unlinked passenger trips divided population density) was devised to rationally account for service within the region.

#### *Customer Satisfaction Measurement Program (1989 to 1996)*

Designed, developed, and managed a customer satisfaction measurement program known as the "Rider Report Card." While two other similar efforts began within the transit industry now, SEPTA's effort had several salient differences including consistent and comparative scoring, route level detail, and secondary and tertiary analysis. Also noteworthy was that this project was accomplished with minimum in-house resources. In 1996, a move was made to supplement the satisfaction effort using quarterly telephone surveys.

#### *Transit First (1981, 1990 to 1992, 1997 to 2012)*

Developed, in 1981, at the request of the SEPTA Board a "transit first" effort to reduce operating expenses through speed improvements. Coordinated the development of a joint City-SEPTA Transit First Committee. This committee was based on a Peer Evaluation of trolley lines and the recommendation that the City commit to Transit First improvements in a concrete way if streetcars were to remain viable. In addition to developing the rationale and foundation for the committee, specific conceptual studies were done on five major routes.

#### *Street Condition Summary (1992)*

Developed a report, "Condition of Paving on Tracked Streets in Philadelphia," that graphically represented track and paving responsibility and track condition. This report laid the foundation for resolving what had been an ongoing source of conflict between the Pennsylvania Department of Transportation, the City of Philadelphia, and SEPTA.

# STEVEN SILKUNAS

## EXPERIENCE (Continued)

### *Trapeze (1990 to 1993)*

Initiated and oversaw the procurement of third-generation transit scheduling software. Innovations on this project included a PC-based platform, software upgrades included in the contract purchase price, and system design included with the software proposal. Of note, this procurement took less than nine months from concept approval to signed contract with notice to proceed.

### *Congressionally Mandated Trolley Feasibility Study (1988 to 1989)*

Reviewed consultant documents and other material for objective presentation of the viability of quasi-abandoned streetcar routes. Recommended changes in the consultant report which mirrored solely the minority opinion. Assisted UMTA in the development of the Report to Congress. Received commendation from UMTA for work on the project.

### *Strategic Planning (1985 to 1986)*

Assisted the Deputy General Manager in developing an operations-based plan for a five-year horizon for adoption by the SEPTA Board.

### *Schuylkill Expressway Reconstruction (1984 to 1986)*

Supervised the development of alternative transit routings and contingency plans for major interstate highway reconstruction.

### *Energy Contingency Plan (1979 to 1982)*

Project manager for the development of an energy contingency plan detailing potential tactics to cope with a shortage in oil supplies.

### *Frankford Elevated Reconstruction Project (1979 to 1984)*

Provided coordinated planning efforts to assure that the design parameters provided the optimum in terms of convenience to customers. Assisted in the development of construction schemes to allow construction under traffic.

### *Light Rail/Streetcars (1979 to 1993)*

Researched and outlined the status and viability of streetcar operation within the City of Philadelphia. Principal author of "Planning Options for SEPTA North Philadelphia Streetcar Routes." This report, as a first in the transit industry, aligned various modal choices and associated costs and applied the financial tool of net present value to the investment. The report at the time was controversial, although it led to the formal conversion of Routes 6 and 53 to bus operation. In a formal review by industry experts ten years later, the report was judged "technically sound."

### *Parking Lots (1985 to 1986)*

Provided direction to a study of the physical condition of over 120 SEPTA owned or leased facilities.

### *Schuylkill Expressway Reconstruction (1984 to 1986)*

Supervised the development of alternative transit routings and contingency plans for major interstate highway reconstruction.

## **STEVEN SILKUNAS**

### **EXPERIENCE (Continued)**

#### *Depot Location and Capacity Study (1979 to 1982)*

Provided operations planning assistance to a consultant study to create a "black box" model for locating and sizing the various operating locations.

#### *Emergency Coordination (1980 to 1984)*

Directed the coordination of weather-related emergencies with various agencies and departments of the City of Philadelphia and SEPTA. Responsible for staffing joint control center.

#### *Fleet Mix and Vehicle Assignment (1979-1987)*

Assisted in the determination of vehicle assignments by district to achieve policy goals.

#### *Service Standards (1979 to 1992)*

Researched and developed SEPTA's first formal set of service standards. Lobbied for a change of approach from minimalism to one that was market driven.

#### *Traffic-Transit Coordinating Committee (1979 to 1985)*

Participated in an interagency group (SEPTA, City of Philadelphia, Pennsylvania Department of Transportation) to deal with construction, signals, pavement markings, and enforcement issues that were of mutual concern.

#### *Infrastructure (1979 to 1992)*

Reviewed and recommended changes to stations (e.g., Olney Terminal) and other passenger facilities, and related track and overhead. Devised procedures and strategies for building under traffic. Identified a number of locations in public ownership for conversion and utilization as bus loops (e.g., Front and Snyder). Used accounting techniques to justify additional payment for SEPTA inconvenience by third parties. Worked with community groups to achieve Authority goals.

#### *RU/DAT (1989 to 1991)*

SEPTA liaison to an urban design project for North Philadelphia with national significance sponsored by the American Institute of Architects.

#### *DALLAS REPORT (1985)*

Conceived and oversaw the development of the SEPTA DALLAS REPORT, a summation of ridership, revenue, and expenses. Of note this represented the first time that information was presented in a simple, unified document.

# STEVEN SILKUNAS

## SELECTED PUBLICATIONS/PRESENTATIONS

“The Relationship Between Transit Asset Condition and Service Quality.” TCRP Report 198. Spypond Partners, AECOM, McCollum Management Consulting, Harry Cohen, Steven Silkunas. National Academies of Sciences, Engineering, and Medicine. 2018. Washington, DC: The National Academies Press.

“Picking up the Tab: Compensation for Fixed Facilities Disruption.” Transportation Research Board 2005 Annual Meeting. Washington, District of Columbia. 23 January 2006. Paper published in Transportation Research Record. Number 1955, 2006.

“Market Research in Service Planning.” American Public Transportation Association Intermodal Operations Planning Workshop. Cleveland, Ohio. 06 August 2001.

“Defining the Role of SEPTA in Lower Bucks County: A Market-Based Approach.” SEPTA. November 1998.

"Path Dependence: A Managerial Hermeneutic." American Society for Quality's 52nd Annual Quality Congress. Philadelphia, Pennsylvania. 05 May 1998.

"A Visual Approach to the Analysis of Running Time." American Public Transportation Association Intermodal Operations Planning Workshop. Philadelphia, Pennsylvania. 09 August 1996.

"Dancing and Hand Grenades." National Computer Systems Eastern Users' Conference. Baltimore, Maryland. 23 August 1993.

"Putting the Customer in the Driver's Seat." Philadelphia Chapter of the American Society for Quality Control. Bensalem, Pennsylvania. 21 April 1993.

“Customer Satisfaction: The Next Frontier.” Transportation Research Board 1993 Annual Meeting. Washington, District of Columbia. 11 January 1993. [Excerpts printed in Urban Transport News (21 January 1993) and Strategies (May/June 1993). Paper published in Transportation Research Record. Number 1395, 1993.]

“Automated Schedulmaking -- A Managerial Overview.” Transportation Research Board Conference on Advanced Technologies in Public Transportation. San Francisco, California. 19 August 1992. [Summary published in Transportation Research Circular. Number 410, July 1993.]

"The Challenge of Quality of Service Measurement: The Customer's View." American Public Transit Association Multimodal Operations Planning Workshop. Miami, Florida. 07 December 1990.

“Planning Options for SEPTA’s North Philadelphia Streetcar Routes” (with J. F. Tucker III and M. L. MacInnes). SEPTA. November 1982.

Library Journal. Over 70 book reviews published on economics and management since 1993.