


Automated People Movers and Automated Transit Systems 2018



Moving to the Future, Building on the Past



Proceedings of the 16th International
Conference on Automated People Movers
and Automated Transit Systems



Tampa, Florida
April 29–May 2, 2018



Edited by William J. Sproule, Ph.D., P.E.

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TRANSPORTATION
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INSTITUTE

AUTOMATED PEOPLE MOVERS AND AUTOMATED TRANSIT SYSTEMS 2018

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PROCEEDINGS OF THE 16TH INTERNATIONAL CONFERENCE ON
AUTOMATED PEOPLE MOVERS AND AUTOMATED TRANSIT
SYSTEMS

April 29–May 2, 2018
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SPONSORED BY
The Transportation & Development Institute of the
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EDITED BY
William J. Sproule, Ph.D., P.E.



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Preface

The **16th International Conference on Automated People Movers and Automated Transit Systems** was held at the Hilton Hotel in downtown Tampa, Florida, and the theme of the conference was *Moving to the Future – Building on the Past*.

During the 1960s an innovative terminal design was proposed for the Tampa International Airport and a key component was the need for a reliable transit system that would shuttle passengers between satellite terminals and a central terminal building. When the system went into service in 1971 it was the first airport Automated People Mover and it marked the start of numerous applications and development of these driverless transit systems around the world. A second driverless monorail system was installed a few years later in the airport garage and the vehicles on the original shuttles were replaced in the 1990s. A new, third Automated People Mover, the SkyConnect, linking the terminal area with a consolidated rental car complex, recently opened with the result that the Tampa International Airport has the distinction of having the first airport APM and the newest airport APM.

The Conference Proceedings include 22 papers that were presented at the conference and all papers included in the Proceedings have been peer reviewed and accepted for publication. In addition to these papers over 50 presentations were made at the conference without a paper. The papers and presentations examined the current state and future of APMs and ATS, and covered a wide range of topics including history, Personal Rapid Transit (PRT), applications, airport and other major activity centers projects, system improvements, facility planning and design, safety, security, standards, automated train control, and policy. Abstracts and presentation slides for all presentations made at the conference were reviewed by a technical committee. In addition to the technical sessions, opportunities were available in an exhibition area and at social events for attendees to meet and network with others. Technical tours of the original airside APM shuttles and the new SkyConnect APM provided attendees with a behind the scenes look at these innovative systems.

This conference is the sixteenth of a series of successful Automated People Mover conferences that began in 1985 in Miami, Florida. Since that time subsequent conferences have brought together planners, inventors, designers, suppliers, builders, owners and operators of automated transit of all forms to share their experiences, reveal innovations, and discuss what they have learned. Past conferences have been held around the globe and have built an international collegial community and the Proceedings have become an invaluable reference source. In 2011, automated transit systems were added to the automated people mover focus in recognition of exciting applications on line haul metro systems, and the Tampa conference has continued that addition.

1985 Miami, Florida
1989 Miami, Florida
1991 Yokohama, JAPAN

2003 Singapore
2005 Orlando, Florida
2007 Vienna, AUSTRIA

| | | | |
|------|---------------------------|------|------------------|
| 1993 | Irving, Texas | 2009 | Atlanta, Georgia |
| 1996 | Paris, FRANCE | 2011 | Paris, FRANCE |
| 1997 | Las Vegas, Nevada | 2013 | Phoenix, Arizona |
| 1999 | Copenhagen, DENMARK | 2016 | Toronto, CANADA |
| 2001 | San Francisco, California | 2018 | Tampa, Florida |

The organizing committee acknowledges the significant efforts of the many authors, presenters, moderators, and reviewers who through their efforts have created these Proceedings and contributed to the success of the conference.

Bill Sproule

Acknowledgments

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