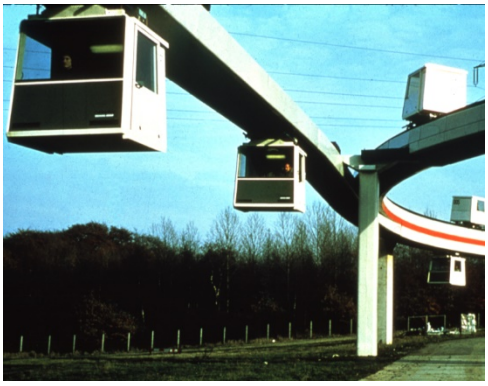
History of the Advanced Transit Association (ATRA) Year by Year

by J. Edward Anderson, first ATRA President.

1979 – The Fourth Year.

The big event of the year was ATRA co-sponsorship of the International Symposium on Traffic and Transportation in Hamburg, Germany on June 18-20. As President of ATRA, I was privileged to be invited to give a speech, which is published in full in Volume 3, Number 3 of the *Advanced Transit News*. In part, my words are given on page 3. ATRA chartered an airplane, which permitted 12 of its members to attend. The Symposium attracted 1500 participants from over 28 countries. More than 200 papers were presented, with over 20 by U. S. industry and government representatives. In addition to the Symposium, we visited sites of demonstrations of M-bahn in Braunschweig, H-bahn in Erlangen, and C-bahn in Hagen, which were three markedly different versions of AGT in test in Germany.



C-bahn Test Track, Klaus Becker, Designer

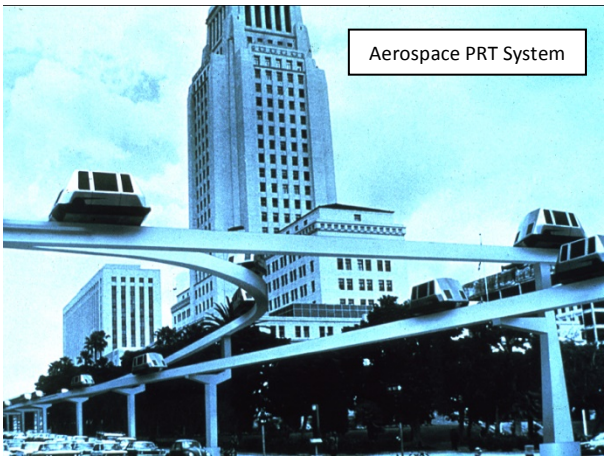
In its Annual Report, ATRA gave the following list of accomplishments:

- Its first Conference, which was rated as one of the more stimulating and successful of the year.
- Growth in membership to over 400.
- A regular newsletter.
- The Journal of Advanced Transportation.
- Participation in UMTA and APTA activities under the ATRA banner.

Zemlin, Colleague, Klaus Becker, JEA

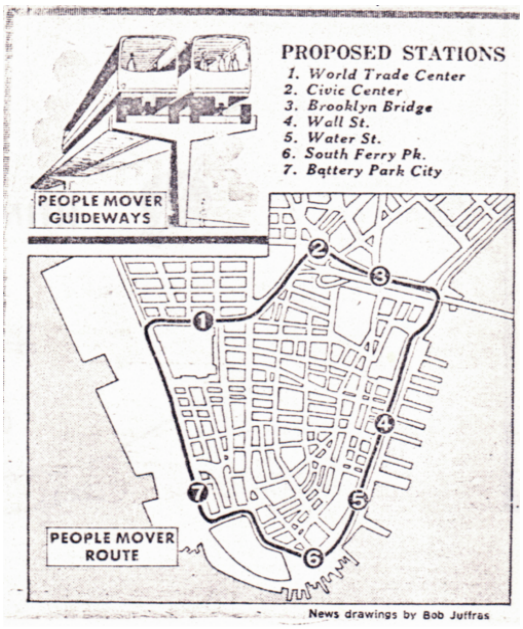
At the ATRA annual Board Meeting, newly elected officers were announced. The incoming Chairman is Dr. Lawrence Goldmuntz, President Robert Maxwell of the USDOT, Vice President Herman Zemlin, the one-man German UMTA as he called himself, Tresurer Dr. Jerry Kieffer and Secretary A. M. (Tony) Yen.

At the Board Meeting, a discussion of controversial advanced transit issues occurred, A separate forum was set up to encourage point-counterpoint dialogue. The issues rose mainly 1) because ATRA was formed at the 1975 PRT conference with committee members who understood real PRT and became involved because of it, and 2) because UMTA had canceled its High-Capacity PRT program, which was to be based on The Aerospace Corporation PRT system shown here, and, as a result of industry pressure reverted to the most primative of AGT systems called Shuttle Loop Transit (SLT), which were promoted as Downtown People Movers.



What we wanted!

Many ATRA Members earned their living from UMTA contracts, and they knew they would loose out if they said anything good about PRT. Moreover, some ATRA Members represented those DPM-type systems and discouraged discussion of anything better. The old adage "*The Best is the Enemy of the Rest*" is always present. In military technology, fear drives innovation. In civilian technology, fear inhibits innovation. As a University Professor, I was privilidged to be able to avoid this problem, but others could not. I promoted my findings through the Slide Presentation shown on page 4.



What we got: SLT!

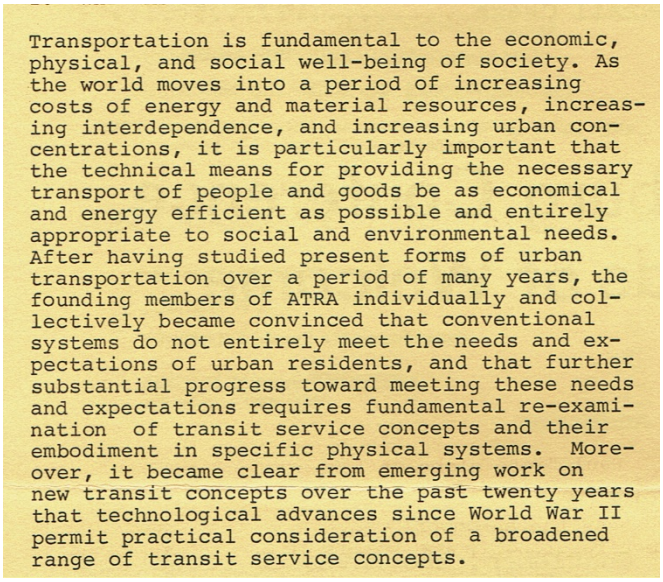
In a speech, Lillian Liburdi, UMTA Associate Administrator for Policy and Program Development, commented on opposition to expenditures in AGT and DPM research. She mentioned that UMTA is considering better ways of making the transition from research to realization. To limit advanced transit research is a "harbinger of doom," she said.

William L. Alden, President of Alden Self-Transit Systems Corporation, announced a 23-page booklet that traces the history of development of PRT. The Alden system was the basis for the Morgantown AGT system, but with 6 instead of 20-passenger vehicles.

ATRA Board Member R. Morse Wade wondered if a new agency would be needed toward automated individual transportation. He suggested the establishment of a new and substantial project involving more advanced service concepts and technology while leaving the present DPM program in place, and urged that ATRA have a special planning meeting on this topic. I thought urban-transportation research should be patterned after the National Advisory Commit-

tee for Aeronautics, which was commissioned to study the problems of flight, with its output in reports.

An article appeared in the May 25, 1979 issue of the *Minneapolis Tribune* stating that "the Minnesota House dealt St. Paul's DPM an apparently fatal blow." The DPM had been a topic of discussion for several years, and now it was clear that the numbers simply didn't work. Ridership had been grossly inflated to 34,000 per day, whereas the bus system in the same area drew no more than 600 per day. A survey showed that 70% of the people near downtown St. Paul were opposed. The St. Paul DPM program was canceled.



Transportation is fundamental to the economic, physical, and social well-being of society. As the world moves into a period of increasing costs of energy and material resources, increasing interdependence, and increasing urban concentrations, it is particularly important that the technical means for providing the necessary transport of people and goods be as economical and energy efficient as possible and entirely appropriate to social and environmental needs. After having studied present forms of urban transportation over a period of many years, the founding members of ATRA individually and collectively became convinced that conventional systems do not entirely meet the needs and expectations of urban residents, and that further substantial progress toward meeting these needs and expectations requires fundamental re-examination of transit service concepts and their embodiment in specific physical systems. Moreover, it became clear from emerging work on new transit concepts over the past twenty years that technological advances since World War II permit practical consideration of a broadened range of transit service concepts.

From JEA Speech in Hamburg.

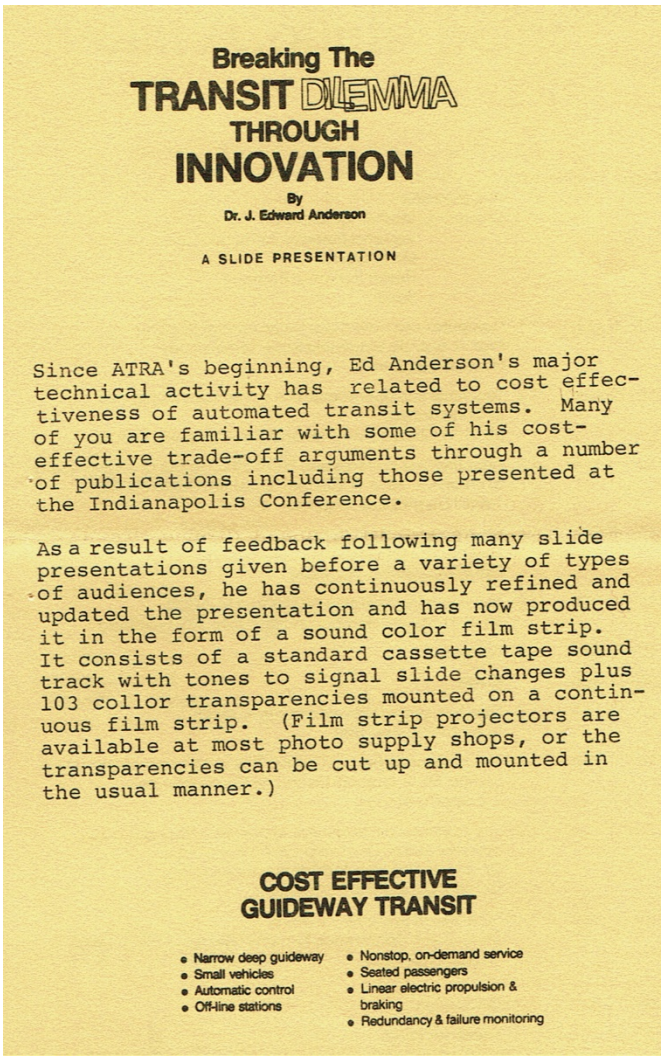
ATRA received an UMTA Grant of $35,060 to prepare a synthesis of the Proceedings of ATRA's First International Conference. Al Kornhauser became the editor.

The first Chairman of ATRA's Finance Committee, Dr. Larry Goldmuntz, reported that a second grant of $10,000 from General Motors would be forthcoming. Larry was instrumental in getting both grants from General Motors.

On Tuesday, June 12, 1979 the *Seattle Times* reported that Boeing received a $27 million contract from UMTA for an advanced group rapid transit system. A test track would be built and at the end of a six-year contract (Award of a grant exceeding the term of a President occurred in part because of ATRA criticisms of the Morgantown process.) two rubber-tired 12-passenger transit cars would operate. The system was to include a radar-operated collision-avoidance system to enable the cars to operate three seconds apart. The system would feature off-line loading. At the same time, Otis Elevator Company received a contract for $24 million to develop a similar system with vehicles supported on air cushions.

John Crosetto, Director of Automated Transportation Systems for the Boeing Aerospace Company, spoke to the Subcommittee on Transportation Appropriations of the U. S. House of Representatives. In his conclusions, he said "Gentlemen, let me put this nation's urban transportation dilemma in straightforward terms. Conventional subway systems are too expensive to build. Conventional bus systems are too expensive to operate. Relying on the automobile for most urban travel is bankrupting our energy resources and our economy. Automated guideway transit (AGT) systems offer the potential for real achievement in confronting all three of these major problems. AGT systems, given nominal infusions of R&D money over the next 4 to 6 years, can be deployed for less than one-half the cost of heavy rail systems and they can be operated at less than one-half the cost per passenger on buses. In addition, they provide service that

is far superior to either rail or bus systems in convenience to the user. Perhaps what may be more important in the long run, they are not dependent on oil as an energy source. DPM systems will improve downtown circulation without more automobiles or buses on city streets, but are not a substitute for AGRT. You need offline stations and small vehicles at short intervals to achieve the convenience and the growth provisions of an AGRT system. Finally, gentlemen, I urge you to support the formation of a long-range policy for urban transit, a policy that reflects a national commitment to R&D that will transcend administration changes. Put more muscle in R&D and support the AGRT program now. Put some hope back into urban transit. Plant a few seeds. Don't turn your back on tomorrow."



Breaking The
TRANSIT DILEMMA
THROUGH
INNOVATION

By
Dr. J. Edward Anderson

A SLIDE PRESENTATION

Since ATRA's beginning, Ed Anderson's major technical activity has related to cost effectiveness of automated transit systems. Many of you are familiar with some of his cost-effective trade-off arguments through a number of publications including those presented at the Indianapolis Conference.

As a result of feedback following many slide presentations given before a variety of types of audiences, he has continuously refined and updated the presentation and has now produced it in the form of a sound color film strip. It consists of a standard cassette tape sound track with tones to signal slide changes plus 103 collor transparencies mounted on a continuous film strip. (Film strip projectors are available at most photo supply shops, or the transparencies can be cut up and mounted in the usual manner.)

COST EFFECTIVE
GUIDEWAY TRANSIT

- Narrow deep guideway
- Small vehicles
- Automatic control
- Off-line stations
- Nonstop, on-demand service
- Seated passengers
- Linear electric propulsion & braking
- Redundancy & failure monitoring

It is significant that Crosetto did not mention vehicle size or headway – only small and short. Moreover, in his presentation he said "small vehicles, thin guideways, and short turning radii are much easier to live with. A greater portion of the system can be built above ground, thereby enabling a further saving of costs."

Japanese CVS PRT system.

British Cabtrack PRT system.