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

by J. Edward Anderson, first ATRA President.

1998 – The Twenty-Third Year.

The Annual Meeting was held on January 12, 1998 at the Washington Hilton. Dr. Jerry Kieffer, Chairman, presided. After the usual introductory business, progress of the Chicago RTA Raytheon PRT Development Program was discussed. Dan Kelly of Raytheon reported that three vehicles were operating on their test track. Operational tests were underway and the test program was to be complete by the end of March. Raytheon expected a joint announcement with the RTA in April. In a Q&A period, concerns about cost surfaced immediately. Kelly said all costs were only guesses. Costs, he said, could vary between $16M and $47M per mile. He projected completion of Phase III by early 2002. Kelly described marketing prospects as very exciting.

The Chair reviewed the origin and purpose of the draft Capacity paper for Board consideration and a discussion of the paper followed. The Board approved the capacity paper as an official ATRA Information Paper. A comparative cost project was discussed in detail and the Board voted to proceed with a Comparative Cost Project. Dennis Manning reported that the ATRA Website was on line. ATRA President Tom Richert delivered a "1998 Annual Report and Association Plan" to give an historical perspective and glimpse of new directions. He said that Newsletters were being produced through efforts of Bob Dunning. The Board discussed various areas of inquiry that could lead to information papers. Areas suggested were sprawl, dual vs. single mode, and PRT/AGT comparisons. President Richert stressed the need to expand ATRA's involvement in raising public and official awareness of opportunities in advanced transportation technologies.

The winter issue of the ATRA newsletter contained a eulogy to Dr. Larry Goldmuntz, who passed away in August 1997 of a heart attack while on vacation in Monpello, Sicily. Larry's speech at the 1975 PRT Conference inspired and directed the formation of ATRA. His personal efforts in ATRA's early years raised $40,000 for ATRA operations, and he served for several years as ATRA Chairman. He will be very much missed.

ATRA Board Member Peter D. Mitchell contributed an article to ATRA's Winter 1998 Newsletter that he called "Mitchell's View." He described the First Annual Fairfax Transportation Summit, held in Fairfax, VA. The problem addressed was TRAFFIC CONGESTION. The Nation's capital region had one of the worst traffic congestion problems in the country. Every speaker thought the terrible congestion would get much worse in the years to come, but no one present had any idea what to do about it.

Dennis Manning, who passed away in 2017, contributed a long article he called "What Will PRT Induce?" Here is one paragraph of his article, which I think summarized his views: "I believe that what we are promoting will eventually have a profound effect on almost all land use patterns, and that we as promoters should be more aware of the possible outcomes. A belief that older patterns will remain is probably the least likely result. More thought as to how PRT will be used is needed. Land use and transportation planners need to get out of their respective ruts. They need to aid in the effort of choosing amongst the possibilities, not yearn for models of the past. They need to grasp the fact that automation of transportation is already underway and they must deal with it, not deny or ignore it. I am optimistic. The options provided by PRT give us unparalleled opportunity to build a better life and turn around the abuses of the industrial world as we know them today."

ATRA President Tom Richert thanked Dennis Manning, Jerry Schneider, and Ian Ford for getting ATRA's website http://advancedtransit.org off and running.

In June 1998 Tom Richert wrote to ATRA members who had agreed to serve on the committee Comparative Transit Costs, telling them that "it is past time to begin working on the CTC project voted for at the Annual Meeting. He reminded them of the type of information and types of transit systems on which cost data should be gathered.

My work on PRT during 1998.

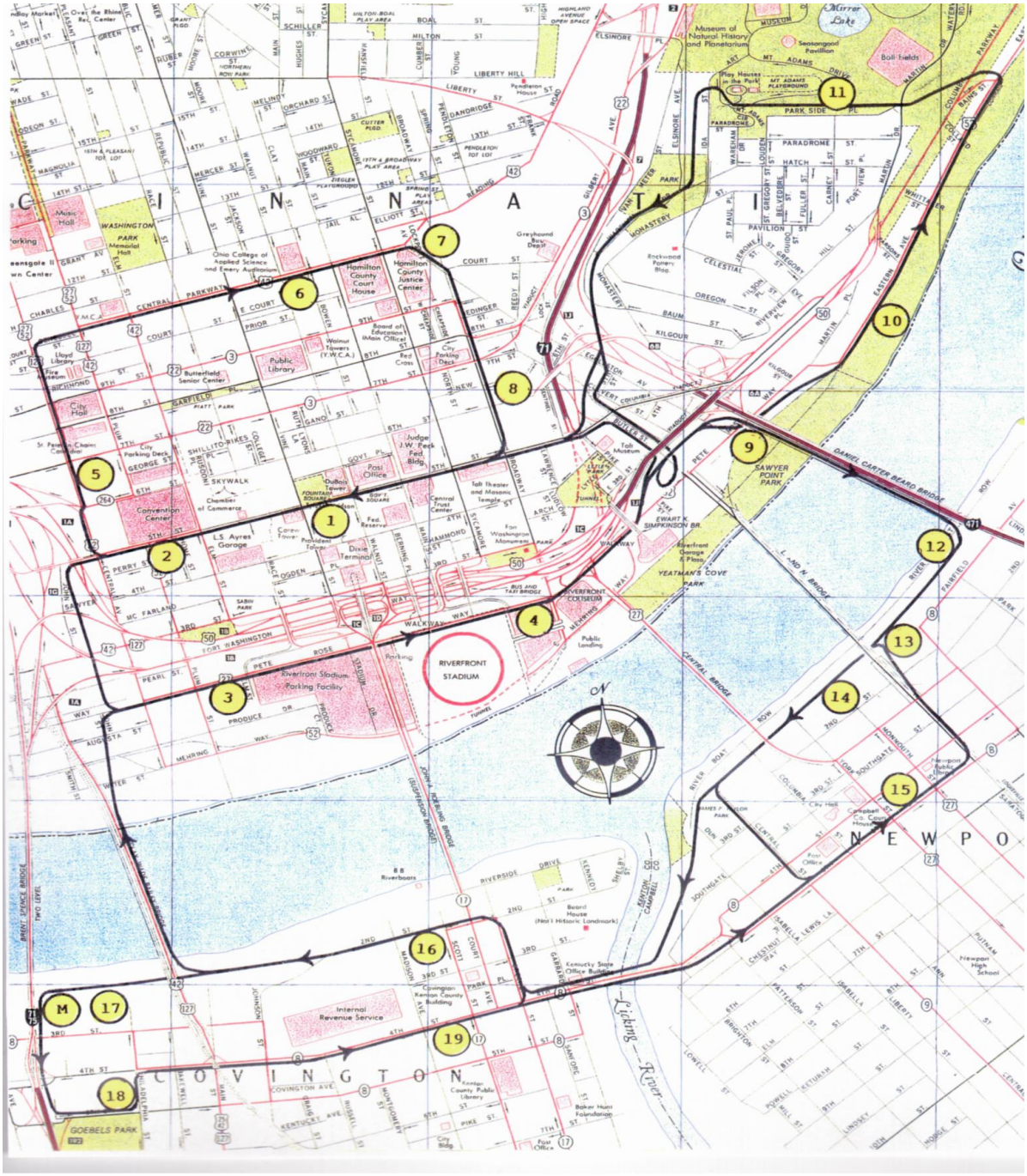
My PRT work kept me very busy. There would be no more trips to Korea because of their currency collapse. Ray MacDonald said that the company he worked for there may go bankrupt, so he is looking for other opportunities. Norway is the latest entrant into interest in PRT. I learned that the Oslo transit system collapsed and that there is a great need for a new solution. A group was formed to begin investigating PRT. Thanks to my urging, they are working with a group in Gothenburg. I made two trips to Denver, at the urging of Dr. Byron Johnson, to participate in workshops on the I-70 corridor from Denver International Airport to Glenwood Springs. The consultant said that he knows that the proven systems like trains or busses won't work and they need a new solution. There was a group in Denver pushing Taxi 2000. We were not able to start our PRT planning and design study at the University of Minnesota, but the Center for Transportation Studies wants it and there were some very good people pushing it.

At about this time, spring 1998, I noted to my Board that at the rate we were spending money from the funds we received from Raytheon, we would soon be out of money, so I proposed that my salary be cut substantially and that we review the annual payments we were required to pay the U. S. Patent Office to maintain our patents, which now were only within a few years of running out. A year later we stopped payments.

Much of my time during spring 1998 was devoted to preparation for a Symposium in Cincinnati to be held on June 13th. The Advanced Elevated Rail Committee had for the previous two

years been studying information they could find on elevated rail systems. They found data on over 50 such systems and from them selected what they determined were the top eight for presentations on June 13th. Taxi 2000 was among them. To prepare, Chuck Roth and his colleagues prepared a plan for a PRT system to serve the Cincinnati Metropolitan Area. Their plan, which was later modified to provide better service to the Cincinnati Reds Ball Park and to a new football stadium then under consideration, is shown on the next page. I had sufficient time before the Symposium to develop a simulation of that system and presented it as part of my talk. People gasped with surprise − the simulation was clearly a differentiator. Each presenter was invited to bring displays, and I brought ours. Each of us was given a half hour after our presentations to answer questions. The AERC hired Jakes & Associates to assist them in evaluating the various technologies against their criteria. Deliberations occurred throughout the summer and in November the committee selected Taxi 2000 as the preferred technology. AERC changed its name to The SkyLoop Committee (SLC). A web page, www.skyloop.org, was developed by Bob Brodbeck, who had also markedly improved and then maintained www.taxi2000.com. The reader can still access the 1998 version of these web pages via www.archive.org, a web page maintained by the Library of Congress. The remarkable fact was that Taxi 2000 was still legally tied to Raytheon. They both knew that and knew the difference between my design and the one built by Raytheon. We had argued that, if there was interest in Cincinnati, we would find private funds to build a demonstration system and then give the manufacturing rights to Raytheon. Our PRT system was to go over the bridges shown here.

One of the questions AREC did not ask me was about the passenger wait times recorded as part of my simulation of the Cincinnati PRT network. I was glad they did not because the wait times were too long – embarrassingly long. This was the largest network I had simulated and the results differed from previous simulations. As a result, I spent many hours during the summer of 1998 trying without success to figure out what would reduce the waits. I was also preparing a paper that I had been invited to present at a conference called "Computers in Railways VI" which was held in Lisbon, Portugal, on September 2 – 4, 1998. The title of my paper was "Simulation of the operation of personal rapid transit systems." When I arrived at the conference hotel and registered, I was given a two-inch-thick volume of papers that were to be presented. I read through the table of contents and spied a paper entitled "Empty freight car distribution at Swedish State Railways" by Dr. M. Joborn of the Department of Mathematics at Linköping University in Linköping, Sweden. I read through Dr. Joborn's paper and by the end I knew what I had to do to reduce wait times. I had my laptop computer with me and in a few days programmed a completely new (to me) method of moving empty vehicles that reduced the average wait times in my Cincinnati simulation to less than one minute.



Here is a response to the presentation I gave in Lisbon, and following it an interesting indication of interest from Honda Motor Company:

Dear Dr. Anderson:

It is a great pleasure to write to you.
Because I was very much amazed by your great presentation at COMPRAIL i
n Lisbon,
I am eager to introduce PRT to my colleagues of JR-Central and tell the
m how amazing
your operating simulation was.
Actually, I am planning to write about it in the company magazine calle
d JR Technical
Report, but they may not imagine what PRT is like without pictures.
I wonder if you would be so kind that you send me a brochure or somethi
ng carrying
photographes of PRTs.
Or if it is impossible, could I use some pictures from your web site?

My address is: 1-3-4 Meieki, Nakamuraku, Nagoya 453-8520, Japan

I am looking forward to hearing from you soon.

****
* Hidetoshi Shibata *
* Central Japan Railway Company *
* e-mail : hshibata@hellonet.or.jp *
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Shef Lang and I meet with Kazuya Akaba of Honda Motor Co. for two hours on Saturday, August 29, the morning before I left for Lisbon. We agreed to further discussions when I returned home. Our contact with Honda was renewed in October, at which time they agreed to fund some work mainly for them to understand the market for PRT. I was able to invoice them for almost $6000 for assisting them and also got Ray MacDonald involved in giving them access to his extensive work on the PRT market. I informed him that I had been in contact with representatives of the Japan Science City who had developed a plan for a PRT installation. Mr. Akaba visited those people as well as others interested in PRT. After months of study, I was informed that Honda was an automobile company and found that PRT was too far from their range of expertise, so I heard no more from them. In the meantime, I also got queries from the Mitsubishi Research Institute and several other Japanese organizations, but nothing ever came of them.

Facsimile Transmission *Future Research*

To: J. Edward Anderson

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Date **98.8.4**

From: Kazuya Akaba
HONDA Motor Co., Ltd.
Corporate Planning Div. Future Research

Subject: Interview request

Dear Prof. Anderson

I represent the Future Research Group, Corporate Planing Division of HONDA Motors,Co,.Ltd Japan. My focal point of research is the future transportation system.

Although the automobile on which we rely on for our individual life is our core business domain, it has only 100 years history. It's future is not predetermined. What kind of transportation tool will the automobile industry have to provide for all individuals ? Those are our goals to define. For that reason, I have a great interest in the " Personal Rapid Transit" System Concept. I congratulate you on a true breakthrough in better mobility service in the future.

Regarding the future transportation system, I think our goal is quite similar to yours. I will be in the U.S. between August 26 and September 4, and would appreciate a chance to visit your office and share some notes, if you are available. If you would be willing, I would like to come to Minnesota on September 2th and would like to meet for 2 hours or to your convenience. Please let me know if this is possible by e-mail or fax and we can arrange a specific date.

It is my honor that I could contact you, and I thank you for your consideration. I look forward to hearing from you soon & meeting you.

Yours truly,

Kazuya Akaba
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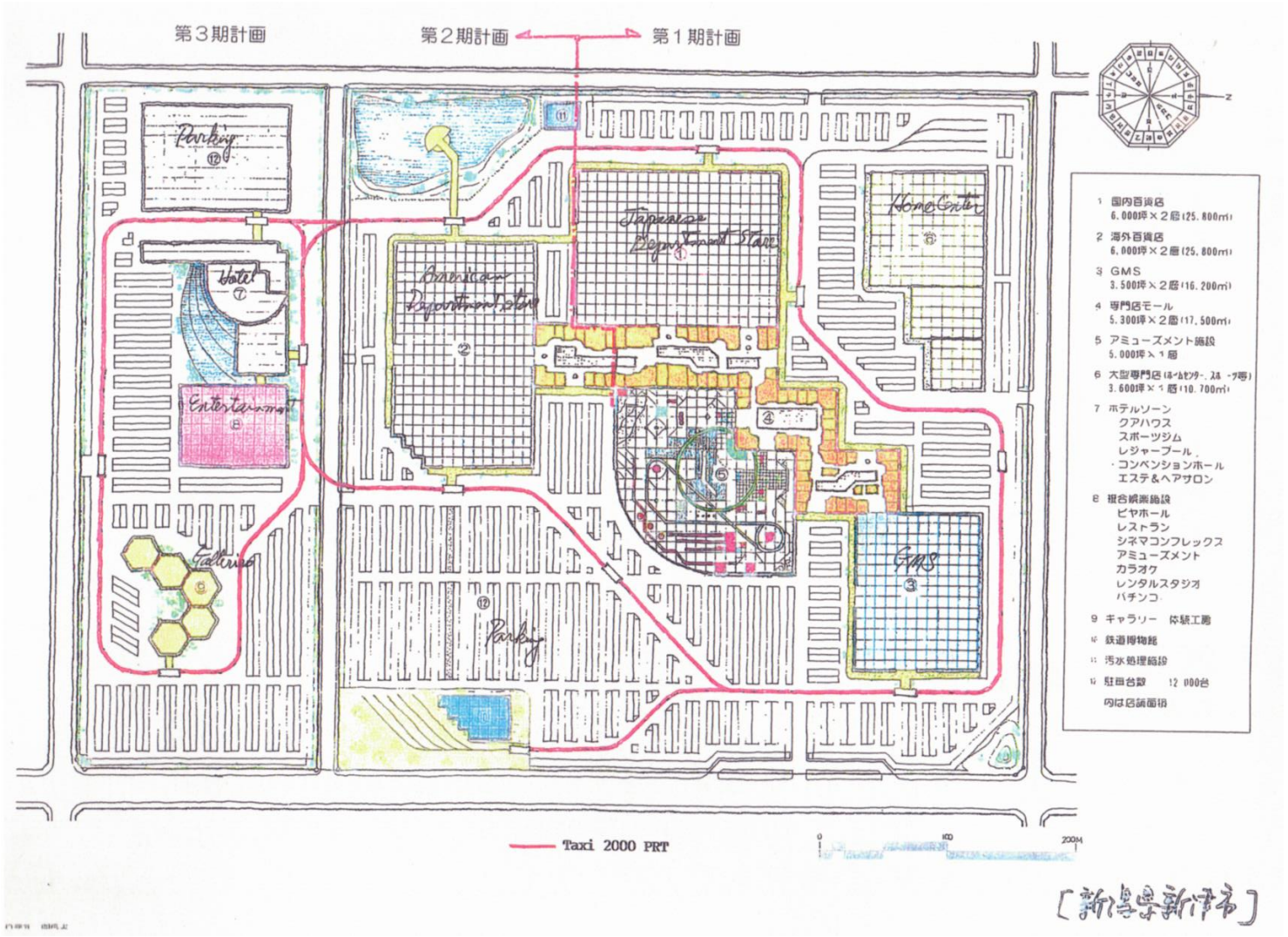
Raytheon had continued to work on the Phase III project at Rosemont, Illinois, and had been refining their estimates for capital and operating costs. All this was leading to a meeting of the RTA Directors on November 7, 1998. They were to vote on providing the funds needed to build the Rosemont system, now at about $43 million per mile and almost four times the Stone & Webster estimate. What I learned some months later was that the discussion of PRT funding was removed from the agenda and the RTA never said anything about PRT after that. I learned several years later that one serious problem was that Raytheon would not guarantee the operating costs of the Rosemont system. So this was the end of RTA interest in PRT. Almost a year later Raytheon, now lead by a new CEO, announced that they had abandoned the PRT business.

Two other events occurred in November 1998. One was an article that filled the entire Opinion page of the November 14th *Sunday Star Tribune* entitled "Really light rail." It was by David Morris, Vice President of the Institute for Local Self-Reliance in Minneapolis. The article is much too large to fit on an 8 ½ x 11 page, but it resulted in many inquiries and expanded the ranks of Citizens for PRT. A second event was an article that, thanks to our Director Ed Rydell, appeared in the Fall 1998 issue of *Inventing Tomorrow*, a publication of the University of Minnesota's Institute of Technology.

A St. Paul architect, Richard Wolfgram, upon reading the article in *Inventing Tomorrow,* had gotten sufficiently interested in working with us that he had an associate develop the illustration shown here of Taxi 2000 in front of the Excel Sports Center in St. Paul. This illustration was included to a large scale in the above-mentioned *Sunday Star Tribune*.

Having seen the November 1998 *Star Tribune* article, a Japan/USA business consultant Shiro "Don" Katagiri, who lived in Minneapolis, contacted me about a possible business arrangement between his company, Kiku Enterprises, Inc. and the Tokyo firm Commerce Systems Corporation. CSC was a developer of a large-scale commercial complex in Japan and had built many shopping centers in conjunction with local government re-development plans. When I met Don he gave me a copy of the planned commercial complex that I show on the next page. Note that CSC had already shown the complex being served by Taxi 2000. Once I signed the agreement, Katagiri and CSC intended to seek potential investors such as Mitsubishi, Sumitomo and Kumagai Gumi, all large companies. His intention was that the new joint venture company would be able to pay my travel expenses to Japan. The president of CSC, Mr. H. Roji, later visited me and gave me a book he had written about the development of shopping malls and showing that he had worked with the Gharmezian Brothers, who had built a large mall in Edmonton, Alberta.


第３期計画
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第１期計画
Parking
Hotel
Entertainment
Japanese Department Store
American Department Store
Home Center
GMS
Parking
Taxi 2000 PRT
0
100
200M
1 国内百貨店
6,000坪×２層(25,800㎡)
2 海外百貨店
6,000坪×２層(25,800㎡)
3 GMS
3,500坪×２層(16,200㎡)
4 専門店モール
5,300坪×２層(17,500㎡)
5 アミューズメント施設
5,000坪×１層
6 大型専門店(ホームセンター、スポーツ等)
3,600坪×１層(10,700㎡)
7 ホテルゾーン
クアハウス
スポーツジム
レジャープール
コンベンションホール
エステ&ヘアサロン
8 複合娯楽施設
ビヤホール
レストラン
シネマコンプレックス
アミューズメント
カラオケ
レンタルスタジオ
パチンコ
9 ギャラリー　体験工房
10 鉄道博物館
11 汚水処理施設
12 駐車台数　12,000台
内は店舗面積

［新潟県新潟市］