

SKYBUS:

Pittsburgh's missed chance at reviving public transportation

By Ed Reis

Skybus shuttles hurry past each other on their elevated guideways, c. 1965.

HHC Detre L&A, MSP 424, Box 50, Folder 14.

“ALL ABOARD! ALL ABOARD!”

It was autumn 1965 and the crowds arriving at the annual Allegheny County Fair in South Park were boarding a shiny prototype Westinghouse transit vehicle for a short ride to the fairgrounds. Long lines waited to board the air-conditioned, rubber-tired transit car, enjoying a bird's-eye view of the fair as they looped around the racetrack.

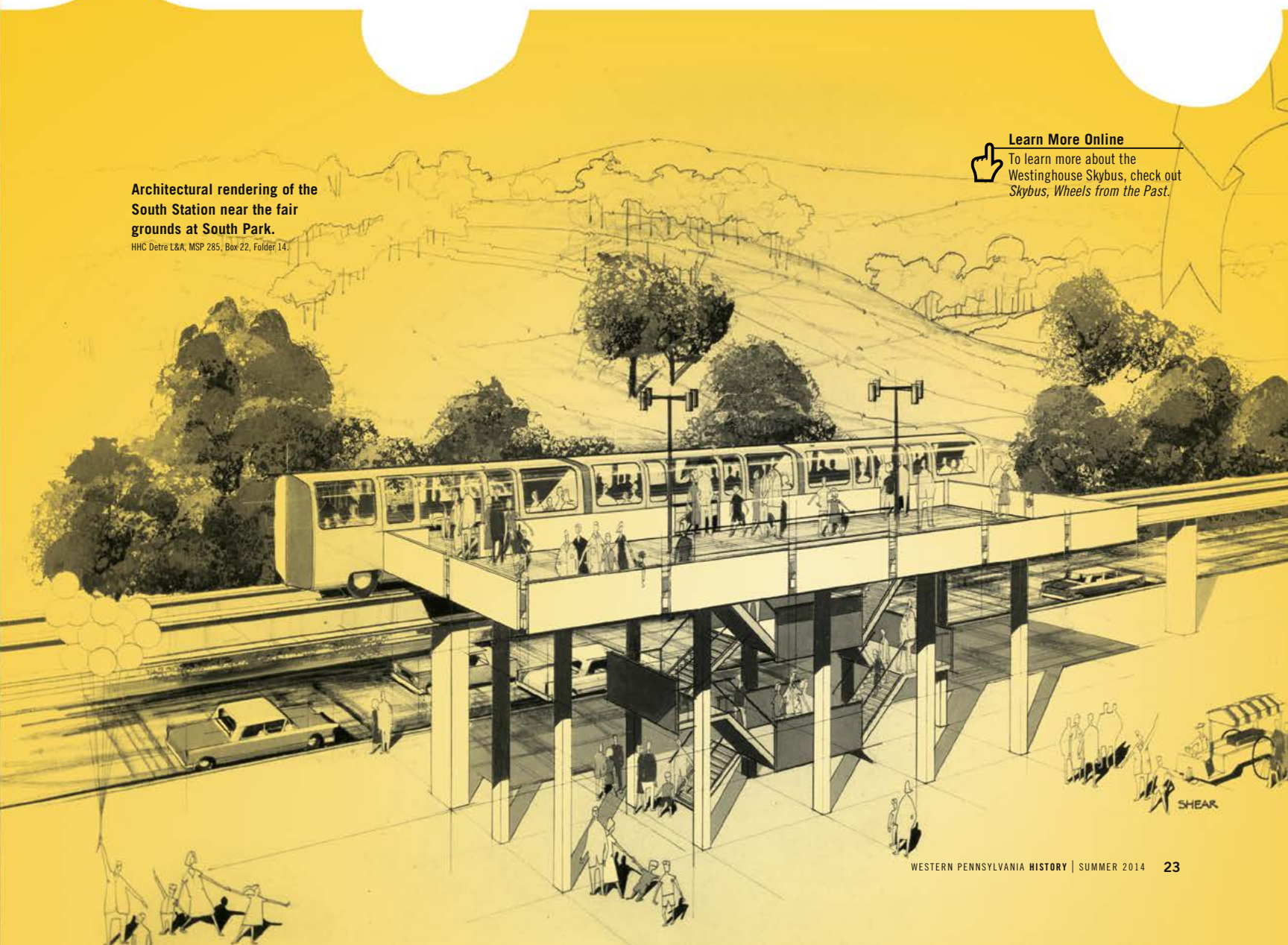
The gleaming machine was called “Skybus.”¹ Its two-mile-long elevated concrete guide-way, made for the cars to ride on their tires, was the first of its kind. The forward-thinking project, from new vehicles to innovative locomotion, was seen as crucial to Pittsburgh's efforts to clean up the city and streamline its public transit. A half-century after its rise and fall, little remains except for an intriguing effort to track down any of the revered vehicles.

Architectural rendering of the South Station near the fair grounds at South Park.

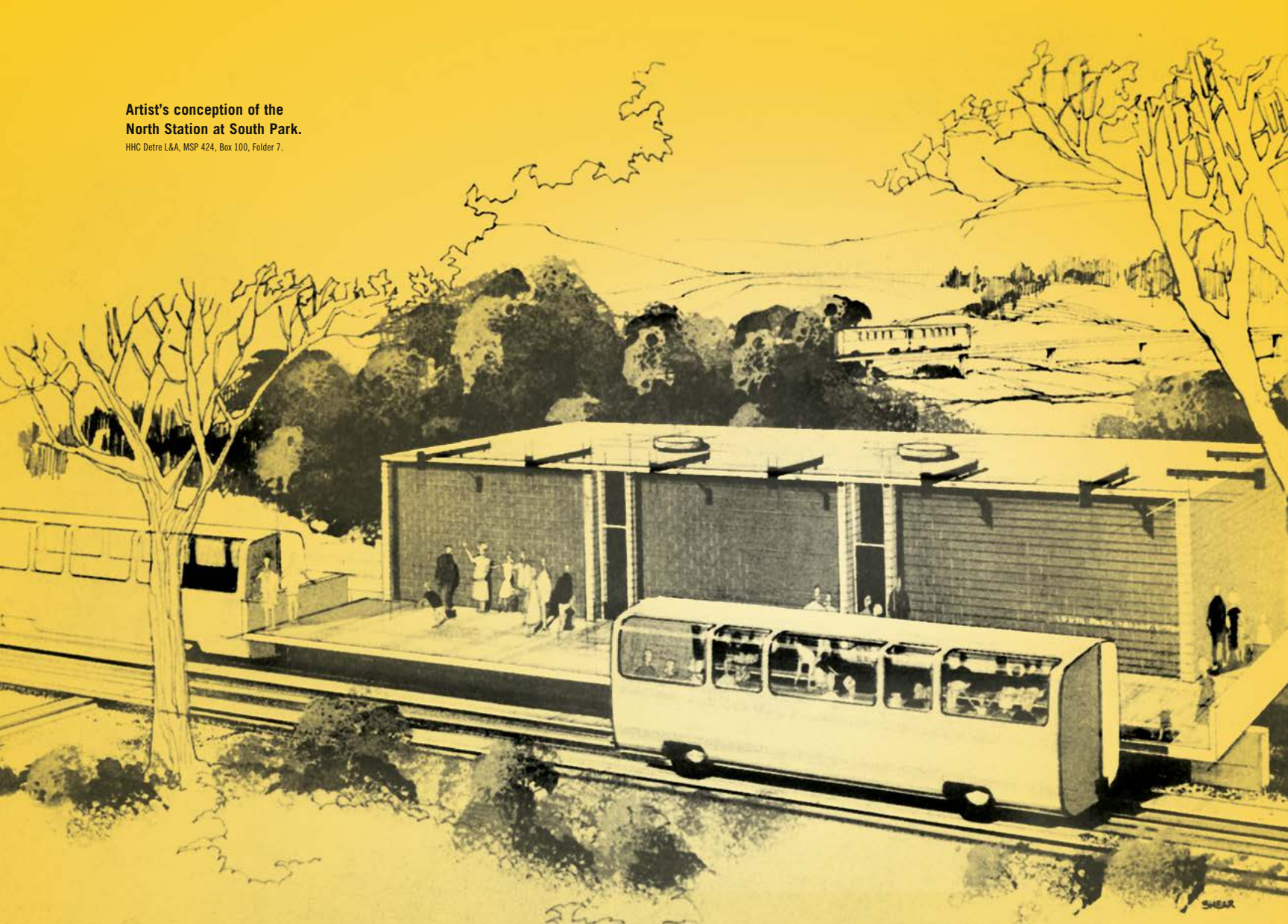
HHC Detre L&A, MSP 285, Box 22, Folder 14.

Learn More Online

To learn more about the Westinghouse Skybus, check out *Skybus, Wheels from the Past*.



Artist's conception of the
North Station at South Park.
HHC Detre L&A, MSP 424, Box 100, Folder 7.



With Westinghouse Electric and other corporate headquarters in the city, civic and business leaders saw an opportunity to make the region a forerunner of design and manufacturing of rapid transit systems.



The inspiration for Skybus found its spark in the cultural and political movements of 1950s Pittsburgh. The “Renaissance” was an effort by civic and business leaders to clean up Pittsburgh’s grim “Smoky City” image. Large-scale urban renewal had helped clear the rail yards to make way for Point State Park and the adjacent Gateway Center office complex. Also targeted was air pollution from industry and homes heated by coal. In just a matter of years, slums were cleared, buildings scrubbed, and the smoky air improved.

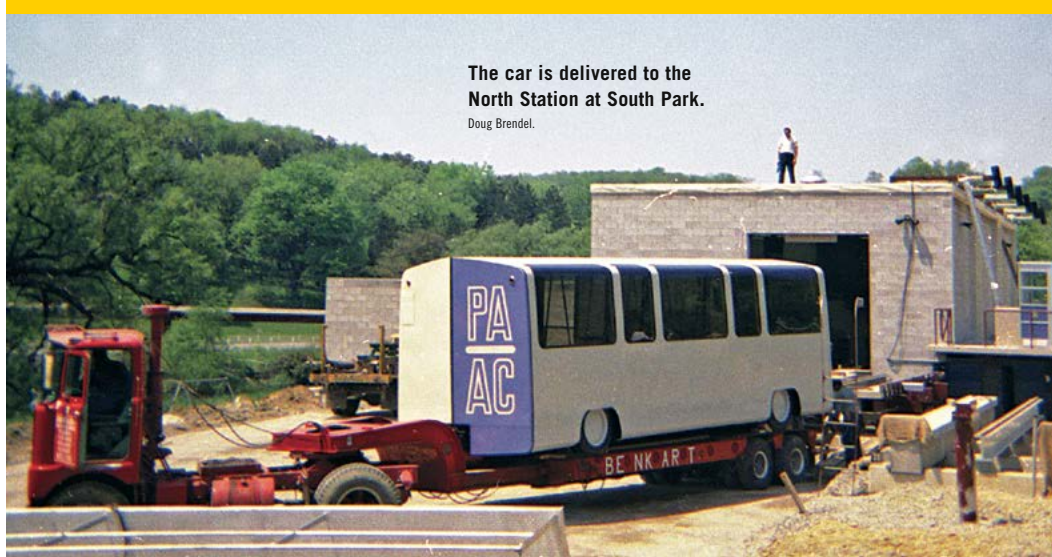
Infrastructure was also to be upgraded through a well-planned, comprehensive public transit system. Since the end of World War II, commuters had been abandoning the mishmash of competing bus and trolley companies in favor of the ease and comfort of driving their own cars, leading to congested roads and parking lots. With Westinghouse Electric and other corporate headquarters in the city, civic and business leaders saw an opportunity to make the region a forerunner of design and manufacturing of rapid transit systems.

The Port Authority of Allegheny County was created in 1956, and three years later, its purpose was amended to acquire Pittsburgh Railways Company and 32 other local transit companies through eminent domain. This included buses, inclines, and even a few specially designed railroad passenger cars that rode on existing railroad tracks between Pittsburgh and McKeesport. This comprehensive plan was envisioned as the best way to address the local transportation needs of the future while offering the potential for business growth to produce such a system.

The effort was headed by local financier Richard King Mellon and the Allegheny Conference on Community Development.² Mellon took the efforts so seriously that the lifelong Republican partnered with the city’s Democratic mayor to achieve their goals. There was a lot of optimism; after all, most of the same people had championed the Pittsburgh Renaissance, which was a tremendous success



A new car leaves the Westinghouse plant in East Pittsburgh.
Doug Brendel.



The car is delivered to the North Station at South Park.
Doug Brendel.

The construction of the wheels and track system was detailed in a 1967 report, *Testing and Evaluation of the Transit Expressway*.
Doug Brendel.

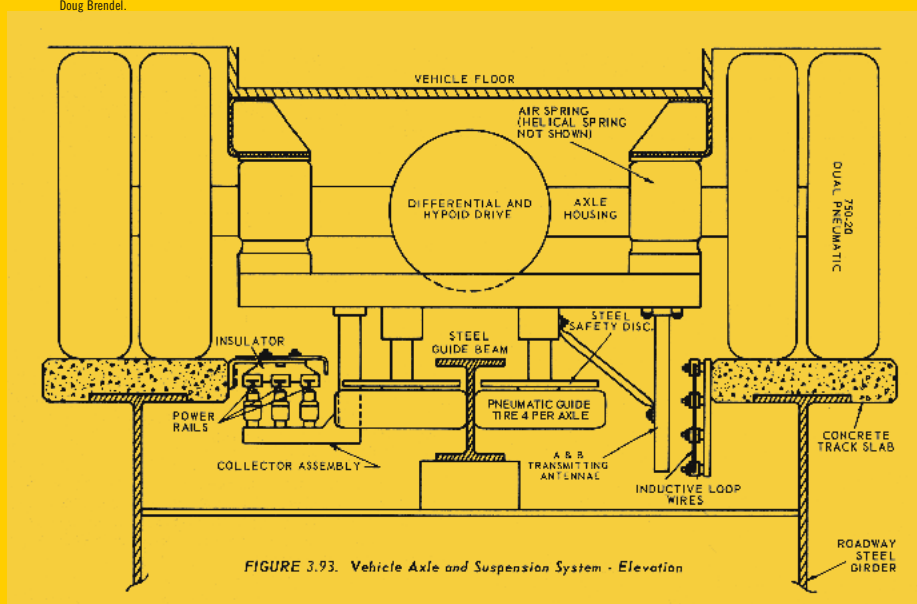


FIGURE 3.93. Vehicle Axle and Suspension System - Elevation



Eager crowds lined up (often for hours) for a ride on Skybus, both views here at the South Station.

HHC Detre L&A, MSP 424, Box 50, Folder 13.



and positioned the city at the forefront of urban renewal. Mellon and the ACCD thought they could do the same for rapid transit. An “Early Action Plan” of the Port Authority detailed replacing the existing light rail trolley routes with a 92-mile, 460-car transit system linking suburban communities with downtown Pittsburgh at a cost of approximately \$740 million.³ An 11-line Skybus transportation system—formally, the “Westinghouse Transit Expressway”—was the centerpiece of the comprehensive plan, with 11 stations downtown and 47 more in the suburbs.⁴

With the plan approved, three prototype vehicles were made, each seating 26 people with standing room for an additional 28. Each car had a top speed of a respectable 50 miles per hour. The vehicles were designed with side doors so they could be run independently or connected in sets of two or three. Interestingly, Westinghouse found out it took 40 seconds to load the vehicle, but only 18 seconds for the people to leave.⁵ At the fair, long lines with waits up to three hours discouraged some riders, but many more waited: 13,921 men, women, and children paid the 10 cent fare to take the fascinating ride during the 1965 fair—and they were thrilled!⁶ This scene was repeated for the Allegheny County Fairs of 1966 through 1971. Skybus remained popular while in service and ever since in memory.

Word of the success of the Skybus system traveled quickly. Walt Disney, who had a good relationship with Westinghouse dating back to the late 1930s (when he contracted the company to make plastic toys), was experiencing breakthrough success with Disneyland in California. In 1966, Disney visited the Westinghouse Tele-Computer Center in Pittsburgh, known for its innovative advances; he was interested in how computers could be applied to monorails at Disneyland and new parks he was planning in Florida. Although Skybus was operated manually at first, it was intended to be fully automated, thus eliminating the need for someone to

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operate the vehicles. The futuristic design caught Disney's attention, along with the very quiet ride of the rubber-tired vehicles.⁷

A Rapid Transit Study was commissioned in 1965 and released two years later that advocated for extending the new concept into the entire system.⁸ However, Skybus' initial triumph was soon embroiled in political machinations. Richard King Mellon passed away in 1970, and David L. Lawrence was no longer mayor. Besides, no longer could two

powerful men have informal meetings and move their agenda forward, with any opposition being easily neutralized. As an alternative to Skybus was proposed (and apparently decided against behind closed doors), opposition arose. The resulting criticism and funding questions mired city, county, and state leaders in legal battles and stymied any possible potential transportation renaissance.

There were concerns too about the ability of Skybus to operate in the snow or on

anything other than a flat track. The winter weather issue was successfully tested and resolved, and a spur guide-way sloping 10 degrees was constructed at South Park that likewise resolved that concern. Fully automated Skybus vehicles were also successfully tested. Still, newspapers, radio, and television stations often highlighted the perceived shortcomings of the proposed new rapid transit system. Stories carried headlines such as, "Controversy Clogs Path of Skybus," and "PAT Sued To Bar Skybus Aid."⁹ Later articles blared, "What They Said At Stop-Skybus Hearing," "Legal Ruts Along Skybus Way," "Shouting Match Held at Skybus Hearing," and "Skybusters Rapped By Westinghouse."¹⁰ The injunction lawsuit filed by Pittsburgh Mayor Flaherty, Allegheny County Commissioner Hunt, and 13 suburban mayors went on for months. When the case moved up to the Pennsylvania Supreme Court, it was thrown back into the lap of the Allegheny County Court of Common Pleas.¹¹

Meanwhile, in 1971, the Skybus demonstration rides at the Allegheny County Fair ended. For those supporting the idea of a futuristic rapid transit system in Pittsburgh, its loss seemed a sure sign that the larger Skybus plan itself would end.

A car glides silently towards the North Station.

HHC Detre L&A, MSP 424, Box 50, Folder 13.





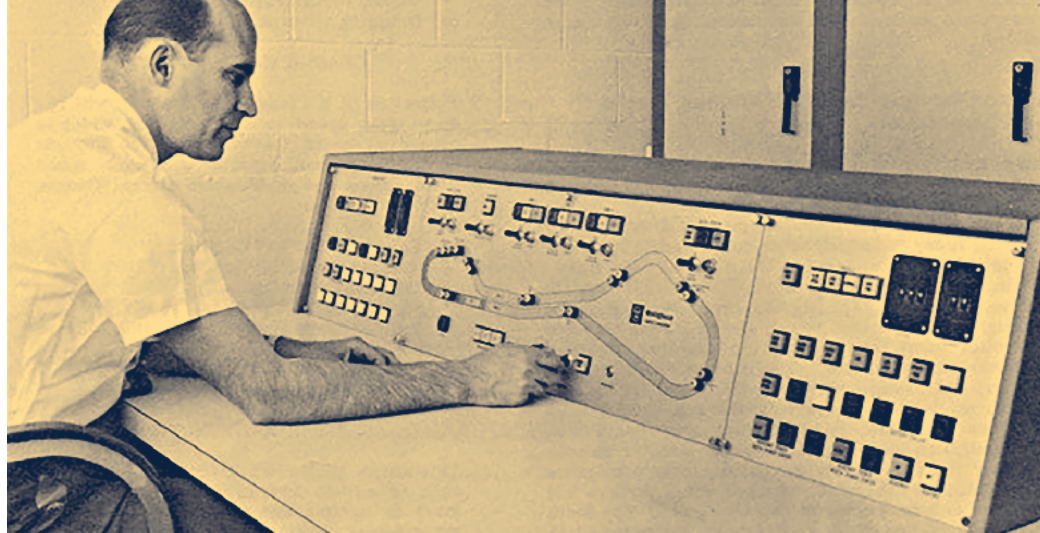
Passengers on Skybus got a bird's-eye view of the Allegheny County Fair starting in 1965.
HHC Detre L&A, MSP 424, Box 50, Folder 13.

In 1975, this once rather heady, revolutionary transportation proposal came to a halt when the governor of Pennsylvania stopped the funding for the experimental project. Besides, yet another study now advised that a lower-cost Light Rail Transit line (essentially, a modern trolley) be adapted, despite Skybus being better and safer (let alone eliminating all grade crossings of conventional trolleys). It was a missed opportunity for the city of Pittsburgh to be on the cutting edge of public transportation. As the *Pittsburgh Post Gazette* editorialized, "Pittsburgh would have been in the vanguard of cities ... which have recognized that automation is the future of urban rapid transit.... Allegheny County is to sacrifice innovation for a conventional trolley operation in the interest of economy."¹²

More than 40 years after the last ride, the once-cutting edge Westinghouse Skybus vehicles were nowhere to be found. Two were known to have been scrapped when the experiment ended in 1975. But what of the third car? For at least three of those decades, no one knew.

Enter Doug Brendel, a graphics designer and local historian. After reading of the Skybus story, Doug began to search for surviving vehicles. Doug pursued a faint trail for the better part of two years until it led him to Ellwood City, 40 miles northwest of Pittsburgh, to Hall Industries and its owner Harold Hall. Back in the early 1980s, Harold had been involved with a transportation museum at Station Square on the South Side of Pittsburgh, which held one of the original Skybus vehicles. After seven years, the museum went under and, since no one else was interested, Harold moved the vehicle to Ellwood City. He covered it with a tarp and there it sat, lost in the shadows of time, until Doug Brendel came looking. Against overwhelming odds, the only remaining original Westinghouse 1965 Skybus vehicle was found.

Doug contacted Dave Crawley, a popular features reporter from KDKA-TV, who brought a production crew to Ellwood City



ABOVE: Control panel for Skybus at South Park.

Doug Brendel.



LEFT: Skybus was little different from today's airport people movers.

HHC Detre L&A, MSP 424, Box 50, Folder 13.

BELOW: Walt Disney visited Westinghouse on January 16, 1966. A monorail had been running at Disneyland in California since 1959, but Disney was fascinated by the driver-less Skybus. Disney World would open in Florida five years later but its monorail remained similar to the one in Disney's California park.

Photos by John Merahaut. HHC Detre L&A, MSP424, Box 8, Folder 260.



An official's commemorative medal from the 1965 fair features a portrayal of a Skybus station.

Curt M. McCormick.



and filmed a segment on Skybus that was aired on his news-time *KD Country*. Doug was also in touch with myself during his research on Skybus, and envisioned this Western Pennsylvania transportation artifact might be displayed in the first floor Great Hall at the Heinz History Center. He hoped it could be displayed there alongside such items as a 1784 Conestoga Wagon, a stainless steel 1936 Ford DeLuxe sedan, the oldest surviving Jeep (built nearby in Butler), and a restored 1949 Pittsburgh Railways Company streetcar.

Instead, as the Heinz History Center's Westinghouse historian, I suggested that Doug contact Bombardier Transportation (formerly Adtranz) in West Mifflin, as it owns what was at one time the transportation division of the Westinghouse Electric Corporation. Although Skybus had been stopped in its tracks, the Skybus concept lived on, even before Bombardier acquired its people-

moving business. Westinghouse developed Bay Area Rapid Transit System (BART) in San Francisco, evolved from the work that had been done on Skybus. Following that, the Skybus concept grew even further, resulting in the successful Westinghouse Airport People Mover transportation systems that were installed at airports around the world, beginning with Florida's Tampa Bay International Airport in 1971. Another early Westinghouse people mover system became operational at Busch Gardens amusement park, also in Tampa. A Westinghouse-designed and -manufactured people mover transportation system is in use today at the Pittsburgh International Airport. After Canadian-based Bombardier acquired the business, it continued to be successful with its worldwide "Airport People Mover" business. To this day, such systems are fully automated, rubber-tired people movers—traits inherited from Skybus.



ABOVE: Map of the Skybus track at South Park.

HHC Detre L&A, MSP 424, Box 100, Folder 7.

RIGHT: One of two models of the Westinghouse Skybus, likely built by the company as a miniature prototype.

HHC Collections, 2007.167.346a, b.



Doug Brendel contacted Bombardier and its vice president, Mike Festko, who was amazed that a 1965 Skybus vehicle from the original three had been located after four decades. As Festko said, "It was an opportunity that I just could not pass up!"¹³ When Doug and Mike visited Hall Industries it was obvious that the vehicle was in less-than-perfect condition, but individuals at Bombardier had a vision for a fully restored, original Skybus vehicle proudly displayed in front of their West Mifflin complex.

Bombardier negotiated with Harold Hall and acquired the only remaining original Skybus vehicle. The vehicle was then transported to Nowak Commercial Refinishing Company in Amity, Washington County, for a complete restoration. Many hands made light the work. The oldest living member of the original Westinghouse Skybus project, Ed Appleby, was located for his expertise as the former director of Skybus development. Another gentleman, Bill Segar, the Skybus project manager back in the 1960s, was also contacted. Bombardier's Arthur Bistig became the project engineer on the restoration project. Ed Nowak from Nowak Commercial Refinishing was personally involved. And, of course, Doug Brendel continued to provide assistance on the restoration. Even Doug Brendel's father and brother helped with the visual design restoration.

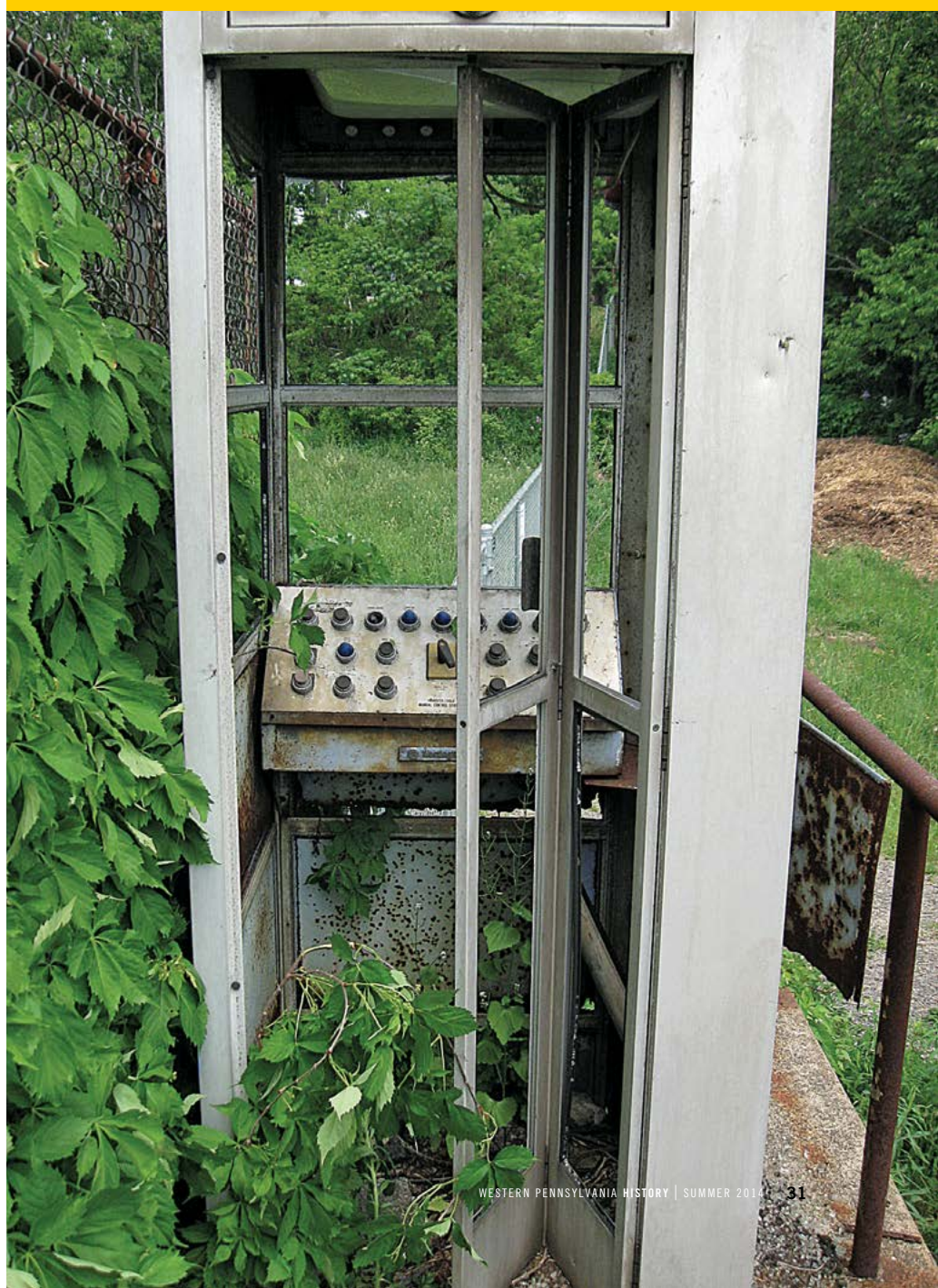
The Skybus vehicle was taken apart with all the mechanical and electrical components reconditioned. New glass was ordered using the original specifications, a rather expensive undertaking. The interior, which was in fairly good condition, was cleaned and remade where needed. The vehicle was repainted in the original off-white color and accented in what over the years became known as "Westinghouse Blue." On the one end of the vehicle was the lettering "PA AC" for Port Authority of Allegheny County, repainted to the original specification. Even though the original Skybus vehicles belonged to



ABOVE: Decaying remnants of the Skybus system remain at the North Station, now used for county park storage.

BELOW: The control "phone" booth that directed cars into the station for maintenance is rusting away nearly five decades after being installed.

Both Doug Brendel.



Westinghouse, they were identified as though they belonged to the Port Authority, for that was the goal at the time. When it was done, it looked exactly like it did back in 1965.¹⁴

The Skybus vehicle had a complete makeover, not only in appearance, but it was once again in full working order. If the elevated roadway still existed in South Park, along with the supporting apparatus, Skybus could again make the loop around the South Park Fair Grounds. But that was not the intent of Bombardier; instead, the restored Skybus was moved from Amity to the Bombardier complex in West Mifflin, where an unveiling and Skybus dedication ceremony was held. Harold Hall, who saved this old vehicle for many years, was impressed: "I think it's going to have a great opportunity for the world to see it."¹⁵

Many folks thought that the Allegheny County Fair was just not quite the same once the Skybus vehicles could no longer be seen making the loop around the South Park Fair Ground's racetrack. Many were also saddened to see the South Park's North and South Stations and the elevated guide-way deteriorate. The South Station was finally dismantled in the mid-1980s, with only the North Station remaining, now used as an Allegheny County storage building.

The original Skybus project failed, for both political and financial reasons, but Westinghouse continued to innovate, building similar people-mover systems, mostly for airports, around the world. And now an original Skybus vehicle also lives on, proudly displayed in front of the Bombardier Transportation complex.¹⁶ And, with a little imagination, one can visualize the ghost of Skybus gliding smoothly and silently along the elevated guide-way during a misty morning at South Park. If you have a strong imagination, you may even hear someone shout, "All aboard, all aboard!"

Ed Reis is the Westinghouse Historian at the Heinz History Center. He is retired from the Westinghouse Electric Corporation. Ed was also the executive director of the George Westinghouse Museum in Wilmerding, Pennsylvania, from 1998 until 2007, at which time the George Westinghouse Museum merged with the Heinz History Center.

¹ At one point in time it was discovered, to the chagrin of Westinghouse executives, that a small airline had the rights to the name "Skybus," so Westinghouse changed its product's name to the Westinghouse Transit Expressway. But even today, for those who remember it, it still is referred to by the catchy name, "Skybus."

² Morton Coleman, School of Social Work; David Houston, Department of Economics; Edward K. Muller, Department of History, *Skybus – Pittsburgh's Failed Industry Targeting Strategy of the 1960s* (Pittsburgh: University of Pittsburgh, 2000).

³ Clint Burton and Doug Brendel, *Westinghouse Transit Expressway – Skybus in South Park*, www.BrooklineConnection.com.

⁴ "The extensive rapid transit system which evolved from the preliminary patronage and route location analysis ... would contain 92.0 miles of double track lines and 56 stations. The Urban System would account for 9.1 miles of the system and serve 11 stations, two of which would be common to the Suburban System (Market Square and Dahlem). The average station spacing on the Urban Line is 0.8 mile. The Suburban System would account for the remaining 83 miles, serving 47 stations with an average station spacing of 1.8 miles. The total system would consist of 11 lines," from Chapter III "Formulating a Mass Transit System" in *Port Authority of Allegheny County, Allegheny County*

Rapid Transit Study, 1967, III-14, online at www.briem.com/files/skybus.pdf.

⁵ "Westinghouse Transit Expressway Proves Big Hit," *Westinghouse News* 20, no. 10 (October 1965), Senator John Heinz History Center Detre Library & Archives collections.

⁶ "Skybus at the Fair," *Westinghouse News* 20, no. 10 (October 1965), Senator John Heinz History Center Detre Library & Archives collections.

⁷ Interviews and oral reports by Westinghouse employees by author, 1980s.

⁸ *Allegheny County Rapid Transit Study, 1967*.

⁹ *Pittsburgh Post-Gazette*, August 22, 1969; *Pittsburgh Post-Gazette*, July 15, 1969; *Pittsburgh Post-Gazette*, August 18, 1969; *Pittsburgh Post-Gazette*, August 23, 1969; and *Pittsburgh Press*, July 14, 1969.

¹⁰ *Pittsburgh Press*, July 21, 1969; *Pittsburgh Press*, February 25, 1972; *Pittsburgh Post-Gazette*, February 25, 1972; *Pittsburgh Press*, March 4, 1972; *Pittsburgh Post-Gazette*, March 16, 1972; and *Pittsburgh Press*, April 6, 1972.

¹¹ "Skybus — From the Beginning," *Pittsburgh Post-Gazette*, October 16, 1974.

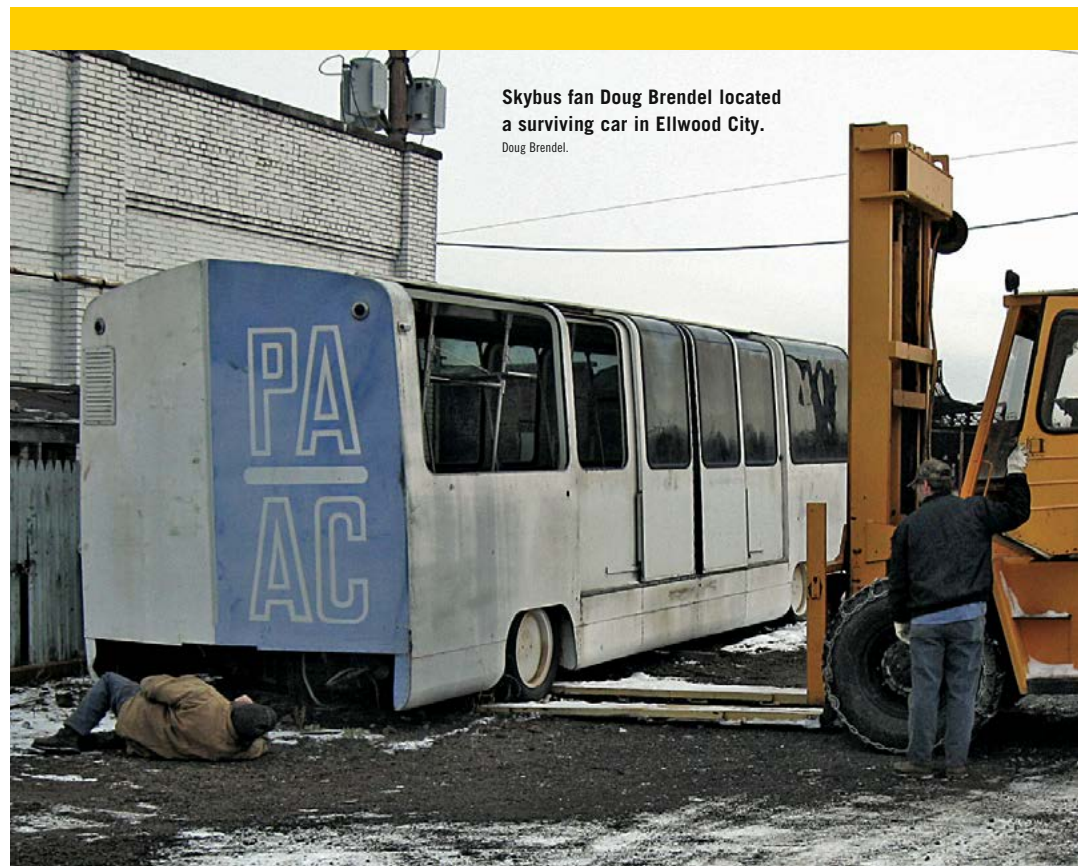
¹² *Pittsburgh Post-Gazette*, March 8, 1976, 6.

¹³ Interview with Mike Festko, Vice President of Bombardier's Automated People Mover Division, with author, West Mifflin, Pa.

¹⁴ Ed Appleby had donated some original 1960s Skybus models to the George Westinghouse Museum in Wilmerding. With the merger of the museum into the Senator John Heinz History Center in 2007, these Skybus models now reside in the Heinz History Center's Westinghouse collection.

¹⁵ Interview with Ed Appleby, the original director of Skybus Development for Westinghouse, with author.

¹⁶ Bombardier is at 1501 Lebanon Church Road, West Mifflin.



Skybus fan Doug Brendel located a surviving car in Ellwood City.
Doug Brendel.



ABOVE: Perhaps the best publicity for Skybus was simply having the cars glide above Corrigan Drive in South Park.

HHC Detre L&A, MSP424, Box 6, Folder 136.

LEFT: In 2010, the restored car was unveiled at Bombardier in West Mifflin. The company, which absorbed the Westinghouse transportation division that pioneered Skybus, has built thousands of light transit cars in the U.S. since 1976.

Doug Brendel.

Learn More Online
 Watch Skybus' dedication at Bombardier.