

Visions of Monorail in Houston, 1955-1994

Brian Anderson

Monorail transportation has long possessed a mythical appeal in Houston as the city has sought solutions to its perpetual traffic congestion problems. Those who see Houston as lacking the infrastructure and planning necessary for traditional forms of mass transportation have set forth the elevated monorail as a possible catchall solution, with its seeming simplicity of construction and operation. Since it requires only a single line of pole supports and therefore could be erected over existing freeways, monorail would seem to be the least disruptive, if not the least expensive, of all potential new mass transportation systems, allowing freeways and motorists to operate virtually unmolested during construction. Combined with the futuristic, sleek image monorails have maintained since their inception over 100 years ago, these presumed technical advantages have given thrust to numerous invocations of the monorail as a solution to Houston's transit woes since the 1950s.

Perhaps a more important factor in monorail's enduring popularity than any real or imagined technical advantages, however, is that the dearth of working monorail systems renders it ideal as a panacea for seemingly unsolvable transit problems. Only a handful of full-scale monorails have ever been built (the best-known being those at the Disney theme parks), so the practical value of the monorail remains optimistically open and perpetually "cutting edge." Monorails are not a particularly new type of transportation. The first passenger monorail, the Wuppertal line in the Ruhr Valley of Germany, was built in 1901 and continues to run.¹ Yet today, be-

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¹The earliest examples of monorails built in Europe and the United States utilized rails that ran on the ground rather than being suspended overhead. On February 29, 1888, a 9.5-mile-long ground-level monorail train track opened in western Ireland. In the United States, a ground-level monorail between New Rochelle, New York, and City Island, New York, was in operation as early as 1910. These ground-level monorails were more akin to a one-rail trolley than to the elevated version we normally think of as a monorail.

sides short-run airport and downtown monorails in cities such as Tokyo and Seattle, the monorail remains for the most part confined to science fiction and world's fairs. While optimists and rail enthusiasts have rallied behind the monorail as a possible savior for Houston, a city that has too long neglected mass transportation, cynics have derided monorails as an unrealistic "straw man" alternative to inevitable freeway expansion and improvements to existing roads. With no operating model to demonstrate its advantages as part of a full-scale urban transit system, skeptics have found the monorail easy to dismiss on technical imperfections—such as the difficulty of track switching—often leaving freeway construction as the most familiar and cost-effective means to alleviate gridlock in Houston.

Former Houston mayor Kathy Whitmire's devotion to the idea of monorail still lingers in the minds of many as one of the reasons for her failure to gain reelection in 1991. Overriding the debate on the value of monorails as a transportation alternative, the entire issue was reduced in the minds of many voters to the mayor's proposed research trip to Walt Disney World. That the best available prototype of monorail happened to connect the Magic Kingdom to the Polynesian Resort, however efficient and venerable the system, could only lend credence to critics' derision of Whitmire's plan as flighty and implausible.

Houston's relationship with monorail began long before Kathy Whitmire, however. In many ways, the history of the monorail in Houston can be traced as a wave graph, with the idea resurfacing periodically only to sink out of sight once more for lack of support. Houston had the first elevated monorail prototype to operate in the United States, and proposals to construct a monorail system in the city have been considered seriously on a number of occasions. Yet recent discussions of the monorail in Houston barely touch on the city's history with monorails. With each new wave of interest in monorails, previous proposals seem to have vanished from Houston's collective memory.

Monorail first arose as a possible transit solution in February 1955, when a downtown development and businessmen's group, known as the Central Houston Improvement Association, announced to the media that they planned to study the feasibility of the construction of a rapid-transit monorail system linking downtown Houston to growing suburban areas. The announcement came in the wake of declining bus ridership from suburban areas and an increase in car traffic in downtown areas, all seen as threats to the prosperity of downtown. Southwest Houston, with the massive new Sharpstown development, was targeted as the general area for

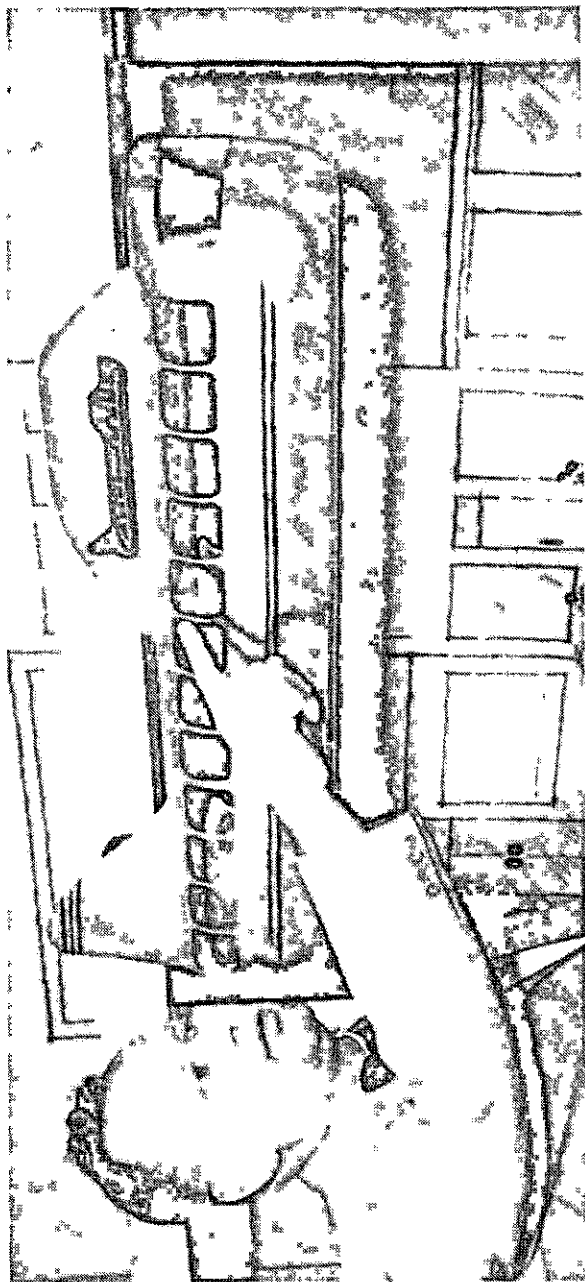
development of the new system.

With enthusiasm perhaps stoked by 1950s science fiction films, the media latched on to the concept from the beginning. One of the first *Houston Chronicle* articles on the monorail proposition said the possibilities of monorails were "fabulous" and that monorails were capable of going up to "700 miles per hour."² The article neglected to say that these speeds were achieved on experimental runs of unmanned, rocket-powered monorails (the highest speed—3,090 miles per hour—was attained by the U.S. Air Force in 1959). As for commuter monorails, the Schwebbahn in Wuppertal, Germany, the longest-running monorail and still the most prominent of practical urban systems, is capable of only 37 miles per hour, and even Tokyo's modern airport line was built for a maximum speed of 62 miles per hour. The Disneyland and Walt Disney World monorails are said to be capable of speeds up to 60 miles per hour, but rarely travel faster than 20-30 miles per hour.

A spokesman for the Houston development group, Nolvin Ward, told the *New York Times* that the group had already decided on an overhead-suspension, diesel-powered monorail and that the group planned to build a five-mile test line at a cost of \$2,500,000. The system would be capable of speeds up to 60 miles per hour, Ward claimed, and would be integrated with existing bus routes.

The group organized a private company, Monorail, Inc., to develop engineering and financing for the venture, and appointed 41-year-old engineer-salesman Murel Goodell as president. Other business leaders involved in the project included Felix Davis, of Felix Davis Construction Company; H. F. Reichardt of Reichardt Electric Company; J. B. Greenfield, an insurance executive; Weldon F. Appelt, president of Clear Span Engineering Company; and Robert C. Lanier, an attorney (not Houston's present mayor). Appelt headed up engineering for the project with engineer Francis Niven. The projected test line was soon scaled down to a mile, at an estimated cost of \$50,000. After the pilot run, Goodell said, the entire system would be disassembled and the parts tested for stress. Monorail lines were planned for the southwest, Oak Forest, North Main, South Park-Airport, and Pasadena areas. Monorail, Inc. officials hoped to take advantage of the right-of-way clearances that had been set aside for the construction of the Southwest Freeway (Highway 59) that would connect the growing Sharpstown area to downtown.

²"Monorail System Considered Here," *Houston Chronicle*, February 24, 1955, sec. A, 7.



Murel Goodell, president of Monorail, Inc., presents one of the earliest versions of his monorail design.

In June 1955, the Goodell team unveiled a scale model of the monorail system for a public display at the Kiesling Building on Fannin Street. The tone of newspaper articles at this stage was optimistic, with little emphasis on the test-run nature of the project. Reporters stated straightforwardly the operating parameters of the unborn system: "The monorail will travel at speeds of 60 miles per hour for intracity travel, and will have an acceleration of three miles per second."³

After contracting for the construction of a coach and truck assembly from Fitzbohn Coach Company, based in Muskegan, Michigan, the next task was the groundbreaking for the pilot line at Arrowhead Park, an abandoned race track on Old Spanish Trail between South Main and Almeda. The public groundbreaking ceremony was held on Saturday, August 21, 1955. Key officials of Monorail, Inc. posed for press photographers behind a futuristic, streamlined logo as a foundation drill bored the hole for the first support tower.

Leaders from cities all over North America—including New York, Los Angeles, Detroit, Miami, and Montreal—expressed interest in sending delegates to Houston to witness the trial run of the monorail system. Impressed by the presumed advantages of monorail—including minimal right-of-way requirements and an estimated lower cost than subway construction—and perhaps inspired by the effort in Houston, many cities even committed public funds to the study of monorail. Los Angeles set up a Transit Authority with jurisdiction limited to monorail transport over an eight-mile zone along the Los Angeles River, while the Metropolitan Rapid Transit Commission of New York and New Jersey, with \$300,000 in bi-state funding, was set up to study rail transport, including monorail, between the two states. Meanwhile, in North Key Largo Beach, Florida, a proposed 1,500-acre development incorporated in 1955, monorail was named as one of the cornerstone features of a futuristic, master-planned community. North Key Largo Beach eventually became the Crocodile Lake National Wildlife Refuge—the city never materialized, and neither did the monorail.⁴

In print, skepticism regarding monorails seemed limited to professional trade journals. Writing in *Mass Transportation*, shortly after the Houston project's trial run, engineer Henry K. Norton called monorail the "Prince Charming of the transit world" and enumerated the cost and engineering

³"Scale Model of Monorail Shown Here," *Houston Chronicle*, June 26, 1955, sec. F, 3.
⁴Joy Williams, *The Florida Keys: A History and Guide* (New York: Random House, 1993).

difficulties of building a monorail system, questions he believed were not answered by the Houston pilot line. Those who champion monorail, he said, "still cherish the early pictures of the artists who depicted the monorail as a graceful and ethereal structure consisting of what looked like elongated lamp posts...from which projected dainty brackets....The problem is, dainty brackets will not support trains nor will lamp posts hold up a railroad."⁵

Although the impending debut of monorail generated national interest, Houston leaders remained noncommittal when it came to the question of public funds. J. B. White, acting director of the City of Houston's Public Service Department, told the *New York Times* in August 1956, just after construction on the pilot line had begun: "If it can be adequately financed and properly engineered by private industry I will recommend it to the City Council."

Monorail, Inc. used a variety of imaginative promotions to build public interest in the new technology. Testing of the first support tower in October 1955 was opened to the public to capitalize on the curiosity of Houston commuters while at the same time allaying any fears about the safety of monorail transportation. With Julianna Larson, a dinner club performer from the Shamrock Hilton, riding on board, a military tank was lifted onto the support beam as a demonstration of the tower's strength and sound construction.⁶ In early 1956, the company also sponsored a contest to generate possible names for the monorail coach and the pilot line. Two local women were awarded expense-paid weekends at a Galveston hotel for their names, "Trailblazer" and "Skyway." KTRK-TV newscaster Ray Conaway received an honorable mention for his name, "Surrey with the Rail on Top." The monorail proposal was given a favorable forecast in at least one newspaper feature, in which writer Dick Tate likened doubts about the new transportation system to the misgivings that had slowed construction of the Gulf Freeway a decade before. Tate also suggested that construction of the monorail would naturally follow bayou and creek right-of-ways when possible as a way of avoiding street traffic, while at the same time adding to the visual appeal of the ride.⁷

On Saturday, February 18, 1956, Monorail officials finally unveiled the

⁵Henry K. Norton, "Is Monorail the Answer?" *Mass Transportation* 53 (January 1957): 24-28.

⁶"Monorail Developers Ready for Public Showing Monday," *Houston Chronicle*, October 7, 1955.

⁷"Is Monorail the Answer?" *Houston Chronicle Rotogravure Magazine*, January 15, 1956, 8.

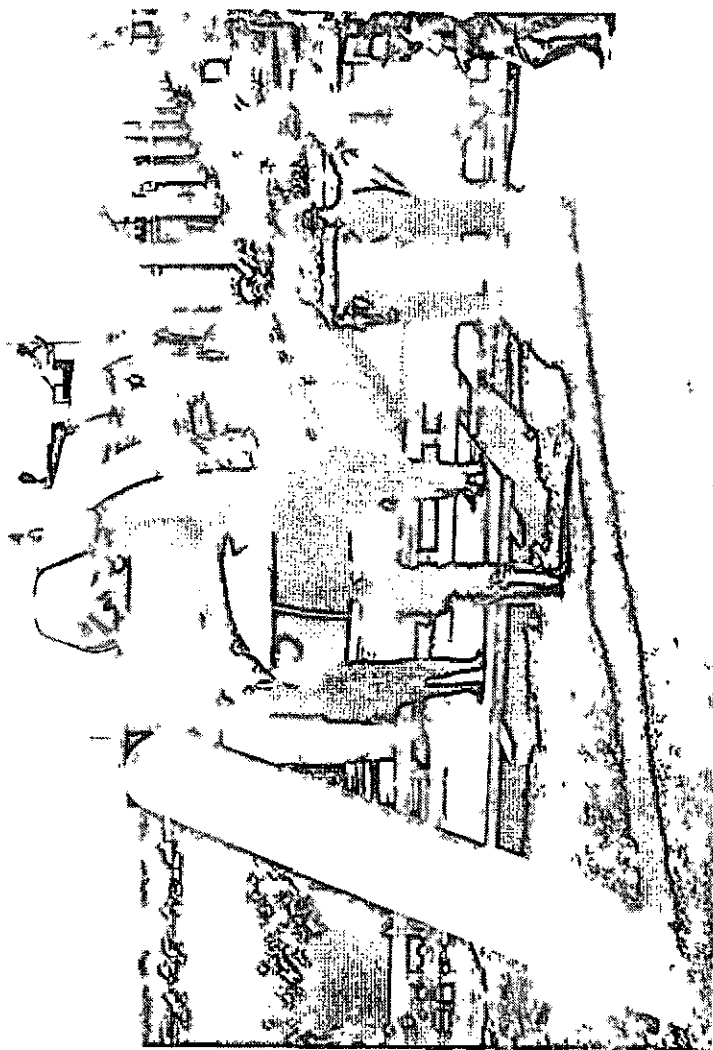
"Skyway," a 970-foot pilot line constructed in Arrowhead Park at a cost of approximately \$100,000. Because this was the first elevated monorail prototype to operate in the United States,⁸ the maiden voyage of the "Trailblazer" was accompanied by much fanfare and national media coverage. Transportation officials from around the country were given VIP tours early in the day, leaving the afternoon for public rides and other festivities. Approximately 6,500 people turned out for the first weekend of free rides, with 40 trips made the first Saturday. Television cowboy Roy Rogers and his horse Trigger were on hand to greet passengers, many of them children, while Murel Goodell's wife christened the system with a kiss on the coach.

The coach was air-conditioned and sleek-looking, but the first test rides never exceeded 10 miles per hour. The 55-passenger single-coach car was driven by two on-board, 320-horsepower diesel engines, a departure from the electrical power used on the Wuppertal line and other earlier European monorail lines. The system was a "classical" saddlebag-type monorail, with the car being suspended from the rail using a 100-pound gyroscope for stabilization. The rail itself sat atop 18 inverted-J towers embedded in steel and concrete, with tower heights varying (up to 30 feet) to allow for passenger loading at ground level. Fiber glass paneling, a relatively new innovation, was used in the ceiling of the coach to diffuse light throughout.

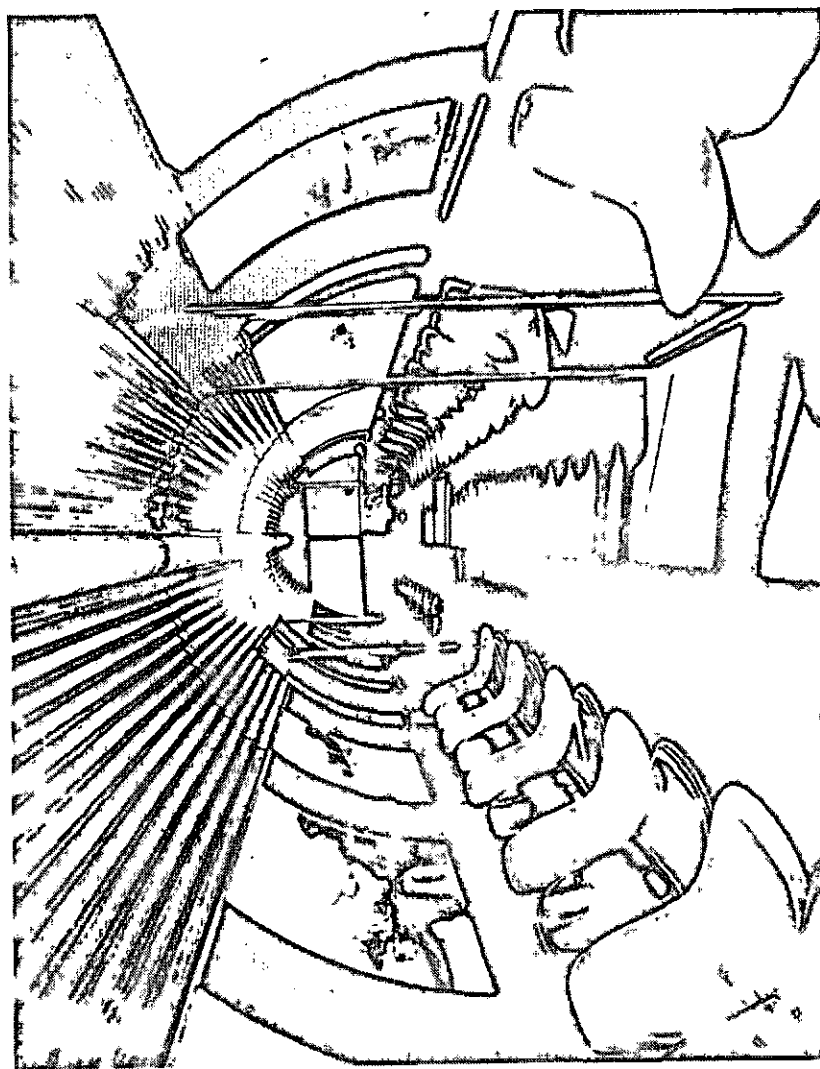
Despite the fanfare, the monorail met with rather tepid response from the public and city officials alike, most of whom said the idea was interesting but in need of more research. Councilman Louie Welch said the city should "encourage private enterprise to develop this type of transit system," leaving the question open as to whether the city would assume any kind of active role in construction or operation.⁹ Monorail's biggest supporter within the city government up to that point, J. B. White, was no longer the spokesman for the Public Service Department, with the appointment of a new director. Jesse L. Andrews, chairman of the City Planning Commission, showed up for the opening ceremonies, but left before the demonstration got underway. Goodell's estimate for cost of construction was \$500,000 per mile or \$750,000 for a mile of two-way track. Cost was certainly a factor in city officials' hesitant reactions, but matters weren't

⁸In the early 1900s, a visionary farmer named Joseph Wesley Fawkes built a monorail between Burbank and downtown Los Angeles, but the contraption fell apart on its maiden voyage.

⁹"Monorail Makes Debut, Free Rides Offered," *Houston Chronicle*, February 18, 1956, sec. A, 5.



Transportation experts and press representatives inspected the Trailblazer on its opening day in Houston's Arrowhead Park.



The interior of the Trailblazer, with its fiber glass ceiling panels and modern, contoured plastic seats, was described as "invitingly light and comfortable."

helped by the test run's two-hour delay due to a last-minute parts replacement. The most enthusiastic responses came from out-of-town officials; congratulatory telegrams arrived from Vice-President Richard Nixon and from the mayor of Wuppertal, Germany, home of the world's first and most durable monorail line. A post office official told newspapers monorails could "easily beat air mail service" in distances of more than 250 miles.

Houston's pilot system did impress transportation expert Sydney Bingham, who had been in charge of the New York City subway and street car system at one time and served as a consultant for Monorail, Inc. Bingham encouraged Swedish rail officials to tour the pilot line in Houston, despite the fact that he said he usually rejected monorail systems as being "too heavy, too ponderous" and "too unsightly." "None of these objections applies to the design Texans have produced," he told the *Houston Chronicle* in March 1956. "The Texas monorail will work anywhere, can be installed in any part of a city without requiring street or curb changes or expensive right of ways." The Swedish officials were "enthusiastic" about Houston's system, the *Chronicle* reported.

Though the Trailblazer operated in Houston for several weekends, at 10 cents per passenger after the first weekend, the State Fair in Dallas soon beckoned. In order to transplant the line to the fair grounds by October 1956, officials decided to dismantle the system right away. A statement on April 16, 1956, announced that the company had "tentative" plans to construct a 39-mile line between Fort Worth and Dallas at a cost of \$35,000,000. Other contracts were reportedly signed by Monorail, Inc. to construct systems in the Niagara Falls and Fort Lauderdale areas. James Melton, a singer, provided \$75,000 in financing for the Florida line, a 1,250-foot Skyway built for display at the Autorama transportation show in Hypoluxo, Florida. The line was to be built by Monorail of Florida Inc. under a franchise agreement with Monorail, Inc. With a smaller, 26-passenger coach and reduced construction costs, the Hypoluxo prototype was billed as the company's affordable model for low-density population areas.¹⁰

Talk of such promising deals attracted the attention of 76-year-old Swedish financier Axel Wenner-Gren, a multimillionaire who had made his for-

tune at the helm of the Electrolux vacuum empire and had been black-listed by the United States government during World War II for his dealings with the Nazis. Founding board members Goodell, Appelt, and Davis visited Wenner-Gren in Mexico City in January 1957 and persuaded him to invest \$300,000 in Monorail stock. Wenner-Gren would eventually acquire a controlling interest in the company.

By the time Wenner-Gren came to see firsthand the technology of Goodell's company, in November 1957, a new 1,000-foot monorail system had been quietly erected on South Main about three miles west of Post Oak near the Fort Bend County line. The new system had two coaches, which rode atop the rail at grade level. Wenner-Gren's vision for monorail included combining the best features of Goodell's South Main system with his own mile-long experimental system at Cologne, West Germany. Wenner-Gren's Alweg monorail, as it was dubbed, was a straddle-type vehicle that would eventually be adapted for Disneyland's monorail in 1959 and for other prominent monorail systems around the globe.

Monorail, Inc. worked hard to keep interest alive in its home town. In late 1957, the firm announced it would conduct a survey to determine the feasibility of a full-scale monorail system in Houston, with the condition that city officials grant franchise and right-of-way privileges before the survey. City Council gave the go-ahead for the survey, without the requested special conditions.¹¹ About this time, Goodell was also trying to stoke interest in an airport monorail that would use a smaller coach and the straddle-type technology of the South Main line—it was one Goodell brainchild that would eventually come to fruition.

In October 1958, however, Murel Goodell announced that he would resign as president of Monorail, Inc. to start a national mass-transportation finance company. His announcement seemed tinged with frustration at the lack of financial and public interest monorail had generated in Houston: "As originator and president of Monorail, Inc. since its inception, I feel it is now ready to successfully enter into actual sales, which requires financial substance," he told the *Chronicle*. "We've gone as far as we can go with Monorail at this time without major financing. We've successfully worked out its engineering, operations, design and testing."¹²

¹⁰News release, Monty Levine and Associates, October 2, 1956, RG A 20, City of Houston Public Service Department, Transit Division Records, box 35, folder 8, Houston Metropolitan Research Center, Houston Public Library.

¹¹Motion No. 57-1504, City Council Minutes, Book GGG, June 5, 1957, 10.

¹²"Goodell Quits Monorail, Will Form Company," *Houston Chronicle*, October 12, 1958, sec. A, 20.

Four months later, under the auspices of his new company, Goodell Monorail, Goodell announced that his firm had designed a new type of monorail in which the cars could run on both the streets and the rail, ostensibly negating the need for stations. Goodell spoke candidly about the financial feasibility of such a system, stating that it would have to be financed by bonds based on revenue from the system. His firm, he said, was not interested in building or operating a monorail system, only in providing the necessary financial and engineering consultation. Goodell was looking to a national, not local, market with his new company. In 1962, the Los Angeles Metropolitan Transit Authority drafted a positive letter of intent in response to Goodell's proposal to construct, with underwriting from Paine, Webber, a \$40 million, 17-mile, double-track system connecting downtown to the airport.¹³

While Goodell appeared to be on the verge of success, his former company suffered from internal conflicts. In September 1959, Monorail, Inc. president Sixten Holmquist was voted out of office by the board of directors, who said that Holmquist's connections with Wenner-Gren's German monorail company represented a conflict of interest. Board member Felix Davis said Holmquist had directed installation of the monorail at Disneyland under the auspices of ALWAC International, the company controlled by Wenner-Gren, "without the foreknowledge or consent" of the board. Though Holmquist was allowed to remain on the board as a representative of ALWAC International, it was not enough to appease the formidable Wenner-Gren. Just six days later, Wenner-Gren used his 63-percent controlling interest to reinstate Holmquist and oust three of the four directors who had fired him.¹⁴

Former Monorail, Inc. vice-president Felix Davis, one of the three ousted directors, sued Wenner-Gren's company in 1961, alleging that the financier and his company had conspired to sabotage Monorail, Inc. in order to bolster the competing Alweg technology. Davis was awarded \$78,050 in back salary, exemplary damages, and attorney's fees, although the court absolved Wenner-Gren of attempting to devalue the stock of Monorail. On cross-action and appeal, however, the courts held that Davis could collect the judgment only from Monorail, Inc. and not from Wenner-Gren's other,

¹³News release, Monty Levine and Associates, September 4, 1962, RG A 20, City of Houston Public Service Department, Transit Division Records, box 49, folder 5.

¹⁴"President of Monorail Is Removed," *Houston Chronicle*, September 20, 1959, sec. 4, 2.

more financially stable companies.¹⁵ Two years later, Monorail stockholder Khleber V. Attwell filed \$4.5 million in suits against the then-deceased Wenner-Gren's estate, claiming that Wenner-Gren stripped Monorail, Inc. of its patents and that he had not been allowed to exercise his stock options. The suit included what Monorail, Inc. officials termed "scandalous" references to Wenner-Gren's trade dealings with the Nazi government.¹⁶ The troubled company, which had moved headquarters from Houston to New York, eventually dissolved in the late 1960s.

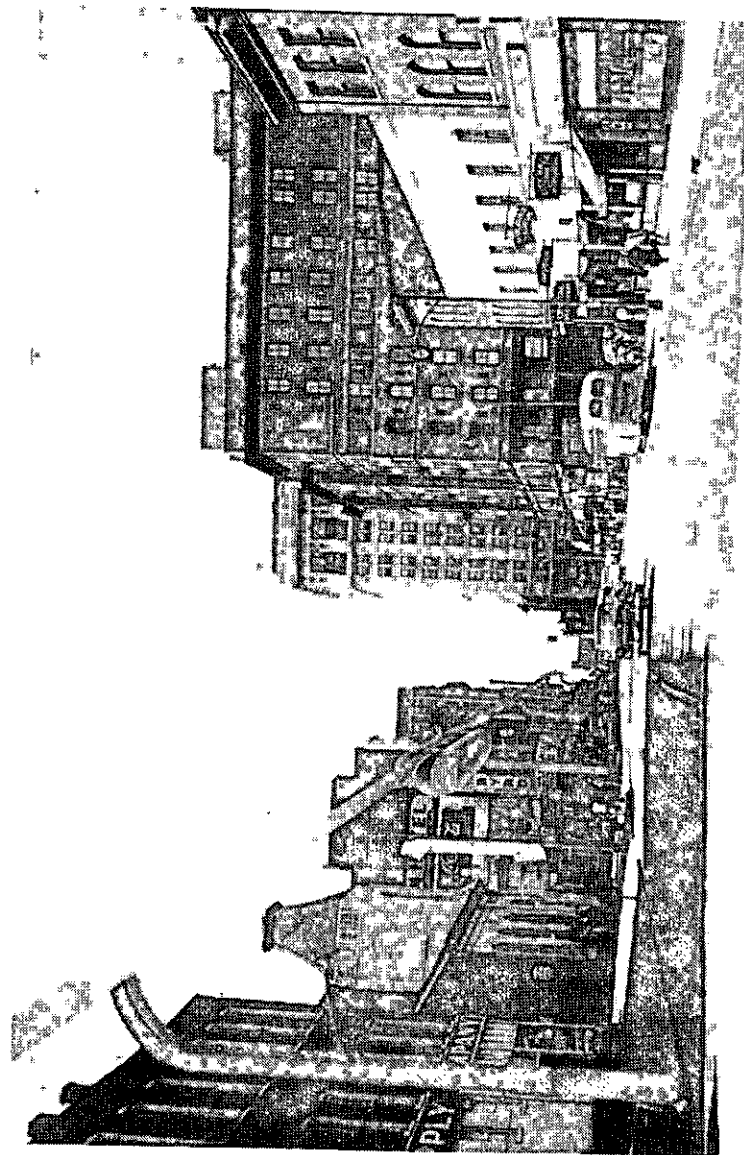
Meanwhile, monorail's future in Houston had become doubtful. Monorail, Inc. had submitted a final proposal for a monorail franchise to the mayor's office in November 1959, but nothing had come of the project. Nonetheless, the idea continued to surface in conversations about mass transportation. Bernard E. Calkins, president of Rapid Transit Lines, which operated more than 200 buses in the Houston area under a franchise agreement, presented a report to the City Council in 1962 outlining the advantages and disadvantages of monorail and other forms of mass transit.¹⁷ According to the *Chronicle*, he recommended the city adopt a "rapid transit" system utilizing freeways with connecting bus routes, while dismissing monorail and other fixed-location rapid transit systems as unable to serve the needs of a shifting population.¹⁸ Mayor Lewis Cutrer and others began to view freeway expansion as the best approach to addressing Houston's mass transit needs, and a 1963 study by the city, Harris County, and the Texas Highway Commission reflected those sentiments. This report explicitly ruled out rapid transit, defined as trains of all types and express buses, for two reasons: the low population density and the capacity of Houston's growing freeway network. The report held that if rapid transit should be desired in future, it could easily be accommodated by running express buses on the freeways, thus avoiding the many costs associated with a system involving separate rights-of-way. The report touched on surface rail, elevated rail, and subway systems, with barely a mention of monorails. Nonetheless, the newspaper article's lead and headline focused on the demise of the monorail, suggesting that the futuristic mode of transportation

¹⁵*Davis v. Alweg International Inc.*, 360 S.W.2d 797 (1963).

¹⁶"Antitrust Defendants Ask For Changes in Petition," *Houston Post*, December 3, 1963, sec. 1, 4.

¹⁷City Council Minutes, Book SSS, February 28, 1962, 192-193.

¹⁸"Calkins Says Buses on Freeways Only Cure to City Transit Woes," *Houston Chronicle*, February 28, 1962, sec. 7, 7.



Monorail, Inc. created this image showing a monorail in a typical urban scene. Although the monorail looks attractive and does not take street space away from cars and buses, there is no apparent way to travel in the opposite direction or along cross streets, and passengers evidently cannot board or disembark in this section of town. (Another image in this set showed a passenger station on the second-floor balcony of a hotel.)

continued to capture the public's imagination.¹⁹

Despite the dismal outlook for monorail systems reflected in the 1962 and 1963 studies, discussions of monorails continued. In 1963, Ralph Wallace, an unsuccessful candidate for councilman-at-large Position 2, emerged as a champion of monorail transportation and made the issue a cornerstone of his campaign. When Dale Marvel took over as chief of the city's Traffic and Transportation Department in 1966, he included both monorails and deep subways as part of his vision of Houston's transportation future, which he believed would have to include several forms of rapid transit.²⁰

Well into the 1960s, city transportation officials continued to receive inquiries from students, journalists, and transit experts who believed Houston had an operating, commercial monorail system. Clinton Owsley, director of the Public Service Department, dutifully replied to the letters, usually stating that monorail had been deemed "economically unfeasible" and that its "fixed rail" operation made it impractical for an expanding city. Sometimes, though, his replies revealed a sense of astonishment that the pilot line had made such a global impression (letters came from Britain and Spain). "Houston does not have and never has had a commercial monorail system in operation," he wrote in one reply, while dismissing the pilot line as a "novelty or sales gadget."²¹ A 1960 letter, in reply to D. C. Transit System, Inc., reiterated the city's continuing position on monorails: "You state 'In the near future we will certainly be interested in making a monorail proposal for Houston....' Are you now ready to make a proposal? We prefer to have the mass transit service furnished by private enterprise...."²²

In 1965, Murel Goodell tried again to bring monorail transportation to his home town. He was granted permission to build and operate a demonstration monorail system at the Houston International Airport, now Hobby Airport. (Others had already speculated that the new, modern Intercontinental Airport would be well served by a monorail connecting to down-

¹⁹"Study Turns Thumbs Down On Monorail," *Houston Chronicle*, August 27, 1963, sec. 4, 18; City of Houston, County of Harris, and Texas Highway Department, *Public Transit: Technical Report No. 3 of a Series of Reports on the Houston Metropolitan Area Transportation Study* (Houston, 1963).

²⁰"Monorails, Subways Possible in Future," *Houston Chronicle*, December 26, 1965, sec. 3, 4.

²¹Clinton Owsley to Louis Weintraub, February 7, 1963, RG A 20, City of Houston Public Service Department, Transit Division Records, box 49, folder 5.

²²Clinton Owsley to O. Roy Chalk, December 7, 1960, RG A 20, City of Houston Public Service Department, Transit Division Records, box 49, folder 5.

town areas.) Goodell's 1,400-foot demonstration system, to be built by Horizontal Elevating Company for about \$150,000, would carry passengers to parking areas at the airport at a charge of 10 cents. Because Goodell proposed building the system at no cost to the city and set the city's take at five percent of the profits, the airport and the council approved construction of the "Sky Taxi."²³ A *Chronicle* editorial pointed out that Goodell undoubtedly saw the airport monorail as a springboard for a more extensive system. The Sky Taxi, while it would be Goodell's first city-sanctioned commercial venture, was in essence his third demonstration line. Still, the press remained optimistic: "If it turns out to be a success, as we believe it will...then it will be time for city officials to give serious consideration to monorail as Houston's mass transit system of the future."²⁴

When it began testing in 1966, the Sky Taxi gained national exposure for some of its innovative features. The short, 20,000-pound car rolled on an overhead steel rail on radial-ply Goodyear truck tires. Most unusual of all, the coach included a built-in elevator that lowered passengers to the ground, thereby doing away with the need for elevated stations. Though this promised to be the most likely of Goodell's ventures to succeed, financial hurdles once again proved insurmountable. In 1967, City Council officially requested the removal of the demonstration line, terming the partially completed track an "eyesore."²⁵ Unable to raise the \$11,000 for continued liability insurance, Goodell reluctantly complied.²⁶ The Sky Taxi never went into public service, having completed only trial runs, and Goodell relocated to Utah.

As Peter Papademetriou points out in *Transportation and Urban Development in Houston, 1830-1980*, alternative proposals for mass transit in Houston have repeatedly incorporated variations on the monorail theme,²⁷ including proposals for "people mover" automated train systems linking downtown to the Galleria area and, more recently, to the George R. Brown Convention Center. In the 1970s, when Houston's experimental lines had been largely forgotten, many, if not most, of the mass transit suggestions the city received from private citizens continued to center on monorails. Most believed they had hit upon an original and ingenious solution to

²³City Council Minutes, Book BBBB, May 19, 1965, 450-451.

²⁴"Our City: Give 'Sky Taxi' a Try," *Houston Chronicle*, May 21, 1965, sec. 2, 2.

²⁵City Council Minutes, Book JJJJ, June 14, 1967, 26.

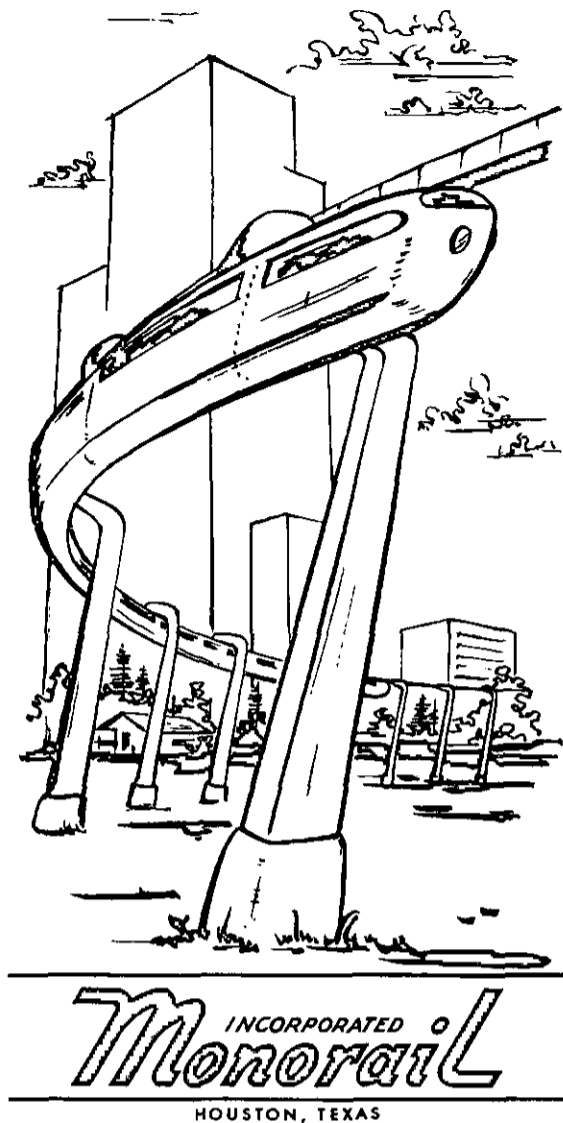
²⁶"City Pushes Dismantling of Monorail," *Houston Post*, June 16, 1967, sec. 4, 1.

²⁷Peter C. Papademetriou, *Transportation and Urban Development in Houston, 1830-1980* (Houston: Metropolitan Transit Authority of Harris County, 1982), 82-84.

GIBSON GIRLS GO PLACES...
COAST TO COAST!
Come Along!



The short-lived Sky Taxi monorail at Houston International Airport provided an exciting, futuristic backdrop in this June 1966 newspaper advertisement for the Juliet Gibson Career School.



The image appeal of monorails often outdistanced available technology. This brochure for Monorail, Inc. (ca. 1956) shows an elongated train apparently able to bend in a perfectly smooth curve.

Houston's traffic congestion, and several even included detailed proposals and maps of possible routes. Paul Groody of Fort Worth brought his "Sky-Kar Transivator" system, which consisted of 12-passenger cars that rode above the ground along a steel guideway, to the attention of City Council in 1970. Full-blown news coverage again emphasized that the system could be built on existing easements, although Groody admitted his system was "old hat" from a technological standpoint.²⁸ In 1976, students from Spring Woods High School built a monorail system model, and KTRK-TV's Ed Brandon featured the students' project on his "Turn On" television program.²⁹

It was in the late 1980s and early 1990s, however, that monorail came closest to realization in Houston. In 1988, voters gave the go-ahead for METRO³⁰ to develop a \$1 billion, 20-mile rail transit system, opening discussions for potentially revolutionary changes in Houston's transportation infrastructure. The "glitzy" image of monorail was again touted by its supporters, and monorail was indeed chosen over light rail for the new system, despite some concerns about safety factors. After calling for bids, METRO eventually put together a team of two transportation engineering firms to collaborate on the design of the system.

While monorail appeared to be gaining a foothold in Houston at last, the plan nonetheless faced vocal opposition in the press and in the person of Bob Lanier, former METRO chairman. In a series of well-publicized debates on the topic, Lanier questioned the cost-efficiency of rail transportation and whether such a system was viable in the car culture of Houston. Though it became a controversial position to hold, Mayor Kathy Whitmire championed monorail throughout two years in which the topic rarely left the spotlight of city politics. Arguments over whether or not the 1988 referendum signified voters' approval of monorail rather than light rail raged; charges of conflict of interest on the METRO board and of improper minority hiring practices by a contractor added scandal to the debate. Members of the Texas legislature engaged in Byzantine maneuvers, attempting to force or to block a new voter referendum. In October 1991, at the instigation of Representative Tom DeLay of Sugar Land and after months of skirmishing between DeLay and Texas's senators, a U.S. congressional com-

²⁸"Look, up in the sky—it's a bird, it's a plane—no it isn't, it's Sky-Kar!" *Houston Post*, April 14, 1970.

²⁹Robert B. Foster to Public Service Department, January 27, 1976, RC A 20, City of Houston Public Service Department, Transit Division Records, box 79, folder 11.

³⁰The Houston Metropolitan Transit Authority, known as METRO, had been created in 1978 as the agency in charge of mass transit for Harris County and the surrounding areas.

gation of Representative Tom DeLay of Sugar Land and after months of skirmishing between DeLay and Texas's senators, a U.S. congressional committee barred Houston from using federal funds to build the system without further voter approval. It was only with this loss of expected federal funding that Whitmire finally dropped the issue altogether, perceiving that further support of rail transit could potentially damage her reelection campaign.

Whitmire's 1991 defeat by Bob Lanier—who had promised to shift funds from METRO to improve roads and hire more police officers—effectively killed the monorail proposal. Yet monorail surfaced briefly again in May 1994, when developer George Mitchell proposed constructing an elevated "short" monorail system linking the Brown Convention Center with downtown attractions west of Main Street, including the Theater District and hotels. Lanier voiced his opposition to the mini-monorail succinctly and, given his leading role in the demise of the earlier proposal, rather demurely. "I wouldn't start off as one of its leading enthusiasts," he told the *Chronicle*.³¹

³¹"Lanier Monotone on Trains," *Houston Chronicle*, May 11, 1994, 21.