KENT STATE UNIVERSITY CAMPUS BUS SERVICE

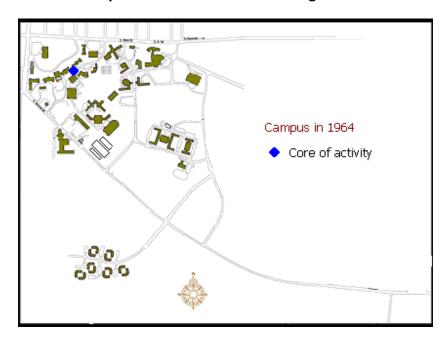
HISTORY 1965 - 2004 In the middle 1960's, American universities anticipated a period of rapid growth fueled by the post-war baby boom. Kent State University was ideally located to participate in that growth with about half of the U.S. population living within a 500-mile radius.

From 1964 until 1969, Kent's enrollment grew from about 12,000 to 21,000. The 75% enrollment growth of the University during this period was not merely an artifact of regional demographics, however. Specific actions made the University more attractive to incoming students and increased the University's capacity to accommodate that growing student body.

Perhaps a most critical step was the commission of a comprehensive physical plan for the campus in 1964. The plan that resulted in 1965 outlined a number of developmental problems and opportunities and established basic trends for the University's physical development. The plan established that in order to accommodate a projected 24,000 enrollment, the University needed:

- To shift the core of activities from the Northwest corner of campus to the south and east. This was to be accomplished with new development.
- To restructure pedestrian and vehicular circulation, especially to limit vehicles in the interior of campus.

Kent Campus in 1964 with the core of campus activities indicated between Hilltop Drive and the western edge of the Commons



One concern that arose from these discussions was the expectation that parking structures would be needed on the periphery of campus including, perhaps on Front Campus. It was generally felt that there should be some alternative to building a deck at this location. Another concern was that by expanding and shifting the core of campus to the southeast, walking times between campus locations would increase and thus conflict with the daily academic schedule.

At this time, the University's Vice President for Business approached the staff of KSU's newly formed Center for Urban Regionalism and asked- is there an alternative that could support the necessary growth without the undesired consequences?

In large part, the answer to that question was the Kent State University Campus Bus Service.

In the 37 years of its operation, CBS was a transportation service, a training facility, the employer of thousands, a social experiment, a focus for integrated research, a recruitment tool, a somewhat elite fraternity and the most highly regarded student service at Kent State University.

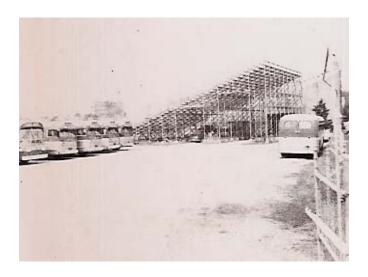
The impact of CBS upon the institution of the University, the community, Kent students and the transit industry prompts the following history.

When work began in anticipation of a bus service on Kent's campus, there were not many models of transit services fully integrated into a University environment. Many campuses used shuttles to address temporary, construction-related traffic problems while urban universities often relied upon existing community transit services.

Kent's unique approach seems to have been that transit could be an efficient, long-term institutional strategy, even in Kent's semi-rural environment. From the start, transit services development was to be coordinated with physical development and the delivery of other services, especially parking. As a result, when originally conceived, the Campus Bus Service was part of the Office of Parking and Traffic.

The Office of Parking and Traffic was charged with service development and implementation while the Center for Urban Regionalism continued to conduct research. The two entities often seemed to blur such distinctions. Because so much of the first services were experimental and students were involved in significant research tasks, CBS was systematically integrated with the University's mission of research, teaching and service from the outset.

The grand experiment actually began in 1965, long before the first passenger was carried. This new bus service would need organization, leadership, staff, buses, an office and a garage. How exactly, all of this was accomplished does not appear in the records, but about the time service began in the spring of 1967, there was a core staff of about 15 student drivers, 3 very used buses, an off-campus house for an office and the use of space under the Stadium bleachers for maintenance.



No matter the humble start, with the establishment of Parking and Traffic's transit department, students of every academic discipline could participate in and contribute to new solutions to real problems.



The first tentative experiments with transit services began in the spring of 1967, after the University committed \$79,000 to the start-up. That first service was a route that linked dormitories on Midway Drive with Front Campus using East Main Street, Lincoln, Hilltop, Main, Midway, Theatre, and Horning Drives. Three GMC TDH4512 coaches purchased from Green Lines, (New York City area), provided service. The first week of operation showed an average of 170 passengers per day at 5 cents a ride. By the fourth week of operation, ridership had grpwn to 1200 passengers per day.

All involved felt that the initial service was well received, although the success was itself creating problems. Traffic began to back up behind the buses at stops. Of course, East Main Street was hardly more than a two-lane road at this time. Something had to be done to minimize the time that a bus was stopped for passengers.

The solution came to define the new service- **no fares** would be collected. Once the service operated fare free, ridership jumped to 2800 passengers per day. Services between campus, the Midway Drive-In Theatre and Allerton Married Students Housing were tried as well as service to the Sto-Kent Shopping Center. By the close of Spring term, decision-makers were confident that value of transit service on campus had been demonstrated. Expanded services were to be planned Fall quarter.

The experiment with fare free service design was determined to be a valid means of reducing delays and congestion. Further discussions suggested that a fee for transit service applied to all students would support the service in lieu of fares. This student fee and fare-free operations became defining characteristics of CBS for many years.

In the fall of 1967, the Office of Parking and Traffic began regularly scheduled transit operations between 7:00 a.m. and 6:00 p.m. Monday through Friday. The new route system consisted of the Campus Loop, Allerton / East Main and West Main / Plaza routes. While much of the new service was developed to intercept commuter traffic, all routes were designed to assist with circulation on campus.

The East Main route used the Midway Drive-In Theatre lot as a daytime park and ride location as it was unused during the day. This route was paired with the Allerton route. There were 51 round trips per day on this route pairing. The West Main/ Plaza route linked campus with Sto-Kent Shopping Center, downtown Kent and commercial concentrations on South Water Street. 38 round trips per weekday were provided. The Campus Loop was operated with a 5-minute headway- (spacing between buses) and was soon regulated by the Headway clock, a bus service innovation that prevented the buses from bunching up. By

Spring quarter of 1968, this basic service plan was providing about 10,500 rides per weekday.

As the keystone of the University's southeastern development program, the New Student Center and Library complex brought new challenges to the Bus Service. The new focus of activity required a nearly complete redesign of services. The new Stadium had been built east of Campus and provided ample parking to justify new strategies, including the new Stadium Loop route. In these days, the Stadium Loop really looped; circling all of campus on every trip. The Stadium Loop also operated in clockwise and counterclockwise versions. Other new routes included the North Kent route and the Southwest Kent route. These two routes provided proving grounds for new technological approaches supported by Federal Transportation demonstration grants.

For the first few years, CBS' "new" buses were procured from all over the country as needed. When a newly purchased bus needed to be rebuilt, as many of the first ones did, they were rebuilt under the bleachers. In time, KSU had a handsome fleet.

Whether rebuilding a bus or developing cutting-edge technology, leadership positions within the Campus Bus Service translated into transit industry leadership. CBS was where KSU students of every major and from all over the world could gain the experience, confidence and maturity to power them to the top of any field. It was true then. It is true today.



As the new Student Center complex was developed, the old Stadium bleachers that housed bus maintenance were to be torn down and CBS rented a new warehouse type facility on St. Clair Avenue. Over the 20+ years of its use by CBS, major improvements included excavation of a maintenance pit, installation of a wash rack and construction of offices.





Working in cooperation with the Portage Area Regional Transportation Authority, CBS received Federal and State grant funding from 1972 to 1991. In addition to operations support, CBS received capital support for the purchase of buses and the construction of a combined office / maintenance / storage facility.

In 1991, CBS' administration and maintenance moved into the new, purpose-built facility. Soon after it moved into its first real home, however, it was clear that CBS faced some difficult times. Funds for replacement of the fleet became unavailable. Students became less likely to seek on-campus employment than before. Parking continued to expand and was expected to expand even more. Ridership declined steadily.

By the mid-90's, it was apparent that student transportation preference was based upon use of a personal car. This reflects the social trend of a much more mobile society with dependence on the automobile for almost every activity. Campus Bus focused more on providing on-campus shuttle type services and seeking partnership arrangement with local RTA's.

Over the 37 years of its existence, approximately 3000 men and women accepted the challenge of working for CBS. Passengers recognized the men and women in blue uniforms as classmates, but they were classmates who had earned a special regard.

That regard was won by tough work, creativity and enthusiasm





- On the first day of operation in Fall term, 4,000 passengers are carried.
- Service consists of 3 routes- the Allerton / East Main, West Main / Plaza and Campus Loop and 13 buses
- Over 210 transit systems are visited by a team composed of an economist, a mechanical engineer, a highway engineer, a electronics specialist and a chemist. All are looking for the best ideas to integrate in a system that will be right for Kent.



112 Wilson Avenue- Home of Parking and Traffic with an early unit #1

• KSU Parking and Traffic applies for a \$422,000 Federal demonstration grant to test the application of electronic data systems on transit services.



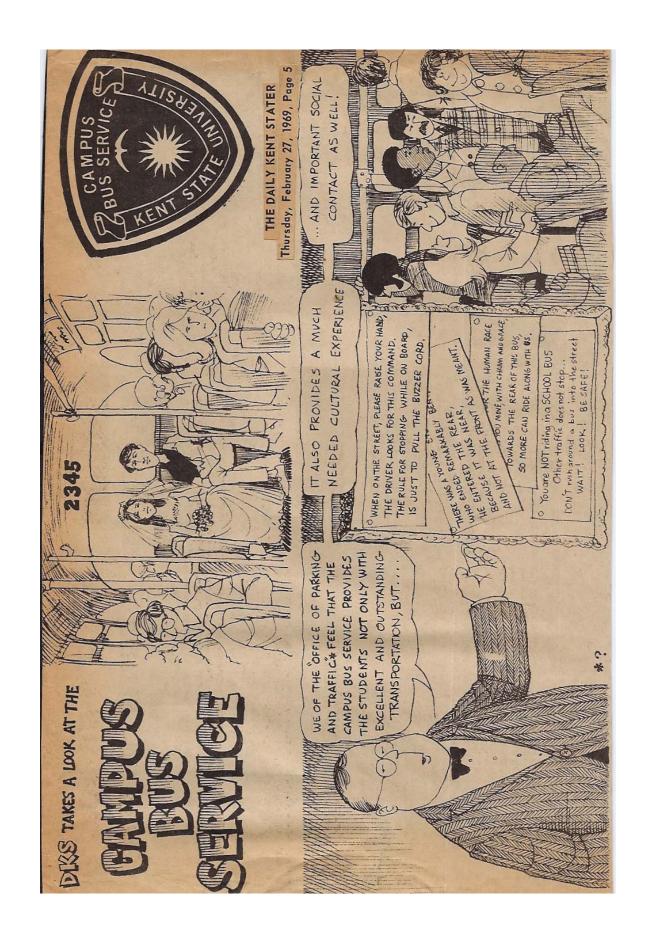
At Stow-Kent

- The Campus Bus Service carries over a million passengers in its first year.
- Bus drivers are required to be at least 21 years old

- For-profit transit (ALTRAN) makes its last appearance in the area. One service provided by ALTRAN is an evening shuttle between dorms and downtown bars.
- 12,000 passengers are carried on the first day of operation in Fall quarter.
- The Bus Service wins the first of its FLEETOWNER Maintenance Efficiency Awards.
- The Stadium Loop route is introduced as the Stadium parking lot is first opened
- Three new 40-foot GMC buses are received- Units 35, 36 and 37. Each bus costs \$35,000
- The annual budget for bus service is \$220,000.
- Bus Driver qualifications include minimum age of 19 years



CBS provides first application of energy absorbing water bumpers east of California



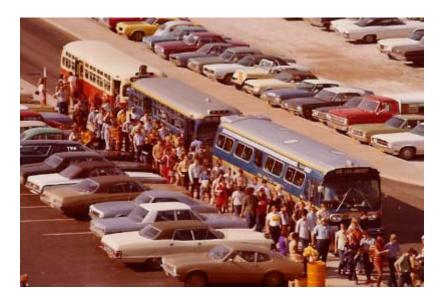


The following innovations arise from the US DOT grant- MTD-1

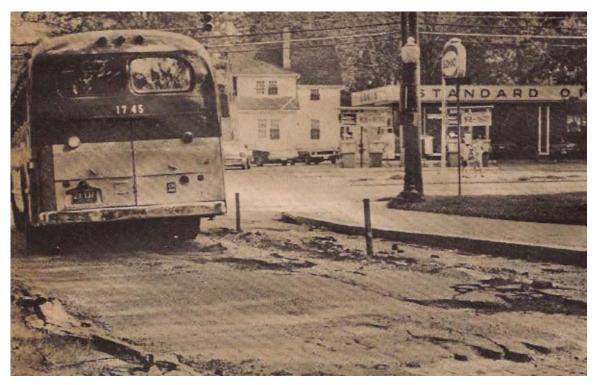
- TRANSMAN- a system of maintenance accounts and records using electronic data systems is prototyped at KSU. TRANSMAN is one of several technical projects that established KSU at one of the top transit research sites in the nation. Later this year, TRANSMAN undergoes applications testing at Dallas and A-C (Oakland, CA) Transit.
- Traffic light pre-emption for CBS buses begins on East Main Street. This
 system senses the approach of a bus, and allowed traffic lights to stay green
 10 seconds longer in order to allow the bus to pass. In 30 years, this concept
 would be adopted within Federal Intelligent Transportation System guidance.
- The headway clock- a device that senses the arrival of buses and signals time to depart, thus maintaining even spacing of buses, is installed at the new Ice Arena stop.
- On-board passenger and mechanical systems data recording and download is prototyped

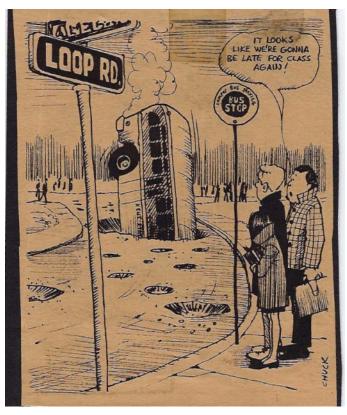


Transit services offered for Kent Home Football games.



- In the fall, Saturday service on the West Main / Plaza route is introduced. The North Kent route begins service in January, initially operating between Williams Hall on Summit Street and Merrill Road in Twin Lakes. Service is extended to North and South Boulevards within a week in response to customer calls.
- Gated access to on-campus parking becomes a major issue in the University community.
- Marilyn McBride becomes CBS first female bus driver. One student is quoted in the April 23rd, 1970 Stater as being "shocked" that a woman would drive a bus.
- The Bus Service wins its 2nd FLEETOWNER Maintenance Efficiency Award.
- Bus Service budget equals \$436,000 in FY 1970





- CBS investigates nighttime glare in buses and installs blue coverings over fluorescent lights. Interior glare is noticeably reduced.
- Campus Bus Service becomes 100% two-way radio equipped, one of the first transit systems in the country to do so.
- The first test of electronically routed buses begins on the southwest side of Kent. Passengers wishing a ride can call in to the office where the address of the waiting passenger is entered electronically. That information is then directed to a remote card printer. The driver then enters the card in an onboard card reader and the system directs him to the waiting passenger. A \$100,000 U.S. Department of Transportation Grant funds this project.
- While time has made the specific technology irrelevant, this test of demand responsive service broke new ground in urban transportation systems.

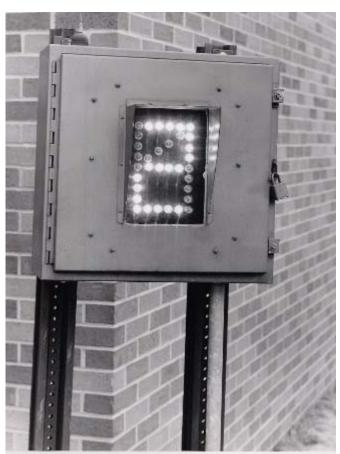


- The first Bus Service Driver skills Roadeo winner is Denny Ruggles
- Bus operators earn \$1.82 per hour, Supervisors earn \$2.31 per hour



Stadium Parking at the site of the current Student Center parking lot

- The Bus Service wins its 3rd FLEETOWNER Maintenance Efficiency Award
- The Bus Service is featured in a New York Times article, which described, among other notable accomplishments, the development of the Headway Clock.



Headway Clock

CBS introduces Summer service on the West Main Plaza route



- Kent State University is proclaimed a "TRANSIT LEADER"-"A steady stream of visitors beats a path to the KSU campus to see what makes the University's bus system so successful.... First, the 28 bus operations solved the immediate needs of transporting KSU students and reducing a traffic problem. ...Second, it serves as the laboratory for testing new transit concepts..." Canton Repository editorial – 2/24/71
- The Bus Service begins operation of door-to-door van service for persons with mobility impairments. In 3 years, the number of University students who were eligible for the service grew by 100%
- Three-bedroom apartment- \$105.00 Per month, including utilities.
- The Bus Service wins its 4th FLEETOWNER Maintenance Efficiency Award
- CBS takes delivery of a new GMC S8H5303A coach- (unit 53) that is assigned to Cleveland Nurses service
- Ridership exceeds 3 million passengers per year / 22,000 per day / 12 passengers per mile
- Budget constraints, attributable to declining enrollment, force some service cutbacks. The CBS administration identifies a likely \$247,000 shortfall in funding. As a result service cuts are planned. Campus Loops buses are reduced from 5 to 4.
- CBS Drivers conduct a "study day" where the only service provided consists
 of 4 Stadium Loop buses and the Nurses Cleveland route.

- 9600 students sign a petition urging the University to increase the bus fee from \$4.00 to \$8.00 to support services.
- CBS has 92 student employees



- Student bus fee is \$8.00 per guarter for full time students
- Campus Bus Service is established as separate from Parking Services.
- CBS carries 3,151,896 passengers while operating 544,558 miles
- CBS specifies the use of Diesel #1, for cleaner emissions.
- The Bus Service wins its 5th FLEETOWNER Maintenance Efficiency Award
- 8 New GMC T6H4523A coaches arrive- These coaches are assigned numbers 6138, 6238, etc. These coaches cost about \$24,000 each.
- Unit 53 becomes a classroom for the first of two University academic charters to the west coast

In response to the OPEC oil embargo, Kent State buses are opened for the
use of the public with accommodations for cash fare, tickets and passes. The
City of Kent and the University also negotiate a \$60.00 per year bus pass for
City of Kent residents.



- CBS issues a Long and Short Term plan in which the creation of a regional transit authority is proposed.
- CBS wins the American Transit Association's Transit Safety Award for 1973.
- CBS also wins its 6th consecutive FLEETOWNER Maintenance Efficiency Award
- CBS' Administrative offices move from 112 Wilson Avenue to Wright Hall

- Student bus fee is raised to \$10.00 per quarter for full time students.
- CBS' annual budget is 352,000.00. The average cost per hour for each bus is \$11.00.
- 8 New GMC T6H4523A coaches arrive- These coaches are assigned numbers 7138, 7238, etc.. These coaches cost about \$44,000 each.



- CBS begins intensive research in computer applications for transit. Data is entered via 8 toggles per character without a storage device or display terminal.
- Unit 53 heads to Alaska via the unpaved Alcan Highway for another KSU summer field school.

• East Main Street is widened. Haymaker Parkway is constructed.



1976-77

 The Campus Bus Service participates in the first Kent Downtown Festival in honor of the nation's bicentennial. Service is provided from the City's neighborhoods to downtown. 435 miles of service are provided with a total labor cost of \$140.32. Service is provided to City residents via 4 routes and results in total ridership of 3286. • CBS also conducts tours of historic Kent. A total of 66 miles of service are provided at a cost of \$54.19. 515 passengers were carried.



Unit 36 in Bicentennial livery

- CBS anticipates a \$45,000 shortfall against revenue. Service cuts are planned.
- Campus Loops are reduced from 4 to 2 buses. Stadium Loop buses are reduced from 4 to 3 buses. The spacing between buses on West Main Plaza route is increased by 10 minutes.
- CBS wins the American Transit Association Safety Award

1977-78

- Ridership is recorded at 3.1 million passengers with fewer than 25 preventable accidents
- Student bus fee is \$24.00 per semester
- Rich Purgert places 1st at the State of Ohio Bus Roadeo
- Robert "Bo" Luce places 15th in the International Bus Safety Roadeo

1980-81

- CBS administrative offices move from the 7th Floor of Wright Hall to Moulton Hall.
- Joanne Connolly and Don Easton place 2nd and 4th at the Ohio State Bus Roadeo
- Don Easton places 34th in the International Bus Roadeo
- CBS receives the FLEET OWNER Magazine Golden One-Hundred Maintenance and Efficiency Award

- CBS establishes a rideshare-matching program for KSU Students.
- March 27th 1982 Campus Bus Service Day in the City of Kent
- New York Times Selective Guide to Colleges –
 "Kent State provides one of the country's biggest and best college bus
 systems, which makes getting around campus and the surrounding area
 very convenient."
- CBS receives one day's notice of the restriction of Summit Street to one-way operation. Two-way operation resumes two weeks later.

 Joanne Connolly and Pete Knize place 1st and 2nd respectively at the Ohio State Bus Roadeo. Joanne later places 25th at the International Bus Roadeo

1983-84

Pete Brown finishes second at the international Bus Roadeo.
 "I was surprised to know that so many people at the Roadeo Knew about Campus Bus Service." - Pete Brown

1984-85

1985-86

- CBS has 180 employees; fewer that a dozen are full-time.
- CBS full time staff begins using a system of networked personal computers.

1986-87

CBS purchases 7 new Gillig (MODEL) buses, which constitute the 80 series.
 Five of these buses are 40-foot, 43 passenger coaches and two are 30-foot, 32 passenger coaches. The average cost per bus is \$146,000. All seven buses have wheelchair lifts and each is equipped with four wheelchair securement positions



- The Ohio Department of Transportation and the Portage Area Regional Transportation Authority sign an agreement enabling a new transit facility to be constructed on land originally purchased for a highway improvement at SR 59 and 261.
- Cash fare for local route service increases from 55 cents to 65 cents

- The Campus Bus Service begins intensive driver recruitment programs.
- Minimum age for bus drivers reduced to 18
- CBS is presented with a Fleet Safety Award from the American Public Transit Association noting that CBS has the best transit safety record in North America.

- With the advent of the Commercial Driver's License requirement, CBS is designated a test site for the license. Only CBS personnel are to be tested.
- Groundbreaking for the new CBS/PARTA facility occurs on July 5th, 1989. This facility is funded by \$1.6 million from the Federal Transit Administration, \$200,000 from the Ohio Department of Transportation and \$420,000 in CBS dedicated funding.

1990-91

- CBS receives State of Ohio and Federal Transit funding through agreements with the Portage Area Regional Transportation Authority totaling \$806,000 to support operations, capital expenses and planning.
- CBS provides rides to about 18,000 passengers per day with an annual budget of approximately \$2.2 Million.
- CBS operators are paid \$4.75 per hour
- In response to a decision to require all residence hall freshmen to park at the Stadium, CBS begins an overnight shuttle service.

- 5 Buses purchased in 1974 (70 series) are extensively rebuilt.
- CBS maintenance and administration move to new facility 1950 State Route 59. The move is conducted in one day without any service disruption.
- CBS experiments with the provision of the Small Group Loop, a route that links Small Group with Front Campus via Summit Street.
- All CBS operators have Commercial Driver's Licenses by April 1st.
- Half of a 2-bedroom apartment \$112.50 plus utilities- No smokers
- Pam Broadfoot wins the Ohio Paratransit Roadeo

- After almost two decades, the Campus Bus Service and PARTA end cooperative transit service provision. CBS anticipates service reductions.
- CBS and KSU Ground Transportation Maintenance (Motor Pool) merge.



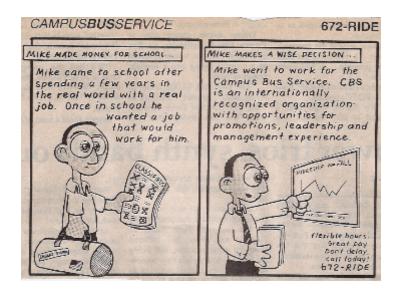
1993-94

- CBS' Marketing Department wins two 1st place awards in the American Public Transportation Association's Adwheel competition
- CBS purchases three 30 foot Gillig Coaches.
- CBS provides 4 round-trip a day service to Akron via Chapel Hill Mall and the University of Akron

1994-95

 CBS wins the 1993 American Public Transit Association Certificate of Achievement for Safety Improvement. CBS builds Aladdin's Lamp for the Homecoming Parade.





1995-96

 CBS wins the 1995 American Public Transit Association Samuel K. Skinner Award for Safety Improvement.



Homecoming float- the Minnow from Gilligan's Island





Homecoming Float- the Space Shuttle

- CBS purchases the Fiala Transportation Center from PARTA.
- Van service to the Salem and East Liverpool campuses is provided with 3 round-trips per day.

- Van service is provided between Kent and the Trumbull campuses.
- CBS installs bicycle racks on buses used in West Main service. Within months, additional racks are installed on coaches serving the North Kent and Ravenna routes.





Homecoming Float- Lamancusa's Harley Diner

• Van services to the KSU Stark Campus and Stark State College are offered



Marketing during Freshman Week

1999-2000

- CBS introduces the "EXTRA", a route which functions originally as a counterclockwise Campus Loop.
- A new campus master plan featuring extensive use of parking decks is revealed.

2000-01

• Following the cooperative development of new KSU/Akron services, CBS and Akron METRO RTA are engaged in merger discussions.

- CBS purchases 3 1989 Gillig Coaches from Capital Metro of Austin, TX for \$24,000 apiece.
- CBS wins the 2001 American Public Transit Association Silver Award for Safety.

- CBS offers 3 types of overnight shuttle services.
 - The Downtowner- Wednesday and Thursday, 10:00 p.m. to 2:00 a.m. between downtown Kent and campus
 - Door-to-door- all night demand-responsive service on campus
 - Stadium Shuttle- all night service between campus and the Stadium Parking lots

- Akron METRO RTA announces service cuts in response to continued economic turn-down in Summit County. Merger with Campus Bus Service is shelved.
- Intensive discussions between Kent State University and the Portage Area Regional Transportation Authority result in an agreement for PARTA to operate remaining off-campus services- West Main / Plaza and East Main on behalf of CBS.

2003-04

 Continuing discussion between KSU and PARTA results in agreement for PARTA to take over all transit services. Campus Bus Service to cease operations in June of 2004.

