Reorganizing for Tomorrow

Anthony J. Schill, Niagara Frontier Transit Metro System, Inc.

Organizations must evolve over time in response to internal and external changes. Organizations that do not evolve will fail to succeed in terms of efficiency, cost-effectiveness, product quality, and customer satisfaction. Niagara Frontier Transit Metro and its parent organization, the Niagara Frontier Transportation Authority, recently completed the transition from a traditional hierarchical structure to a decentralized model. Metro's organizational history is examined and the factors affecting organizational decision making are identified. The principal conclusions reached are that the decentralized management structure achieved by Metro has resulted in improved internal accountability and communication.

ny successful organization evolves over time in response to internal and external changes. Organizations that fail to recognize the need for change may not actually fail in the sense that they go out of existence, but they will fail in terms of efficiency, cost-effectiveness, product quality, and customer satisfaction.

Most large North American public transit systems have long histories, often reaching back to the formation of small independent electric street railway companies in the 19th century. Between 1890 and 1910, most of these smaller lines were consolidated into the major private systems that dominated the transit industry until after the Second World War and, indeed, right up to the transition to public ownership and operation.

The organizational structure of the major street railways was typically patterned after that of a somewhat

distant relative, the steam railroad. The railroad was the first product of the Industrial Revolution to require a strong centralized organization to carry out its operation. Operating frequent freight and passenger service over many miles of track with a high degree of efficiency and safety, but without the technological assistance we take for granted today, required a tightly disciplined and well-organized approach to doing business.

The railroads naturally turned to the military for inspiration, since armies had long faced similar organizational challenges. Thus the "top down" type of organization, wherein orders originate at the top and then are passed through multiple layers of management, to be executed without question at the bottom, became the norm in railroading—and, by extension, the urban electric railway business.

No longer are such hierarchical arrangements seen as the only way to do business in transit. Today a strong emphasis is placed on decentralization through the "flattening" of organization, that is, reducing the number of layers of management as much as possible and placing more authority in the field.

Metro, the transit system in Buffalo, New York, has recently made the transition to a contemporary organizational format. The purpose of this paper is to examine Metro's organizational history, identify the factors that had an impact on organizational decision making, and draw conclusions about the effectiveness of the decisions that have been made.

METRO HISTORY

Niagara Frontier Transit Metro System, Inc. (Metro) is the wholly owned transit operating subsidiary of the Niagara Frontier Transportation Authority (NFTA). NFTA also operates two airports, including Greater Buffalo International Airport; two intercity bus terminals in Buffalo and Niagara Falls; and a recreational boating facility on Lake Erie. The purpose for which NFTA was originally formed, to provide terminal facilities in Buffalo for Great Lakes maritime shipping, is no longer relevant to operations.

NFTA is a public benefit corporation created by the state of New York, and all 11 of its commissioners are appointed by the governor. The commissioners also constitute the board of directors of Metro. The executive director of NFTA, who is appointed by the commissioners, also serves as the president of Metro.

The present Metro system was formed in 1974 when NFTA bought the assets of the major private local transit provider, Niagara Frontier Transit System, along with the assets of several smaller operators. At the time

Metro began operations, the vehicle fleet consisted of approximately 500 buses, rail operation having been given up in 1950.

In 1978 construction began on Metro Rail, a 6-mi "starter" line comprising a 1-mi transit-pedestrian mall and a 5-mi subway. Method of operation and facilities approximate the heavy rail systems found in other cities. Metro Rail opened in phases between 1984 and 1986, and the 27-car fleet currently carries in the neighborhood of 29,000 weekday riders. The total annual ridership on Metro (bus and rail) is 30 million passengers.

System Organization

NFTA was originally formed to operate Buffalo's port facilities. Later, the two primary airports came under NFTA jurisdiction. Finally, in 1974 Metro's transit operations were added. As a result of this growth process, NFTA came to have an unwieldy organization; by 1984 there were more than 15 direct reports to the executive director, as shown in Figure 1.

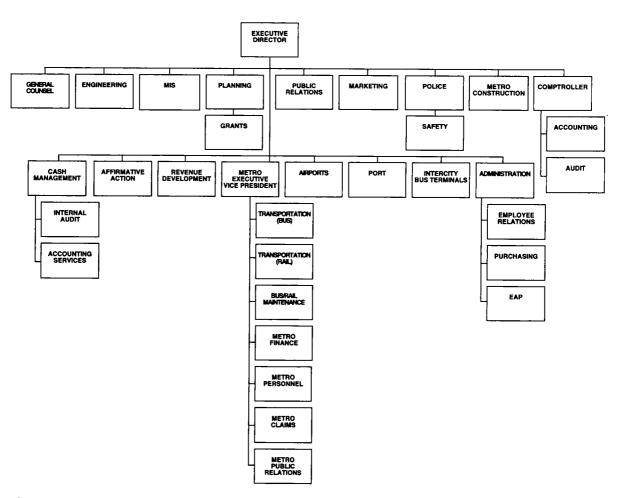


FIGURE 1 Niagara Frontier Transportation Authority, 1984.

SCHILL 309

From 1974 to 1987, Metro (bus and rail) functioned independently of NFTA except, of course, for its policy decisions and funding. Metro was organized on a standalone, "Chinese wall" basis intended to keep it completely separate from NFTA in order to protect other NFTA divisions from any impact of operating losses on the transit system. Consequently Metro retained its own operating and support functions, including Transportation (which included Scheduling), Maintenance, Public Relations, Finance, and Personnel. (Metro's personnel were on a different benefits program than NFTA employees.)

Until the inception of rail operation in 1984, the Metro system's organization had remained essentially unchanged since the days of private operation. Many of the senior managers had served in the same capacities for the private operator. Many of these managers had 35 to 40 years of service and were extremely familiar (and comfortable) with the then-existing organizational structure.

Metro's 1980 (pre-rail) organization, shown in Figure 2, was characterized by multiple layers of management and a strong "downtown" orientation for decision making. The two major operating units, Transportation and Maintenance, had parallel reporting structures all

the way up the line. Field locations were almost totally focused on day-to-day operating issues, with all budgeting and financial responsibilities (apart from payroll submissions) being carried out in the General Office. A strong philosophy of cost control, carried over from the private era, was nevertheless present. (For a number of years Metro was actually able to "bank" federal operating assistance.)

The advent of the rail project in the late 1970s eventually brought numerous changes into both the NFTA and Metro organizations. Building a rail line was viewed as an NFTA project, although Metro would operate the line once it was built. Metro was only peripherally involved in the decision to build and in the actual construction. Indeed, Metro's management probably would have preferred to continue operating an all-bus system (Metro Rail was planned as much as an urban development project as a transit facility).

In any event, NFTA established the Metro Construction Division (MCD) to oversee system design and construction. The original rail plan underwent numerous substantial modifications as a result of community involvement and financial constraints. The intended 12-mi line (from downtown Buffalo to the State University's new campus in the suburb of Amherst) had to be

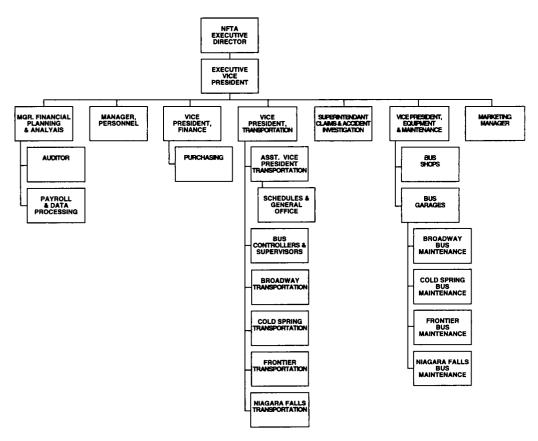


FIGURE 2 Metro, 1980.

truncated to a 6.2-mi segment ending at the older SUNY Campus at the Buffalo city line. A major contributing factor was the community's insistence on additional subway construction where above-grade operation had been planned. Ultimately, the total cost of the line rose to \$550 million.

By 1981 construction had progressed to the point where it was thought desirable to begin bringing on board the management staff who would eventually operate the system. MCD's consultant on operational matters, Day & Zimmerman, drafted an organizational plan that included two major rail units, Transportation and Maintenance. The Transportation Unit would be headed by a rail transportation superintendent, who would report directly to Metro's existing senior officer, the executive vice president (who in turn reported to the NFTA executive director). Rail maintenance func-

tions, however, would report to the vice president—equipment for the bus system, because Metro's management at the time considered bus and rail maintenance issues to be similar in nature. While not fatally flawed, this decision led to structural problems later on because rail personnel believed that important issues went unaddressed by bus-oriented officials. The overall Metro organizational plan in effect when rail service began in 1984 is shown in Figure 3. The original organization plan for just the rail functions is shown in Figure 4.

A brief look at the internal NFTA-Metro relationship is useful at this point. At the time of the 1974 NFTA takeover, Niagara Frontier Transit was not in immediate financial distress, although the operation was becoming increasingly subject to the ills common to private-sector public transit. In some respects, the joining

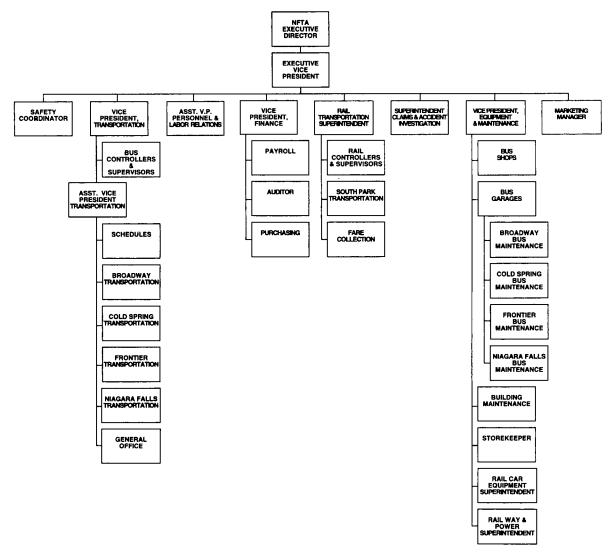


FIGURE 3 Metro, 1984.

SCHILL 311

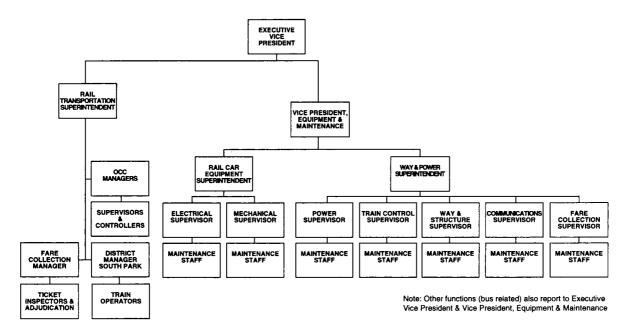


FIGURE 4 Metro Rail Division, 1984.

of NFT (i.e., Metro) to NFTA was not a happy marriage. The highly politicized environment of NFTA at the time did not sit well with Metro's once private-sector executives. Conversely, NFTA officials believed Metro was too much bound by tradition and that Metro's executives were unwilling to adapt to changing conditions. At times, the friction became intense.

At the behest of MCD, Metro recruited the rail transportation superintendent in early 1982. This person served as the sole employee on Metro Rail (excluding, of course, the NFTA employees in Metro Construction) until early 1984. At that time other operating managers and supervisors began to come on board in anticipation of the planned fall 1984 start-up of limited service on the Mall.

During this period funding was readily available to support system operation, both through start-up grants and federal operating assistance previously banked by Metro. Consequently, and despite the fact that long-promised local financial support had not materialized, rail operations began with relatively few constraints (other than good sense) on staffing decisions.

Those staffing decisions were largely driven by operating parameters that had been established years before during design. For example, the actual base of rail operations at South Park (i.e., yard, shop, and office for rail operators and ticket inspectors) was located at the southern end of the line, about 1 mi from the new bus/rail operations control center (itself adjacent to the existing downtown NFTA headquarters building). Even at South Park, the Transportation Unit was at the west end

of the facility, while Maintenance was at the east end, some 800 ft away.

This geographic dispersal of units necessitated a somewhat larger staff of management employees than might have been the case had all units been housed in a central facility. In addition the technological complexity of the rail line, such as full train control, centralized power control, and a complete supervisory control and data acquisition system, all linked to the Operations Control Center (OCC), drove a decision to provide onsite management for most of the operating day. Thus the two OCC managers each covered an 8-hr weekday shift, with on-call duty officers designated at other times.

Period of Change

From late 1985 until 1987 there was continuing turmoil in the upper echelons of NFTA. During this period considerable unfavorable media and public attention was focused on NFTA, with much of that attention being given to questionable business practices. The executive director resigned under pressure in late 1985, and the chairman of the board of commissioners assumed the role of de facto acting executive director.

In due course local dissatisfaction with the situation at NFTA led to the mid-1987 appointment of a new executive director. For the first time, NFTA would be directed by a person with extensive high-level transit operating experience rather than by a political appointee.

The former general manager of a major multimodal transit system was selected to head NFTA. The new executive director immediately set out to reduce expense and to change the NFTA versus Metro mindset by consolidating all support functions. Metro's Finance, Personnel, and Public Affairs departments were folded into the corresponding NFTA units. This left the Metro executive vice president with direct responsibility for only the Transportation and Maintenance units. Figure 5 shows the 1987 reorganization.

More important, the executive director enacted internal reforms in hiring, promotion, and salary decision making. He also strengthened internal procedures designed to correct other administrative and business practice problems. As a result the public attitude toward NFTA and the staff's morale began to improve.

During this period rail operations and organization were largely unaffected. The major modification was the 1987 transfer of the rail ticket inspection/adjudication function out of Transportation to the General Counsel; this was done as part of the major reorganization mentioned earlier. Another 1987 change was the elimination, through attrition, of one of the two OCC manager positions. Structure was realigned so that the rail transportation superintendent reported to the manager, Transportation, primarily a bus-oriented position, rather than directly to the executive vice president.

Although it was not a major problem, the rail operation was somewhat disadvantaged by a bus-oriented reporting structure. Creating a totally separate rail organization having coequal status with bus was considered but was found to be not feasible owing to cost constraints. In 1989 a rail official was promoted to the position of executive vice president (later retitled general manager, Metro) and the issue became less important. Final resolution, however, did not occur until the 1994 reorganization, which is described later.

FINANCIAL CRISIS

Metro experienced severe financial problems in 1989 and again in 1990. Major service cuts, including all weekend service, were threatened in 1989 but were averted at the last minute by commitments of local aid. By 1990 not all such commitments had been fulfilled, and all bus and rail service was withdrawn for 2 days. This resulted in the establishment of a dedicated source of revenue at the local level, but the total amount generated was not much more than had been received before.

These financial crises and other administrative and philosophical differences caused a deepening rift between the board and the executive director, leading to the latter's resignation in April 1990. The general counsel then headed the authority on an interim basis until the appointment of a new executive director the following October.

Although it was not evident at the time, this transition in administrations set the stage for far-reaching or-

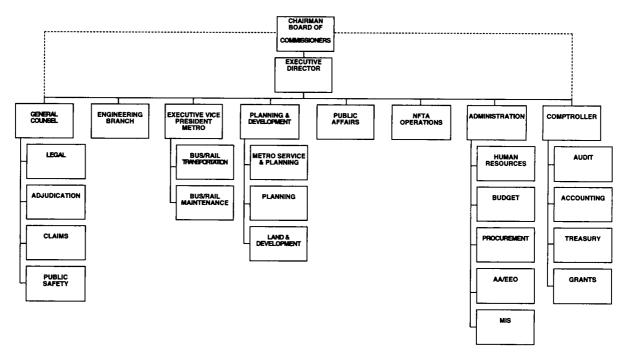


FIGURE 5 Niagara Frontier Transportation Authority, 1987.

SCHILL 313

ganizational changes throughout the authority but especially in Metro. Despite a lack of transit experience, the new executive director quickly grasped transit's financial facts of life and the critical importance of improving both efficiency in transit operations and service quality. This led to a plan to restructure the organization to achieve improvement throughout NFTA.

In 1991 the NFTA management structure was again reorganized. Nine senior management positions in addition to the executive director were created. The nine positions were general counsel, chief financial officer, and six general managers—for Metro, Transportation Services (airports, etc.), Human Resources, Engineering, Marketing/Revenue Development, and Affirmative Action. The general managers for the operating units (Metro and Transportation Services) were to have direct responsibility not only for actual daily operations but also for ensuring that broader planning, marketing, human resource, and financial needs were met through effective utilization of shared support functions. Figure 6 shows the impact of the 1991 reorganization.

Metro's 1994 Reorganization

Once the reorganization at the top was implemented, attention turned to the restructuring of individual operating and administrative support units. In the case of Metro, that restructuring focused on specific goals, including a need to

- 1. Create resources to address unmet needs in safety and training,
- 2. Place more authority and accountability in the field by eliminating much of the existing organizational hierarchy.
- 3. Eliminate parallel reporting structures in Transportation and Maintenance, and
- 4. Correct internal problems caused by having Rail Maintenance report to an essentially bus-oriented manager.

This major restructuring was also seen as essential to encouraging the realization by all employees that Metro had to become a customer-driven organization.

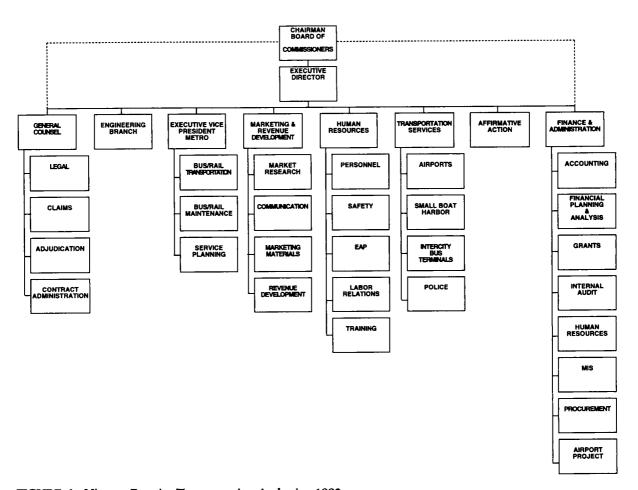


FIGURE 6 Niagara Frontier Transportation Authority, 1992.

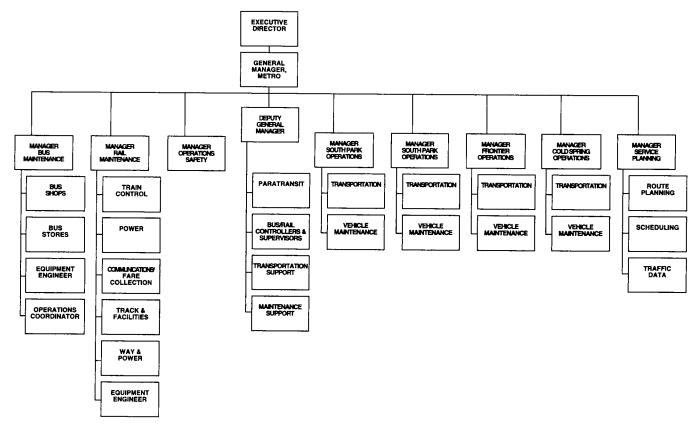


FIGURE 7 Metro, 1994.

The essence of the reorganization was the creation of an operations manager position at each of the three bus facilities and at the rail operating base. Each operations manager has full responsibility for all Transportation and Vehicle Maintenance functions at that location, including service quality and budget adherence. Each reports directly to the general manager, Metro.

Other units reporting directly to the general manager, as shown in Figure 7, are deputy general manager (Paratransit, Transportation and Maintenance Support, and Bus/Rail Control Center and Field Supervision), Service Planning, Operations Safety, Bus Maintenance (bus shops, building maintenance, and materials management), and Rail Maintenance.

Implementation of this reorganization occurred in March 1994. Whereas some problems in coordination were experienced, on the whole it has been very successful. Making one person at each facility responsible for the total operation has greatly improved coordination between transportation and vehicle maintenance activities. Placing more responsibility in the field has eliminated the need to consult "downtown" on a wide range of issues. This has expedited the decision-making process and has led to increased communication, particularly with represented staff.

Metro's new organizational structure will be tested severely in the near future. The impact of major reductions in (and possible eventual elimination of) federal operating assistance, combined with a sharp decline in our principal local subsidy, is setting the stage for a major financial crisis within the next 2 years. This crisis will be exacerbated by the expenses associated with the implementation of mandated paratransit service. In total, Metro's operating subsidies are expected to decline by more than \$7 million annually while paratransit costs increase to nearly \$5 million. This represents a swing of more than \$12 million in a \$70 million operating budget.

Since no system's operating budget can accommodate such pressures without major surgery, plans have been developed to cut union and management staffing, seek nontraditional revenue sources (e.g., Medicaid), investigate an undue financial burden waiver for paratransit, raise fares, consolidate garages, and ultimately, if no relief occurs, to substantially reduce bus and rail service.

We believe that Metro's current organizational structure will enable us to continue to provide a high quality of service even in a period of dwindling financial resources. Achieving that is certainly a monumental challenge, but it is one we can and will meet.