

Appendix E: Planning Initiatives

Vision 2020—The Blueprint for the Future

Overview: Vision 2020

Vision 2020: the Blueprint for the Future, Pace's strategic framework for suburban transit service, calls for a different set of services to be in place by 2020. The first steps to achieving that vision are well underway, using a "family of services" approach that takes into account the three key elements of Vision 2020: the "core" fixed route network, a "first/last mile" array of community services, and numerous capital infrastructure elements including "on the street" facilities like transportation centers, far side bus stops and Park-n-Rides, innovative "operational improvements" such as Transit Signal Priority (TSP) and fare payment system upgrades, and a variety of "planning/analysis tools" that Strategic Services will use to evaluate and improve Pace service.

Improved speed and expanded coverage are the goals underlying Vision 2020. Vision 2020 can be achieved if we change the way we provide service, as the "legacy" service model is simply not sustainable in light of the projected resources available to Pace. To achieve the coverage that the region needs, Pace will expand the scope and scale of existing services while also introducing some new ways to operate service at the community level. In 2010 and the next few years, Strategic Services will continue to focus on the following program areas and projects.

Core Fixed Route Network

Arterial Rapid Transit

To achieve a critical element of Vision 2020, Pace plans to implement a BRT strategy—called Arterial Bus Rapid Transit, or ART—to improve regional connectivity throughout suburban Northeastern Illinois. ART will provide premium quality, fast frequent and reliable service. It will operate in mixed traffic on arterial streets, with short sections of bus-only lanes and queue bypass lanes where needed to help buses get through congested road sections. ART will allow Pace to increase service levels at minimum cost for the maximum number of people, and it can be implemented in a relatively short timeline compared with other rapid transit options.

In Vision 2020, Pace identified 24 strategic arterial corridors as potential candidates for the ART network. Last year, Pace's ART Feasibility Study examined and prioritized these corridors. Six of them—95th Street, Dempster Street, Halsted Street, Harlem Avenue, Milwaukee Avenue and Oak Brook—were identified for implementation in the next ten years. The Pace ART network will feature limited stops, stations with enhanced passenger amenities including lights and heat, smart card fare collection, information kiosks with system maps, real-time schedule information, upgraded signs and shelters and distinctive vehicles using TSP to improve schedule adherence.

Express Bus Network

In addition to the ART network, a series of express routes is planned to operate on regional expressways to provide long distance connections between sub-regional activity centers. As 2009 draws to a close, Pace's Suburban Express Bus Network is expected to add several new routes that will give residents of Northeastern Illinois more direct point-to-point connections via new and expanded services along the I-55, I-355 and I-294 corridors. These routes will facilitate faster, more direct travel between major activity centers and provide congestion relief, improved mobility and better access to employment opportunities. They are being funded through the RTA's ICE and JARC programs.

For 2010 and beyond, additional Express Bus Network projects will build on this progress in several ways, including a study, to be done in conjunction with the RTA, for potential for the development of shoulder-riding priority on I-55. In addition, work will continue regarding the evaluation of new park-n-ride facilities and improved amenities at these facilities, the launching of a corridor planning study to develop the express bus network on I-355, IL-53 and I-290, as well as a collaboration with the Illinois Tollway to expand express bus service on I-294 in conjunction with their plan to develop a High Occupancy Toll (HOT) Lane on the most congested sections of that route.

Fixed Route Service Restructuring

Service restructuring is an on-going program throughout Pace's six-county operating area. Since 2000, in order to address the rapidly changing markets and demographics of the Pace service area, cross-functional teams have been convened to analyze current service, review travel patterns, investigate potential ridership generators such as residential, commercial and retail developments and receive considerable input from riders, operators and community representatives. These efforts resulted in the restructuring of bus service in various regions within the six-county operating area, including Elgin, Aurora, Joliet, North Shore, and most recently, South and Southwest Cook County and Will County.

The benefits that have been realized by the service restructuring projects have included improving on-time performance of service, discontinuing unproductive route segments, expanding service in areas with greater ridership demand, increasing service frequencies and spans, improving passenger amenities at bus stops and introducing posted stops on select routes to speed up service. In years to come, Pace will undertake similar initiatives in the greater Waukegan area and in West Cook County with the goal of improving service speeds, providing greater service coverage and increasing ridership. When all regions have been restructured, staff will continue to fine-tune existing service and implement future phases of restructuring.

Community Services

Community Transit

As outlined in Pace's Vision 2020 Plan, in order to support Pace's large arterial route network as well as the local mobility of its customers, community-based transit services are being developed and implemented in selected markets to provide the first and last mile of a trip connecting individual origins and destinations to the existing Pace route network.

Since transportation needs vary from community to community, Pace provides a full family of services in its community transit program ranging from Call-n-Rides (demand responsive service) to flexible routes (combining fixed route with dial a ride), to circulators (connect-

ing community activity centers following a regular route and schedule) as well as vanpools, rideshare, municipal dial a rides and shuttles. Pace will also explore ways to create "franchises" – partnerships with existing local providers—to achieve the peak hour coverage necessary to get people to work. These "franchises" could also provide service in low density portions of the region to provide "cross boundary" trips that supplement the existing para-transit service for the elderly and people with disabilities.

RideShare

Pace's implementation of the RideShare program in 2010-12 will continue through www.PaceRideShare.com, a website that matches users who can share their commute by carpooling. This also facilitates the formation of new Pace vanpools and supports the retention of existing vanpools.

The marketing of the RideShare-specific programs is funded primarily with federal grant money. Pace has also partnered with the Northwestern Indiana Regional Planning Commission (NIRPC), which is contributing funds for use of the website. In addition, the ongoing outreach activities of the Business Development team includes introduction of RideShare to our region's employers.

A grant-funded Emergency Ride Home (ERH) program will be available in 2010 to reimburse carpoolers and vanpoolers for emergency-related taxi rides. Pace will also continue to monitor existing carpools in the region through an enhanced carpool tracker module.

Capital Infrastructure

Transit Signal Priority (TSP)

The Transit Signal Priority (TSP) Program is geared to providing a more reliable regional transit system with improved bus travel times, schedule adherence and customer satisfaction. Transit Signal Priority recognizes that most buses operate on the arterial system, where delay is largely related to congestion and traffic signal timings that have not been oriented to bus operations. TSP allows bus transit vehicles to adhere to their published schedule by giving priority green time to buses that are behind schedule.

Bus-on-Shoulder Operations

Bus-only shoulder riding is one way of giving right of way to buses. Buses traveling on shoulders would deliver a consistently reliable schedule to passengers regardless of the traffic conditions along the route. Transit agencies can utilize shoulder lanes for BRT and/or express routes along certain congested roadways where favorable conditions exist. Experiences of such use have provided widely encouraging results across the nation. On congested roadways, bus-only shoulder riding supports cost-effective multimodal transportation choices, improves bus schedule reliability, and attracts more automobile drivers into buses. Pace is currently partnering with RTA, IDOT and ISTHA to study the feasibility and implementation of bus-on-shoulders operations within this region.

Queue Jump Project

Pace is conducting a current study to evaluate and determine a concept design for a bus queue jump lane at intersections with existing dedicated right turn bays. The project will address geometric design as well as the need for the signal modifications. A queue jump lane is a short stretch of bus lane combined with traffic signal priority. The idea is to enable buses to bypass waiting queues of traffic and to cut out in front by getting an early green signal. A special bus only signal may be required and coordinated with a TSP system.

The queue jump lane can be a right turn only lane, permitting straight through movements for buses only. A queue jump lane can also be installed between right turn and straight through lanes. A similar arrangement can be used to permit a bus to cross traffic lanes to make a left turn immediately after serving a curb side stop. The project will address selected locations representative of typical conditions in the six County Region. A regional program will be developed from this study.

Market Research & Analysis

Beginning in 2010, the Market Research and Analysis group will focus their efforts on supporting the planning and implementation of Pace's Arterial Rapid Transit and Express Bus services. Through user and non-user surveys and analysis of market data, we can identify service planning opportunities that meet the needs of commuters looking for faster and more reliable service. At the same time, market research and analysis efforts

will continue to identify and serve the needs of riders seeking more traditional, localized or special-needs service through our core and community-based family of services.

Hastus Scheduling Software Upgrade

In early 2010, Pace will upgrade its Hastus scheduling software to Version 2009. Hastus is the sophisticated scheduling tool used by transit agencies worldwide to develop fixed route bus schedules and crew schedules. Pace has used Hastus for over 15 years with positive results such as improved schedule accuracy and greater efficiency of bus operator assignments through state of the art optimization algorithms. This has translated into better customer service and more cost effective deployment of operating personnel. Significant enhancements have been made to the software since Pace's last upgrade five years ago.

Enhanced features for Version 2009 include "behind the scenes" updates to the optimization algorithms as well as "front-end" updates to the various user interfaces. The algorithmic updates will enable Pace to achieve greater efficiency in producing bus and crew schedules. The enhanced user interfaces will improve the scheduling staff's productivity in using the software. Version 2009 introduces the following noteworthy features:

- Improved ATP running time calibration module - This helps determine how much time is needed for scheduled trips. It also helps schedulers analyze and calculate the minimum time needed at terminals, so buses can get back on schedule after routine traffic delays.
- Redesigned Roster module - This helps assemble daily work assignments into weekly operator work packages. It also helps balance the need to minimize pay penalties such as overtime and the need to ensure reasonable operator work assignments. The revisions offer a greater assortment of attributes, rules, and parameters to achieve more efficient results faster.
- Improved Minbus and CrewOpt algorithms - These proprietary Hastus algorithms help minimize the number of buses and bus operators required to operate a given service level. A typical enhancement includes a secondary algorithm that automatically attempts to marginally improve initial results before a final solution is completed. As with the Roster module, a greater assortment of rule and parameter options under Version 2009 will afford a more precise configuration of the algorithms for more effective results.

Marketing and Communications Plan

In 2009, Pace invested the majority of its marketing resources into reaching out to persons with disabilities. Pace sought to improve its relationships with those riders, touting recent improvements in paratransit service and the benefits of using fixed route buses and trains.

Another major effort surrounded the bus route changes in south Cook County, which took place in two phases on March 22 and June 7, 2009. To provide as much information as possible to customers and other stakeholders, Pace advertised in newspapers, on buses, at public events and even by using Pace employees as “Transit Ambassadors” who communicated with riders at bus stops in the days leading up to the route changes. In particular, Pace made a special effort to tell riders about the change in bus stop policy on three routes—350, 352 and 364. On those three routes, passengers can only board and alight at Pace bus stop signs, in contrast to other Pace routes, on which passengers can flag down a bus to board anywhere along the route where it is safe to do so.

The agency also marketed its Express Services to Popular Destinations to attendees of sporting events and concerts, and attempted to increase awareness of Pace services among the Spanish-speaking population of the region.

In other efforts, Pace engaged in extensive promotion of its 25th Anniversary—on July 1, 2009—and its increased Dial-a-Ride subsidies to many units of local government. Pace also promoted its low-cost pass options to high school and college students.

Pace’s 2010 Marketing Plan represents a continuation of the previous year’s efforts towards the disabled, student and Latino communities. A 2009 survey of disabled riders will allow Pace to fine-tune its message to this group, in the hopes of providing better service and more effectively managing the high cost of paratransit service. Furthermore, the agency’s promotional activities will support any restructuring efforts or bus route changes, including transitioning other routes to a “posted stops only” policy. The expansion of the call-n-ride concept to other portions of the six-county region will also require promotional support.



Pace advertising wrapped bus.

Pace will continue to add passenger amenities—bus stop signs and shelters—wherever possible. At the end of 2009, the agency reformed the way it purchases and installs passenger shelters, both advertising and non-advertising shelters, to have more control over the process of installing shelters upon the request of external stakeholders and generating as much advertising revenue as possible. This reform should vastly improve the agency’s ability to install a greater number of shelters throughout the region.

As the local economy appears to be on the road to recovery, Pace in 2010 will continue to tout its services as a method of saving money and taking control over one’s transportation spending. Pace will also utilize press events and outreach to the media to promote our message as needed. Grants from the Illinois Environmental Protection Agency will continue to help market Pace’s successful RideShare matching program.

At a time when many commuters are looking for alternatives to driving alone, Pace has an historic opportunity to significantly increase ridership and make the usage of public transportation a permanent fixture in the lives of many in northeastern Illinois.

Marketing and promotion efforts are crucial to removing the lack of awareness that is often a major barrier to a person trying Pace service for the first time.

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