





By Maggie McGehee and Paulo Nunes-Ueno

Seattle Children's is a highly specialized academic medical center that serves children and youth from Washington, Alaska, Montana, and Idaho. Located in a densely populated residential neighborhood in northeast Seattle, the hospital is a careful steward of its most scarce resource: land. Consequently, when it came time to expand, hospital leadership paid special attention to parking management and Transportation Demand Management (TDM). As you can imagine, we would rather build patient care facilities than employee parking lots!

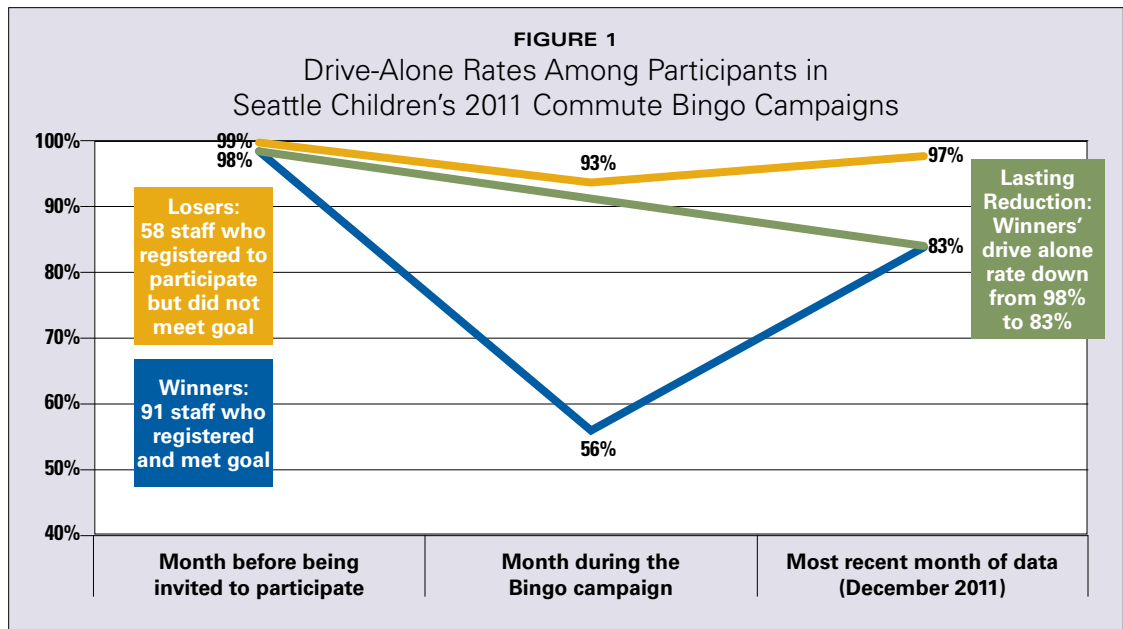
As part of the hospital's master plan, Children's devised a comprehensive transportation plan to help lower its drive-alone rate to 30 percent by project completion, estimated to be in 2030. This robust TDM program features best in class commute benefits such as 100 percent subsidized transit passes, free bikes for staff who commit to riding to work, and daily cash incentives, called Commute Bonuses, for biking, walking, using mass transit, carpooling, or vanpooling.

Part of encouraging alternative transportation had to include discouraging driving alone to work. To do this, Children's converted all parking transactions to daily charges. This way, the cost of drive-alone commuting is made apparent every day an employee uses his or her own car to get to work.

To manage these carrots and sticks, the hospital also implemented Commute Tools, developed by Parkio, a small Seattle-based company formerly known as Goose. Using

Commute Tools, employees fill out an online commute calendar and earn \$3.25 for each day of non-drive-alone commuting. This is similar to many commute calendars in use throughout the industry. Where Commute Tools takes a leap forward is in combining self-reported calendar data about alternative commutes with parking data collected by employee badge swipes at our parking gates and at readers in the shuttles that serve our off-site parking lots. This gives us three distinct rewards:

- There is no way to lie. One could claim a bike commute for a particular day later this month, but if they actually drive to work, the Commute Tools will automatically convert the bike day to a drive day and charge me appropriately.
- Employees receive an accurate and easy to read real-time parking charge and commute bonus statements online.
- We collect a wealth of travel behavior choice data



we can use to customize messages and incentives to individuals based on their specific commute behaviors, targeting our campaigns to further reduce the drive-alone rate.

Commute Bingo

In June 2011, Seattle Children's kicked off our first targeted TDM campaign, called Bus Bingo 75. At the time, one public transit route—King County Metro bus route 75—served the hospital every 15 minutes during peak commute times. By linking Commute Calendar data with employee home address information in GIS, we were able to identify staff who lived within walking distance of a route 75 bus stop but who had always or almost always driven alone to work. These employees were invited to play Bus Bingo 75.

The game's challenge was to take the bus or another alternative commute mode at least five times in one month, and earn an extra \$100 in addition to the daily \$3.25 Commute Bonus and savings on parking charges, gas, and wear and tear on cars.

All staff who registered to play Bus Bingo 75 received a multitude of tools and encouragements to help them win, including:

- A detailed Personalized Commute Plan tailored to their home address and work shift. These plans included bus trip times and stop photos, walking and biking routes, and travel time comparisons.
- At least one phone call and a weekly personalized email during the contest based on how they were doing so far, encouraging them to keep reaching for the five alternative trips goal.
- A list of Bus Buddies—other Seattle Children's employees who were regular bus 75 commuters who volunteered to be contacted with questions.
- An offer for a Transportation staffer to meet and commute with them the first time they tried a new mode to get to work.

Since the first round of Bus Bingo 75, we have conducted two other rounds of Commute Bingo with different target audiences. In August, all staff with 100 percent drive-alone commutes since January 2011 were invited to play, regardless of their home addresses. In October, a new bus—the 65—was rerouted to directly serve Seattle Children's. We repeated the process from Bus Bingo 75 with staff who lived along that route and drove alone at least 90 percent of the time.

During each of these rounds, we made additional modifications to the campaign based on feedback received from prior rounds. For example, we found that no one contacted the Bus Buddies for Bus Bingo 75, so we did not recruit additional buddies for later rounds. After that first round, we also switched to offering to create Personalized Commute Plans upon request, so that we could help participants with information on modes they were interested in trying—bus, bike, or carpool—instead of spending staff time developing detailed plans for commute options the bingo player would not consider.

Bingo Outcomes

Across these three rounds of bingo, we have seen success in convincing dedicated drive-alone commuters to try alternatives. These behavior changes have continued to some extent even after the campaign—and the special incentives—ended.

In total, 1,314 staff were invited to play at least one round of bingo, 149 (11 percent) of all of the staff invited ultimately registered to play a round, and 61 percent of the staff who registered to play reached their goal of at least five alternative commutes.

These 91 winners made 564 alternative commutes during their bingo months. That meant 564 fewer drive-alone trips on the road, and 564 fewer vehicles parked in Children's lots over the month.

Commute Calendar data since the bingo rounds ended



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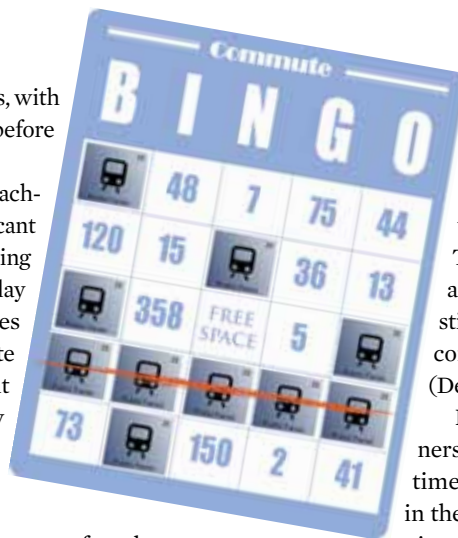
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show that winners are continuing their habits, with an 83 percent drive-alone rate in December; before the game 98 percent drove alone.

Participants who were not successful at reaching five non-drive-alone trips still had a significant reduction in drive-alone in the months following the Bingo campaign. Staff who registered to play Bingo but did not meet the five alternatives goal still showed a 97 percent drive-alone rate in December 2011 compared to a 99 percent drive-alone rate in the month before they were invited to play.

Lessons Learned

Bingo players were asked to take an exit survey after the campaign ended. Survey questions investigated which elements of the program—the Personalized Commute Plan, encouragement emails, financial incentives, or offer of commuting buddies—were most influential in convincing them to adopt alternative modes. Overwhelmingly, participants identified the monetary incentives as most influential, especially the \$100 incentive, followed by the \$3.25 daily Commute Bonus and savings in parking fees. The Commute Bonus and parking fees were in place before the Bingo campaign, so the \$100 one-time incentive was the main thing that encouraged a major change in driving behavior—enough to convince dedicated drive-alone commuters to try new transportation modes.



Among campaign winners who met the goal of at least five alternative commute trips in one month, the drive-alone rate dropped from nearly 100 percent before they were invited to play to 56 percent during the campaign. Though their drive-alone rate increased again after the campaign ended, as a group they are still showing a drop to an 83 percent drive-alone commute rate in the most recent month of data (December 2011).

Notably, only half of the individual bingo winners returned to driving alone 100 percent of the time. The other half made a significant change in their commuting habits; about a quarter of the winners are now driving alone less than 60 percent of the time. For staff who were formerly daily drivers, this is a remarkable shift.

The guiding principle of Seattle Children’s Commute Bingo campaigns has been specifically targeting invitations, messages, and incentives to individuals based on accurate data of their actual parking behavior. The one-time, tailored incentive and communications convinced these staff to try something new, and for those who found the alternative to be a better option than driving, they have been convinced to keep at it. Bingo offers a new option in Seattle Children’s TDM toolbox for reaching dedicated drive-alone commuters.

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