

REGIONAL TRANSPORTATION DISTRICT



**2008
PARKING
MANAGEMENT
PROGRAM
AUGUST**

**SAFETY, SECURITY AND FACILITIES
DEPARTMENT**



Facilities Division

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2008 REGIONAL TRANSPORTATION DISTRICT PARKING MANAGEMENT PROGRAM

1.0 BACKGROUND

In 2002 the Regional Transportation District undertook the initial analysis and research that formed the basis for the program that is described in this report. In 2005 a series of public meetings was conducted to introduce the public to the concept of parking management with associated fees. In 2006 the State legislature became involved resulting in a set of restrictions that, for practical purposes eliminated the ability to implement a self sustaining program that would meet the District's objectives. During the 2007 Legislative session Senate Bill 088 (SB-088) modified the previous enactment and created opportunities for a parking demand management program designed to achieve more efficient use of existing facilities and be self-sustaining in respect to cost.

During this research and development period RTD surveyed numerous transit agencies and associations throughout the nation to determine the type and extent of existing programs. In general most major transit agencies have fees associated with use of selected parking facilities. It also became apparent that a limited number of agencies have attempted, with some success, to manage parking demand by imposing fees in such a way as to shape transit patrons decisions about what parking facilities they choose. No agencies were discovered that have differential fees for transit users who make use of that agency's facilities but do not reside within the agency's jurisdiction and are, therefore, not subject to the taxing authority of the agency.

Four basic objectives have emerged. The program should:

1. Achieve more efficient use of existing parking facilities.
2. Establish more equitable cost recovery from non-resident and long-term parking patrons.
3. Utilize fees at all managed facilities coupled with discounts at selected low-demand facilities where unused parking capacity exists.
4. Be financially self-sustaining, not requiring general fund subsidy.

RTD operates 75 parking facilities with a total of about 25,600 spaces. About 17,000 of these spaces are occupied each weekday. At 19 of these locations 90% or more of the capacity is used every weekday while at 46 locations usage is below 75%. On the average 72% of this total system capacity is used on any particular weekday. About 5700 spaces go unused each weekday.

An analysis of trends found in the District's parking usage reports identifies several issues that a parking management program should address:

1. Demand at some RTD parking facilities consistently, or periodically, exceeds capacity partially due to multiple day use by skyRide patrons for out of state travel. About 1500 spaces are occupied each day by out-of-town travelers who are gone for an average of 4 days each time. Currently there is no limit on the number of days a space may be used by the same vehicle. At the same time, other District parking facilities on the same route are substantially underutilized. **The result is displacement of daily commuters from high-demand facilities.**
2. Demand at some of the District's busiest parking facilities exceeds capacity partially due to use by transit patrons who do not reside within the taxing jurisdiction of the District and, therefore, do not pay their fair share of costs. About 1600 spaces are used by non-residents each weekday. **The result is displacement of potential transit patrons who are District residents subject to the full tax burden of the District from high-demand facilities.**
3. Some high-demand District parking facilities reach maximum use during the morning peak on a daily basis causing patrons to "rush" to these facilities each morning before all spaces are used. **The result of this "rush" is "crush" loads in transit vehicles and virtual elimination of "drop in" patron opportunities for off-peak use.**
4. Some District parking facilities are impacted by unique neighborhood characteristics that elevate the likelihood of substantial non-transit use of available parking capacity. **The result is the displacement of potential transit users who would use the transit system if spaces were available.**

Each of these issues represents an opportunity to shift usage from high-demand facilities to low-demand facilities, resulting in more efficient use of the District's parking facilities.

2.0 LEGISLATIVE AUTHORITY

Senate Bill 088 (SB-88), adopted in 2007, does not authorize daily parking fees for residents of the District. For that reason this parking management program addresses only (1) parking beyond the first 24 hours for non-residents and residents, (2) daily parking for non-residents and (3) a voluntary, reserved, program. Only 15% of the District's parking patrons will be involuntarily impacted by the fees established in this program.

Additionally, SB-088 authorizes access to the State of Colorado Department of Motor Vehicle records, provides that all charges are payable in advance, requires a "payment device" at each managed location, authorizes RTD to limit use of its parking facilities to transit patrons only, establishes penalties for violations, provides that after four days an "unattended" vehicle may be towed, and requires that signage describing the parking program be posted 90 days before the program is implemented.

3.0 PARKING DEMAND MANAGEMENT PROGRAM

Parking Demand Management Programs:

Public Information Program: Through signage, internet and cooperating information outlets information will be provided to the public that will enable them to make informed choices about "equal or better" choices where they can find both available parking capacity and the sought after service.

In many cases potential transit patrons do not utilize public transit because there is no available parking capacity at their first choice and they are not aware of the alternatives that are available. Emphasis will be placed upon the fact that there are at least five free, or lower cost, parking alternatives subsidized by the RTD tax base that are built into the program:

1. the bus feeder system (no parking cost)
2. free lots (no parking cost)
3. lower cost lots (50% discounted parking cost)
4. the drop-off option (no parking cost)
5. car pools to high demand facilities (discounted parking cost)

Public information specifically designed to inform potential patrons about the availability of parking at alternate sites, coupled with incentives, will increase usage at low-demand facilities.

Extended-Stay Parking Program (Traveler): Daily fees will be charged when any vehicle is parked in an RTD facility more than 24 hours.

About 9% of the average usage of RTD parking spaces is by patrons who travel out of the City and who park their vehicle in an RTD parking facility for more than 24 hours. The average length of stay is 4.1 days; over 97.5% of these travelers park 10 days or less. That amounts to about 1500 vehicles parked in RTD facilities on any particular day. During holiday periods the number of travelers and the length of stay increase significantly.

Application of parking fees for extended use (more than 24 hours) where demand is high, coupled with discounts at low-demand facilities, will provide an incentive for patrons to seek alternate parking facilities where unused parking capacity can be found.

Non-Resident Daily Parking (Non-Resident-Commuter): Vehicles registered to addresses outside the District will be charged a fee for any day that they are parked in an RTD facility.

Based upon a license plate survey, about 9% of the vehicles parked in RTD facilities on any given weekday are registered to an address outside RTD boundaries where the District's taxing authority does not apply. Levels on non-resident use vary widely from less than 5% to more than 85%.

Fare box revenues, the only part of RTD revenues that non-residents are obligated to pay, amounts to about 20% of the total operating cost of the District while sales and use taxes, a limited part of which non-residents pay on purchases made within the District, amount to about 66% of the District's revenue.

Application of non-resident parking fees at high-demand facilities coupled with discounts at low-demand facilities will provide an incentive for non-resident patrons to seek alternate parking facilities where unused parking capacity can be found.

Reserved Parking Program (Reserved): In exchange for a fee, transit patrons who reside within the District may reserve parking space at selected high-demand facilities. These spaces, a maximum of 15% of the total spaces at each facility, are reserved for subscribers only between the hours of 5:00 am and 10:00 am each weekday. After 10:00 am unused reserved spaces become available for the general public.

Under this program, patrons can arrive at a time convenient to them over a five-hour period instead of before 7:00 am or 7:30 am by which time all spaces are taken.

If demand for the Reserved program at any facility exceeds the available parking spaces 30 days before opening a facility to this program a lottery will be conducted to determine which patrons are allotted space at the outset of the program. After this point, vacancies will be filled from a chronological waiting list.

The availability of reserved spaces at high use facilities will both reduce peak use on transit vehicles during morning hours (this capacity will then be viable at down-stream stations) and, because not all reserved spaces will be used by 10:00 am on any given day, there will be parking spaces available for off-peak use.

Non-transit Use Program: Use of RTD parking facilities can be restricted to transit patrons only.

Due to location some RTD facilities are likely to be used by non-transit patrons if no controls are established. In such cases a validation program may be justified to protect the availability of parking spaces for those who are making use of public transit. This program is in place at University of Denver LRT Station and may be applicable at other locations on a case by case basis.

Requiring parking patrons to present, upon exit, a parking ticket that has been validated at another LRT Station or a valid bus transfer will eliminate most non-transit use of parking facilities.

4.0 DEPARTMENT OF MOTOR VEHICLE RECORD ACCESS

SB-088 authorizes RTD to access Department of Motor Vehicle (DMV) data for established purposes. The District needs this data for two purposes:

1. The first of these is to identify vehicles that are not registered within the boundaries of the District so that such vehicle can be properly charged for the use of RTD parking spaces.
2. The second of these is for the purpose of identifying the owner of a vehicle to enforce duly established rules.

The initial data has been acquired from the DMV; it has been geo-coded to identify those license plates that are registered within the geographic boundaries of the District (approximately 2,000,000 vehicles); this data has been field tested using mobile license plate recognition technology. An ongoing data update file transfer protocol is being developed to provide daily updates from the DMV records. This license plate and address data will reside on an RTD server and will be "pushed" to a Central Parking server daily. The District will not have access to the names of vehicle owners; Central Parking will only have access to such information through an established DMV internet connection as needed for enforcement.

5.0 FACILITIES TO BE MANAGED

This program will, initially, implement parking demand management fees at ± forty (40) parking facilities in four (4) corridors where, collectively, the largest percentages of the non-resident and traveling patrons can be found (See Table 1, PHASED 2008 PARKING DEMAND-MANGEMENT PROGRAM). While these 40 facilities amount to a little over 50% of the District's parking facilities, they include 72% of the total parking usage, 77% of the total parking capacity, 84% of the busiest facilities in the system, and 91% of the estimated non-resident, long term parking and reserved patrons in the District.

In order to address site specific issues it may be advisable or necessary to make minor adjustments to this list of managed facilities by adding or deleting facilities on a case by case basis. As patterns of usage change it may become advisable to include more facilities among those to be managed. For this reason, facilities that are not managed but periodically experience high usage levels will be monitored for potential inclusion into the Program, see Table 1.

6.0 REVENUE CONTROL TECHNOLOGY

The Program will be implemented with a combination of technology applications, pay-by-license-plate (PBLP) pay stations, and mobile license plate recognition (MLPR).

Pay-by-License-Plate:

PBLP technology allows the patron to walk up to a pay station, pay by card or cash, retain receipt and proceed to the selected transportation mode. This technology makes it unnecessary to return to the vehicle and place the receipt on the dashboard and it avoids the security risk

of a receipt on the dashboard indicating an extended absence, which creates an opportunity for unlawful activity. These units will be solar powered and have wireless communication capability.

Depending upon the type of service, from 70% to 80% of current RTD patrons use some form of pre-payment for their bus or light rail fare. The parking program will offer a discount for pre-payment of parking charges similar to fare box discounts for passes. If parking patrons use pre-payment options to the same degree that fare box patrons do so, at a typical park-n-ride with 1500 parking space capacity about five travelers and thirty-four non-resident patrons would choose to pay daily at the pay station. This volume is well within the capacity of one pay station. For this reason one pay station will be provided, initially, at each managed facility.

Mobile License Plate Recognition:

MLPRT makes it possible to read each license plate with mobile cameras in a short period of time (two cameras mounted on a vehicle reading both rows of vehicles simultaneously). For example, a 1500 space facility can be monitored in about 30 minutes. The unit records the specific location by GIS coordinate, the time, the date, a digital read out of the license plate and a digital picture of the vehicle. The attached lap top computer records this information for future use and identifies any vehicle that is not registered within the District. The attendant visually observes the readings and can intercede when inaccurate or partial readings occur. With multiple readings in the same 24-hour period MLPRT can establish the duration of the stay. Based upon downloaded information from the back office and the pay station, an immediate determination is made in respect to payment, or lack thereof. The attendant takes action with warnings or citations as warranted.

All charges will be pre-paid. Monthly and automated charges may be arranged by mail, telephone or the internet with a credit/debit card, by certified funds or electronic transfer and receive a 15% discount. We expect the portion of automated accounts to be high.

A relatively small number of daily transactions will be accomplished through PBLP devices made available at each site. Occasionally a patron, who has elected to pay on a daily basis, will find it necessary or convenient to by-pass the pay station because of, for example, equipment failure or late arrival. Same day MLPRT monitoring will

detect this non-compliance and a warning will be issued. Through a back office appeal procedure warranted adjustments will be made by Central Parking.

7.0 BACK OFFICE SUPPORT

Central Parking company's web-based patron registration and automatic billing system will be linked to the RTD web site and will serve all of the back office functions that will be necessary.

8.0 RATES-CHARGES AND DISCOUNTS

A rate is established for each classification of patrons (1) residents and (2) non-residents. Discounts are offered to encourage patrons to use low-demand facilities and to establish automated accounts, both of which serve District objectives. The charge to the patron is the product of rates X units of service X discounts.

The rate for programs that apply to residents, who park free for the first 24-hours, is \$2.00 for each 24-hour period after the first and for the Reserved Program. Based upon this rate, with the appropriate discounts applied, a resident of the District will experience a charge only for periods after the first 24 hours and the Reserved Program, if elected. For example, a resident, with an automated account, parking at a high-demand facility for 5 consecutive 24-hour periods will experience a cost of $\$2.00 \times .85$ (discounted 15% for automated account) $\times 4$ days (the first day is free for residents) $\times .5$ (discounted 50% for a low-demand facility) = \$3.40. The Reserved Program charge, which is a monthly pass available only to residents of the District, will be $\$2.00 \times 21$ (the typical number of weekdays in a month) = \$42.00.

The rate that applies to non-residents is \$4.00 for each 24-hour period. Based upon this rate, with appropriate discounts applied, a non-resident will experience a charge for parking at any managed facility any day, including consecutive 24-hour periods beyond the first. For example, a non-resident with an automated account, parking at a low-demand facility for 5 consecutive 24-hour periods, will experience a charge of $\$4.00 \times .85$ (discounted 15% for automated account) $\times .5$ (discounted 50% for low-demand facility) $\times 5$ days = \$8.50. At a high-demand facility the same non-resident will experience a charge of $\$4.00 \times .85 \times 5$ = \$17.00.

As indicated, the incentive to shift a patron's use from the busiest, high-demand facilities to a low-demand facility is 50%. A 15% discount is offered to patrons who establish an automated account.

9.0 INCENTIVES FOR CAR/VAN POOLS

A registration procedure will be provided for car and van pools. All the vital information necessary for establishing a pool and for tracking purposes will be recorded. A refundable "privilege deposit" of \$100.00 will be required for each pool.

A group of patrons who organize a car pool from their homes to a parking facility represent a significant benefit to the District's objectives by reduction of vehicle miles and use of parking spaces. For registered pools to a parking facility there will be no charge for a vehicle registered within the District. A 50% discount will be offered for resident pool vehicles in the Reserved Program. Non-resident pool vehicles will receive a 50% discount of the standard non-resident parking fee.

A group of citizens who join a car/van pool program that uses a vehicle parked at a District parking facility contribute in a limited way to district objectives by reducing vehicle miles but they do not reduce parking demand at the District facility. For registered pools from a parking facility a resident car or van will not pay a fee in open parking. The Reserved Program will not be offered because these vehicles need access to parking places at the end of the day when spaces are typically available even in the high-demand facilities. A non-resident car/van will receive a 50% discount of the standard non-resident parking fee.

10.0 PARTIES WITH LIMITED EXEMPTION FROM NON-RESIDENT STATUS

Students (Colorado State reciprocity program):

The State of Colorado allows students from another State to register as a non-resident when enrolling at a Colorado institution. These non-resident students are exempted from the requirement to register their vehicle in Colorado. Students with valid, current student identification whose vehicle is registered outside the District may request re-classification as residents of the District for purposes of parking management and the imposition of fees. They will not, however, have access to the Reserved Program. Until, or unless, the owner of such vehicles provides proper identification and registers the vehicle

for this exemption, the vehicle will be treated as a non-resident vehicle subject to appropriate charges.

Military (CRS 42-3-104):

The State of Colorado has established a “non-residency exemption” for military personnel temporarily assigned to posts in Colorado. These non-resident military personnel are exempted from the requirement to register their vehicle in Colorado. Military personnel with current Geneva Convention Active Duty (AD) Identification who reside outside the District may request re-classification as residents of the District for purposes of parking management and the imposition of fees. They will not, however, have access to the Reserved Program. Until, or unless, the owner of such vehicles provides proper identification and registers the vehicle for this exemption, the vehicle will be treated as a non-resident vehicle subject to appropriate charges.

Persons with Disabilities (CRS 42-3-204):

Upon presentation of proper documentation, the State of Colorado will issue a license plate or a placard indicating disabled status. Vehicles with such credentials properly displayed will be treated as residents of the District for purposes of parking management and the imposition of fees. They will not, however, have access to the Reserved Program.

Newcomers (CRS 42-3-302):

State of Colorado criteria that establish residency are:

- Own or operate a business in Colorado
- Are gainfully employed in Colorado
- Reside in Colorado for 90 consecutive days.

Whichever of these criteria occurs first establishes residency. Once residency has been established the party is required to register the vehicle in the State of Colorado within 30 days. Because the District does not, reliably, have access to employment and business ownership information, in effect, a newcomer has 120 days from the time of first detection to register its vehicle.

For purposes of parking management and the imposition of fees, all non-resident vehicles will be treated accordingly until, or unless, they

are re-classified due to an exemption or display a Colorado license plate registered within the District.

Any newcomer that claims residency in the District but still displays an out-of-state, or out-of-District (CRS 42-3-113) license plate may request temporary suspension of collection measures for accrued charges until registration is accomplished and residency in the District is documented. At such time, if residency is documented, any charges not warranted for a resident shall be waived. In the event that residency in the State is not documented within 120 days, or in the District within 30 days, from the first detection, accrued charges applicable to a non-resident shall be due and payable.

11.0 ENFORCEMENT STRATEGY

When a vehicle is found in violation a warning is placed on the windshield with an explanation of charges and a description of the appeal process. For the first offense after the warning a \$20.00 penalty will be assessed; for the second offense the penalty is \$50.00; for the third offense the penalty is \$100.00. On the fourth offense a boot will be applied. The boot will be removable after a telephone call results in provisions for collection of the fine and a boot removal code is issued to the violator. "Unattended" vehicles may be towed if they are determined to be "abandoned" after 4 days according to the legislation.

This program establishes a maximum stay rule for all District parking facilities of 15 consecutive 24-hour periods unless prior written approval for a longer period is obtained, but no stay may exceed 30 days.

Central parking has an existing appeal process that is accessible by telephone for patrons with issues to resolve. Their policy is to administer this process with a strong commitment to patronage retention. This established process will be used on the "front line" in conjunction with the right to an appeal to be heard by an RTD appointed Hearing Officer.

12.0 COSTS AND COST RECOVERY

The Central Parking contract requires Central to take all necessary steps to implement the program and acquire all materials, supplies, equipment and personnel. Central will collect all revenues and remit, monthly, to the District 97% of the net revenue after all expenses and monthly amortized equipment investments have been covered. The estimated annual cost for management of forty parking facilities is estimated to be \$1,100,000. The

estimated cost recovery in the first full year of operations is estimated to be \$1,300,000. In addition, because the program will result in a temporary reduction of single occupant vehicles at high demand facilities the District will experience new revenue to the fare box from “back fill” patrons. This revenue is estimated to be \$250,000 on an annualized basis.

A revenue projection model has been created that estimates revenue by facility from each of the three programs. The model assumes that 90% to 95% of current traveling and non-resident patrons will be retained, but that as many as 50% may seek alternative means by which to access transit. These alternative means include shifting to a free, unmanaged facility, switching to a low demand facility where fees are discounted by 50%, joining a car pool to a high demand facility, use drop-off, kiss-n-Ride, or bicycles, scooters or walk-up modes. At high demand facilities those spaces that are vacated will be “backfilled” by the latent demand at these facilities. This “backfill” patronage will result in a net increase at the fare box.

13.0 IMPLEMENTATION SCHEDULE

- Board Study Session – July 22, 2008
- Operations Committee – August 12, 2008
- Board Consideration for Adoption – August 19, 2008
- Phased Implementation – 8 months
 - September – October, 2008 –mobilize and install signage for Phase I
 - November – December – January, 2009 – 90 day signage requirement
 - February 1, 2009 – Phase I opens
 - March 1, 2009 – Phase II opens
 - April 1, 2009 – Phase III opens
 - May 1, 2009 – Phase IV opens

14.0 MEASUREMENT OF SUCCESS

The following goals for measurement of early success of the program will be revisited 6 months into the program:

- Net revenue should exceed 10% of gross revenue 90 days from full implementation
- Pre-sales of Reserved spaces should exceed 50% by opening day.
- Documented “shifts” from high demand to low demand should exceed 200 by 120 days from full implementation (this is the measure of efficiency gain from the Program)

15.0 ATTACHMENT DESCRIPTION

Table 1, PHASED 2008 PARKING DEMAND-MANAGEMENT PROGRAM is composed of two pages:

- The vertical columns indicate:
 - the parking capacity of each facility
 - usage for the most recently available 12-month period
 - the existence of skyRide service currently available
 - estimates of patronage for each of the three programs
 - Traveler Program information comes from Customer Satisfaction Surveys
 - Non-Resident Program information comes from an actual license plate field survey conducted in October 2007
 - Reserved Patronage information is simply calculated at 15% of the capacity of each facility with usage levels at 90% or greater.

- The first page depicts the first four phases for implementation, the rationale for which has been described above, with one addition color-coded as such on the second page. The total estimated patronage for each phase is indicated as a footnote in corresponding color at the bottom of the second page.

- The second page depicts those facilities not to be managed in the initial implementation, the rationale for which has been described above. Those facilities high-lighted as “monitored” on this page indicate any facility that has experienced usage of 90% or greater during any month in the past 12 months.