

City of Richmond Employee Trip Reduction Program Update

Richmond Regional Transportation Planning Organization

D. Moore Clarke
Administrator
Office of Equitable Transit and Mobility
City of Richmond

April 1, 2021



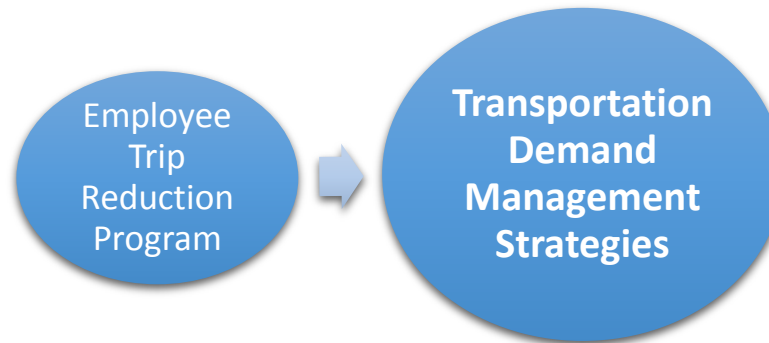
City of Richmond Employee Trip Reduction Program

Mission

The City of Richmond Employee Trip Reduction Program (ETRP) is a part of the City's larger Transportation Demand Management Program, that sets to reduce commute trips into Richmond. Since its inception over 15 years ago, the mission has remained the same:

“To encourage City of Richmond employees to use alternative forms of transportation when commuting to and from work.”

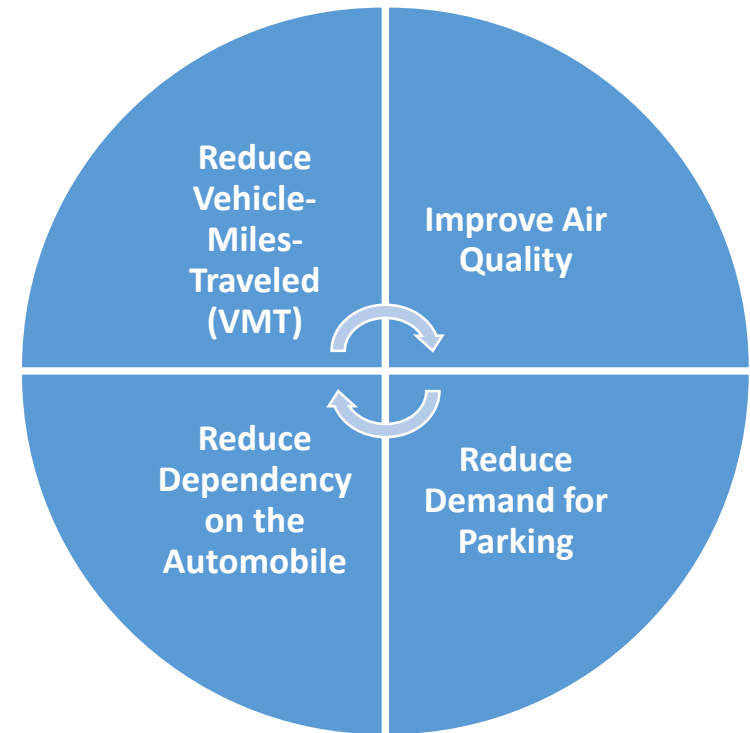
Specifically, this program seeks reduce the number of single occupancy vehicles driven by City of Richmond Employees.



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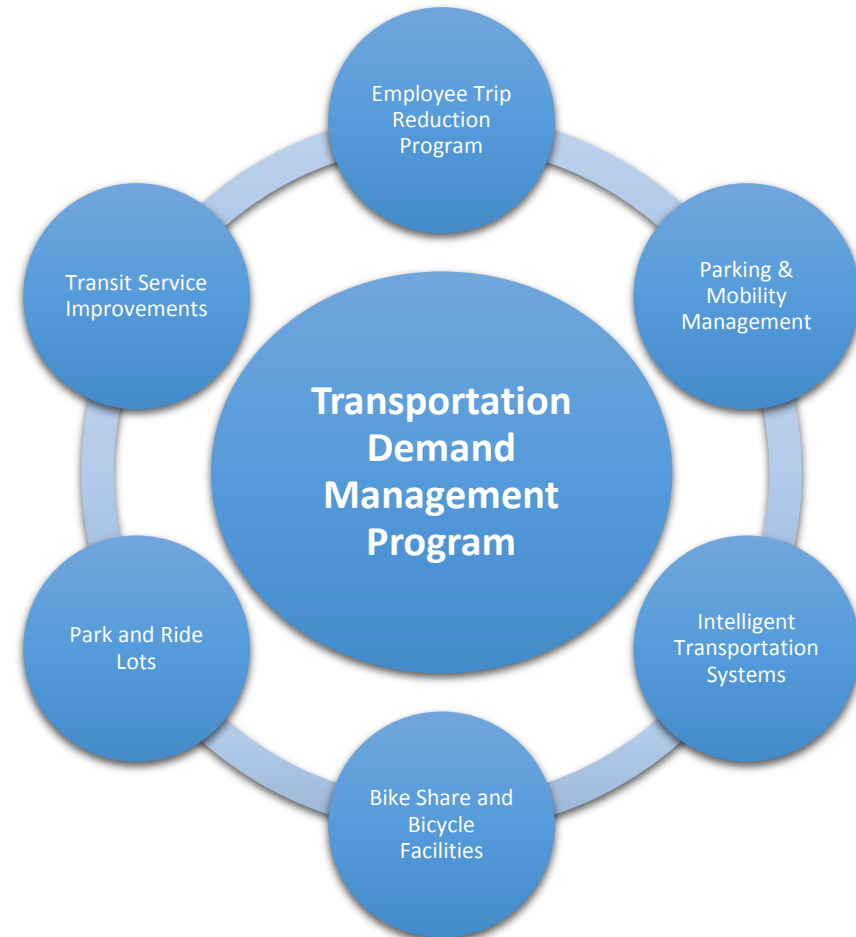
Purpose and Objectives

- By improving the air quality, the City's TDM program supports reduced pollution and GHG emissions.
- By providing alternative transportation options the program reduces Vehicle Miles travelled (VMT).
- By providing alternatives such as biking, park and ride lots and transit, the program lessens downtown commuters dependency on single occupancy vehicles.
- By offering incentives this program facilitates a necessary Downtown modal shift by managing parking supply use of alternative modes of transportation reduce demand for Parking



City of Richmond TDM Program

The City of Richmond's Transportation Demand Management Program has been successful in FY20 in reducing the number of single occupancy vehicle commuter trips. We have also met the intent of the CMAQ program by improving the Richmond's region air quality, reducing traffic congestion and conserving energy.



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City of Richmond Employee Trip Reduction Program

FY20

JURISDICTION: City of Richmond
PROJECT: Richmond Employee Trip Reduction Program
DESCRIPTION: The Richmond Employee Trip Reduction Program provides GRTC transit swipe cards to full time City of Richmond employees as well as vanpool subsidies for certified vanpool riders. To date, approximately 1080 employees have enrolled in the program using both GRTC and Ridefinders vanpool services. This figure far exceeds our original goal of 10% employee participation.

PPMS #:
COMPLETION DATE: 2020 7/1/2019-6/30/2020
PROJECT COST: \$170,000
ASSUMPTIONS:
 Total number of Employees 4,660
 Employee/Citizen Participati 914
 Average Commute 134 miles
 Days per year 160
VMT reduction =Participating employees* roundtrip commute distance
 (Vehicle emissions factors based on MOVES2014a run for light duty trucks and

HC	0.069
NOx	0.204

Reduced VMT	EMISSIONS	
	(kilograms/day)	
	HC	NOx
122,476	8.45	24.99

Emissions Reductions	
EMISSIONS (kilograms/day)	
HC	NOx
8.45	24.99
(tons/year)	
2.33	6.89



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City of Richmond Employee Trip Reduction Program

FY19

COMPLETION DATE: 2019 7/1/2018-6/30/2019

PROJECT COST: \$170,000

ASSUMPTIONS:

Total number of Employees 4,660

Employee/Citizen Participation 904

Average Commute 158 miles

Days per year 250

VMT reduction = Participating employees* roundtrip commute distance

Reduced VMT

EMISSIONS

142,488

(kilograms/day)

HC NOx

9.83 29.07

(Vehicle emissions factors based on MOVES2014a run for light duty trucks and cars, 2019 urban restricted arterial, speed bin 8, all emissions)

HC 0.069

NOx 0.204

Emissions Reductions	
EMISSIONS (kilograms/day)	
HC	NOx
9.83	29.07
 (tons/year)	
2.71	8.01



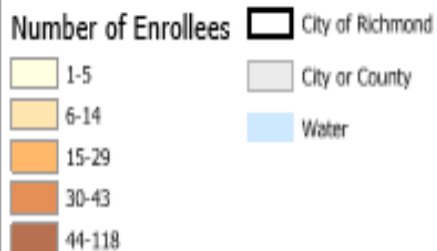
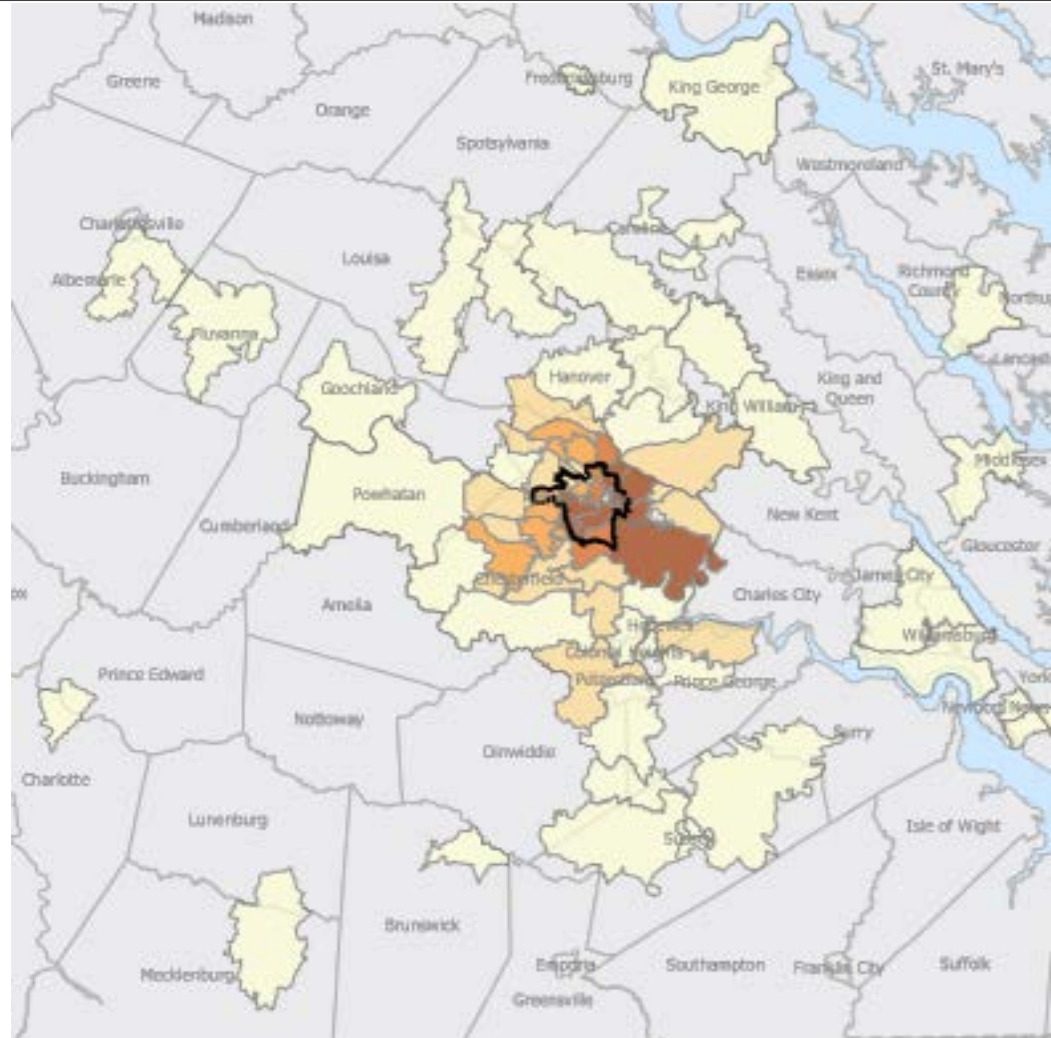
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City of Richmond Employee Trip Reduction Program

The ETRP provides GRTC transit swipe cards as well as vanpool vouchers, for certified vanpools, to full time City of Richmond employees for their commute to/from work; as well as encourage all Richmond citizens to take transit as a commuting option.

FY2020

- In 2020, GRTC reported that employees had made over 68,000 total bus trips, utilizing the program.
- Before COVID, the program had seen a consistent increase in enrollment and provides benefits to 8% of the City's workforce. Up one percent from the previous year.
- The program had an average of 914 participants at the start of 2020.



Enrollees in ETRP
by Home Zip Code

Printed by the GIS Team: 8/21/2019

City of Richmond Employee Trip Reduction Program

Midlothian	23113	7
Midlothian	23112	23
Williamsburg	23185	2
N.Chesterfield	23225	73
Glen Allen	23060	29
Highland Springs	23075	14
Henrico	23231	63
Midlothian	23114	7
Williamsburg	23188	2
Chesterfield	23838	7
N.Chesterfield	23236	19
Bon Air	23235	18
Chesterfield	23832	11
Petersburg	23805	4
Mechanicsville	23111	7
Glen Allen	23059	12
Richmond	23221	18

Richmond	23223	118
Richmond	23220	36
Richmond	23227	36
N.Chesterfield	23224	75
Richmond	23222	71
Richmond	23230	9
Aylett	23009	2
Stony Creek	23882	1
Chester	23836	5
Capitol	23219	7
Mechanicsville	23116	4
N.Chesterfield	23237	7
Richmond	23232	3
Amphill	23234	43
Hopewell	23860	8
Henrico	23228	24
Henrico	23233	9



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City of Richmond Employee Trip Reduction Program

Regency	23229	14
Richmond	23226	6
Chester	23831	13
Henrico	23238	4
Chesterfield	23832	11
Carson	23830	1
Waverly	23890	1
Henrico	23294	20
Chesapeake	23320	1
King George	22485	1
Ruther Glen	22546	1
Newport News	23608	3
Fredericksburg	22401	1
Goochland	23063	3
Sandston	23150	8
Norfolk	23513	2
Petersburg	23803	15

Ashland	23005	2
Yorktown	23693	1
Powhatan	23139	2
Colonial Heights	23834	1
Bowling Green	22427	1
South Hill	23970	1
Richmond	23261	1
Newport News	23602	1
Moseley	23120	1
Warfield	23889	1
Prince George	23875	2
Farnham	22460	1
Fredericksburg	22403	1
Richmond	23241	2
Charlottesville	22902	1
Hampton	23669	1
Chesapeake	23324	1
Hillsborough, NC	27278	1

Portsmouth	23704	1
Richmond	23260	1
Hanover	23069	1
Alexandria	22315	1
Bumpass	23024	2
Cullen	23934	1
King William	23086	1
Beaverdam	23015	1
Powhatan	23239	1
Saluda	23149	1
Hampton	23670	1
Palmyra	22963	1



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City of Richmond Employee Trip Reduction Program

- ✓ The City has brought a renewed focus on the Employee Trip Reduction Program.
- ✓ Along with funding employees GRTC transit fares, RideFinders, vanpools and guaranteed ride home, the ETRP program now does more marketing and outreach to all of Richmond citizens and businesses.
- ✓ Implemented first in FY19 the City's TDM program sponsors Multimodal Day, Bike to Work Day and Try Transit Week annually.

EVENTS LIKE
MULTIMODAL DAY CAN
INCREASE NON-MODAL
RIDERSHIP UPWARDS OF
84% ON ANY GIVEN DAY
OR WEEK!!!



City of Richmond Employee Trip Reduction Program

CMAQ Project ID: VA20170008

Project Year: 2017

Is this a subsequent project? No

State Project ID	N/A
FMS Project ID	5A27501
Tip Project ID	
Is this an Outreach activity project?	N
Is this a TCM in an approved SIP?	N
Is this a congestion reduction project?	N
Does this project include operating assistance?	N
Project Title	FY17 City of Richmond Employee Trip Reduction Program
Duration of project funding (years)	null
Project MPO	Richmond Regional Planning District Commission
Project Nonattainment/Maintenance Area	
Is this project located in Nonattainment/Maintenance Area?	N
Project Reporting Category	Travel Demand Management
Project Description	Guaranteed ride home programs (Not by transit provider), Marketing and outreach
Project Other Description	
Public-Private Partnership Project?	N
Is this a de obligating project?	N
CMAQ Capital Amount	200000
CMAQ Operating Assistance Amount	null
Non-CMAQ Funding	50000
Total Project Cost	250000
VOC Emissions Benefit(kg/day)	0.3380
CO Emissions Benefit(kg/day)	
NOX Emissions Benefit(kg/day)	1.0010
PM10 Emissions Benefit(kg/day)	
PM2.5 Emissions Benefit(kg/day)	
CO2 Emissions Benefit(kg/day)	
VOC QA	N
CO QA	N
NOX QA	N
PM10 QA	N
PM2.5 QA	N
What is the reason for reporting qualitative benefit?	

Travel Demand Management (www.fhwa.dot.gov)

- Fringe parking
- Traveler information services
- Shuttle services
- Guaranteed ride home programs
- Carpools, vanpools
- Traffic calming measures
- Parking pricing
- Telecommuting/Teleworking
- Employer-based commuter choice programs.
- Education and Outreach
- Eligible activities include planning, preparing technical and feasibility studies, and training



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What is the reason for reporting qualitative benefit?	

- Program costs \$120,888 in FY20 down from annual average of \$170,000, due to pandemic and GRTC zero fare policy.
- The City currently are utilizing federal and state CMAQ funds on Vanpool and Carpool vouchers, Marketing and educational outreach.
- Remaining funds of \$239,112 will be used for FY21, FY22 and FY23. These funds will be used both for the Employee Trip Reduction Program and the City's overall TDM initiatives.
- The City will submit through the FY22 CMAQ grant application process a new CMAQ fund request of \$170,000 for FY24 CMAQ funds.



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Questions?



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