HIGH OCCUPANCY VEHICLE TRANSPORTATION CONTROL MEASURES: APPLICATION OF MANAGED LANES AND SUBSTITUTION OF TRAFFIC SIGNAL PROGRESSION

SURFACE TRANSPORTATION TECHNICAL COMMITTEE
DECEMBER 6, 2019
VIVEK THIMMAVAJHALA
Three Interim HOV lanes remain in the following State Implementation Plan (SIP) as TCMs:

*Dallas-Fort Worth 1-Hour Ozone Attainment Demonstration State Implementation Plan Revision* - April 2000

*Dallas-Fort Worth 1997 8-Hour Ozone Attainment Demonstration and Reasonable Further Progress State Implementation Plan Revision* - May 2007

These Interim HOV lanes are being removed as a TCM in the SIP documentations due to being changed to Managed Lanes.

Removing them requires substituting alternate TCM projects that achieve equivalent emissions benefits.
Location of HOV Lanes to be Substituted

IH 35E corridor (Stemmons Fwy) between IH 635 and SH 121

IH 635 east corridor (LBJ Fwy) between Coit Rd and Greenville Ave

IH 635 west corridor (LBJ Fwy) between Luna Rd/IH 35E and US 75
HOV TCM SUBSTITUTION

TRAFFIC SIGNALIZATION PROJECTS TO BE USED AS SUBSTITUTES

6 Corridors:

Parker Rd (Midway Rd to Preston Rd)
  9 signals

Park Blvd (Midway Rd to Coit Rd)
  16 signals

Custer Rd (Legacy Dr to SH 121 NB)
  8 signals

Coit Rd (Legacy Dr to SH 121 NB)
  8 signals

Spring Creek Pkwy/Shiloh Rd (Custer Rd to Plano Pkwy)
  14 signals

Plano Parkway (Dublin Rd to Marsh Ln)
  30 signals

Location of Traffic Signals
Transportation Control Measure Substitution

Transportation Control Measures (TCM) specified in an implementation plan may be replaced with Control Measures if the substitute measures achieve equivalent or greater emissions reductions than the TCMs to be replaced.

<table>
<thead>
<tr>
<th>Pollutants</th>
<th>Emissions Impact of three HOV Projects</th>
<th>Emissions Impact of Corridor Signalization Projects</th>
<th>Difference</th>
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<td>NO&lt;sub&gt;x&lt;/sub&gt;</td>
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<tr>
<td>STTC – HOV TCM Substitution – Information</td>
<td>October 25th, 2019</td>
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<td>RTC – HOV TCM Substitution – Information</td>
<td>November 14th, 2019</td>
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<td>STTC – HOV TCM Substitution – Action</td>
<td>December 6th, 2019</td>
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<td>RTC – HOV TCM Substitution – Action</td>
<td>December 12th, 2019</td>
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<td>Interagency Consultation Concurrence Letters</td>
<td>February, 2020</td>
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<tr>
<td>Approved HOV TCM Substitution</td>
<td>May, 2020</td>
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Request for Action

Recommend Regional Transportation Council approval on the TCM substitution of three HOV projects listed below with traffic signalization projects.

IH 35E corridor (Stemmons Fwy) between IH 635 and SH 121

IH 635 east corridor (LBJ Fwy) between Coit Rd and Greenville Ave

IH 635 west corridor (LBJ Fwy) between Luna Rd/IH 35E and US 75

The traffic signalization projects are mentioned on slide 4.
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Partnership with DFW International Airport to Enable Electric Bus Purchase

Surface Transportation Technical Committee
December 6, 2019

Chris Klaus
Senior Program Manager
Additional Airside Buses Needed to Support Growing Number of Daily Flights

Buses Available in Diesel and Electric Options

Buses Expected to Operate for 20+ Years

Higher Capital Cost and Longer Lead Time for Electric Buses

Up to $3.5 Million Additional Expenses for 4 Electric Buses, Associated Infrastructure, Equipment, and Temporary Lease of Airside Buses Prior to Electric Bus Delivery

Grant Funds Not Available

Constraints Include Buy America and Scrappage Requirements
Electric Airside Bus

Source: cobus-industries.de
Avoid Increase in Ozone-Forming Pollutants

Maintain Compliance with General Conformity as Airport Expands

Reduce Passenger & Employee Exposure to Exhaust Emissions from Diesel Buses

Sustain Airport Carbon-Neutral Accreditation
Endorse RTC Approval Of:

Contribution of Up to $3.5 Million in Regional Toll Revenue Funds (Dallas County and Regional Accounts) to DFW International Airport to Support Purchase of 4 Electric Airside Buses, Associated Infrastructure, Equipment, and Temporary Lease of Airside Buses Prior to Electric Bus Delivery

Flexibility for Staff to do a Funding Swap if Determined to be More Appropriate

Administratively Amending the 2020-2022 Transportation Improvement Program (TIP)/Statewide Transportation Improvement Program (STIP) and Other Planning/Administrative Documents as Needed
## Timeline

<table>
<thead>
<tr>
<th>Milestone</th>
<th>Estimated Timeframe</th>
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<tr>
<td>Regional Transportation Council Approval</td>
<td>November 2019</td>
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<tr>
<td>Surface Transportation Technical Committee Endorsement</td>
<td>December 2019</td>
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<tr>
<td>Submittal to Statewide Transportation Improvement Program (STIP)</td>
<td>February 2020</td>
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<tr>
<td>Anticipated Approval of STIP Revision</td>
<td>Late March/Early April 2020</td>
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<td>Anticipated Approval of Regional Toll Revenue Funds by the Texas</td>
<td>April 2020</td>
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<td>Transportation Commission*</td>
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<td>Anticipated Electric Bus Delivery</td>
<td>Fall 2020</td>
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</table>

*To maximize investment, funding source may change, thus adjusting estimated timeframe.*
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The Regional Transportation Council (RTC) has been selecting projects since 1992.

The first Metropolitan Planning Organization (MPO) Milestone Policy was adopted by the RTC in June 2015, and it reviewed projects selected from 1992 to 2005 that had not yet gone to construction.

That initiative was successful in getting 46 projects to construction.

Staff has been directed to initiate a second round of the Milestone Policy to review projects currently over 10 years old that have not been implemented.
MILESTONE POLICY ROUND 2

- Affected projects:
  - Funded between 2006 and 2010 that have not let or obligated
  - Funded prior to 2006 that had let, but have had implementation issues (e.g., re-bid, utility delays)
  - Funded with RTC-selected sources
  - Locally funded and added to the Transportation Improvement Program (TIP) prior to 2010
  - Funded with Congressional Earmarks that are subject to rescission

- 41 projects will need to be reconfirmed or cancelled

- Projects have $605,904,439 in total funding
INTENDED OUTCOMES OF THE MILESTONE POLICY

- Providing a realistic assessment of project status for decision-making
- Balancing project construction schedule capacity within the current financial constraints
- Increasing the amount of available funds for priority, “ready-to-go” projects, rather than long delayed projects
PROPOSED REAPPROVAL PROCESS

- Agencies with projects on the Milestone Policy Project List will be notified via letter (in addition to STTC & RTC agenda items)

- Agencies must reconfirm the projects as a priority by:
  - Providing a realistic and achievable schedule, which must receive NCTCOG & TxDOT concurrence
  - Providing documentation of policy board support
    - If projects are advancing imminently or have policy board approval within the last six months, new action is not needed (just submit latest approval documentation)
    - If policy support documentation is greater than six months old, new action is requested
  - Documenting the availability of local matching funds
LESSONS LEARNED – SUGGESTIONS FOR AGENCIES TO CONSIDER

- Review timeline with “20/20 vision,” not “Rose-Colored Glasses”
  - Include review of start and end dates for STIP approval, funding agreement execution, engineering, environmental clearance, right-of-way acquisition, utility relocations, bidding process, railroad or other interagency agreements
  - Include time for TxDOT review
  - Do not assume phases can run concurrently
  - Build in reasonable, but not excessive, contingency timing

- Coordinate with TxDOT & NCTCOG staff in advance to ensure timelines are realistic
TIMELINE

- January 2020 – Notify implementing agencies
- May 1, 2020 – Formal responses due to NCTCOG staff
- Summer 2020 – Bring the Milestone Policy Project List to STTC/RTC for review and approval
UPDATE ON NOVEMBER 2019 RTC ACTION

- At its November 2019 meeting, the RTC action differed from the STTC recommendation regarding one Milestone Policy project in the City of Dallas.
- A temporary extension was granted for TIP 11258.9 and staff was directed to work with the City of Dallas staff to develop a specific deadline in time for the December 2019 RTC meeting.
- STTC recommendations for the other projects were approved as is.
- City of Dallas committed to implementing a system to track projects that are identified as part of the Milestone Policy.
QUESTIONS?

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Virgin Hyperloop One Certification Center Status Report

6 Mile Section, Begin Construction in 2021

University Coalition with Some Starter Funding

4 Options

8/9? Corridors, Business Response?
# VHO Request for Proposal

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<th>OPTION 1</th>
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<td>Public Sector with Applications</td>
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High Occupancy Verification Technology

STTC
December 2019

Natalie Bettger
Project Overview

Project Purpose:
Regional Transportation Council instructed staff to replace manual enforcement (self-declaration through Drive On TEExpress app/website) with more advanced technology verification equipment.

Work Completed:
- Pilot Test on DFW Connector Corridor
  - 98.4% exact match in reported occupancy
  - 1.6% indicates an “over count”

Proposed Phases:
- Phase 1 – Managed Lanes
  - HOV Discount
  - Support for all managed lanes in DFW (LBJ, NTE, DFW Connector, IH 30, IH 35E and IH 635)
- Phase 2 and Beyond – Other Corridors, Modes, & Events
Current HOV Enforcement

Register

Pre-Declare
Every Trip

Occupancy Declaration
Sent to Field

Officers
Watch for Red
Light

Violation:
Legal Process

Toll Collected

NTTA Back Office
System for Billing
Proposed HOV Program

Register

Pre-Declare Every Trip

NTTA Back Office System for Billing

Occupancy Declaration Sent to Field

Carma Active Tags/Plates API
Select Carma User Transactions
Carma Occupancy API
Send Differential File(s)

Officers Watch for Red Light

Violation: Legal Process

Toll Collected
GoCarma
How it Works

Get the GoCarma App
Each person in the car has the GoCarma app on their phone.

Setup a GoCarma Pass
A small Bluetooth device that you keep in your car’s glove box.

Drive in a TEXpress Lane
The app automatically verifies the number of people in the car.

Earn HOV Discounts
Each HOV transaction will result in a discount being applied by NTTA.
Continue Monitoring through Implementation Process

- Technology Pilot
- Data
- US 75 Implementation
- Rewards Program / Accounting System
- Existing Enforcement
- Institutional / Legislative
- TxDOT Funding
- Communications Plan
Ramp Up to Implementation

Cooperative effort between:
- TxDOT/Transcore
- NTTA
- LBJE/NTE Mobility Partners

Back-office integration testing

Public education and outreach plan developed

Coordinated switchover schedule

Violation process

Customer service scenarios and business rules
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<th>Event</th>
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<td>December 4, 2019</td>
<td>December 4, 2019 – LBJ/NTE will begin communications with current TEXpress Users and Partner Website Updates with GoCarma; 2\textsuperscript{nd} Pre-Launch Meeting with Partners</td>
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<tr>
<td>December 6, 2019</td>
<td>STTC Update Item</td>
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<td>December 12, 2019</td>
<td>RTC Update Item</td>
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<td>January 6, 2020</td>
<td>GoCarma App Release</td>
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<td>January 9, 2020</td>
<td>RTC Reminder – Director’s Report</td>
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<td>January 10, 2020</td>
<td>3\textsuperscript{rd} and Final Pre-Launch Meeting with Partners</td>
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<td>January 13, 2020</td>
<td>NCTCOG Press Release</td>
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<td>January 24, 2020</td>
<td>STTC Fast Fact</td>
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<td>January 24, 2020</td>
<td>Go Live (focus on existing TEXpress users)</td>
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<td>February 13, 2020</td>
<td>RTC Update Item</td>
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<td>February 28, 2020</td>
<td>STTC Update Item</td>
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<tr>
<td>April 2020</td>
<td>Paid Outreach and Education (new recruitment)</td>
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</table>
Contacts

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Performance End Dates (PED) for Federally Funded Transportation Projects
Background

- The regulation imposes a period of performance during which costs can be incurred and reimbursed for federally funded transportation projects (2 CFR 200.309).
- It became effective on December 26, 2014, requiring all Federal Project Authorization Agreements (FPAAAs) thereafter to include a PED.
- Several of the PEDs established soon after this regulation was implemented have expired, and at least one project in the region has been affected negatively.
What is a Performance End Date?

• A PED is the termination date of the period of performance.

• Costs incurred on a project after this date are not eligible for federal reimbursement.

• The PED is listed in the FPAA.

• A PED is applicable to both state and locally let projects funded with federal dollars.

• If a project phase exceeds the PED, the Federal Highway Administration (FHWA) will no longer reimburse that phase with federal funding.
Establishing and Modifying the Performance End Date

• The period of performance is determined by the Texas Department of Transportation (TxDOT), in coordination with FHWA division offices, for each phase of a project.

• The period is based on a project’s estimated schedule, including any closeout procedures after the actual work is finished.

• A PED can be modified in limited circumstances if there is a change that affects the completion schedule of a project, such as:
  o Change orders that affect scope
  o Delays in award or advertisement
  o Adding a new project phase to the agreement

• Requests to adjust the PED should be submitted to FHWA through TxDOT within the period of performance, not after it has expired.
Example of Performance End Dates in Older FPAAs
Example of Performance End Dates in Recent FPAAs

FHWA - 37/PS & E ASSEMBLY WORKSHEET

State: Texas  State Code: 48  Project Number: STP 2020(428)MM  Project End Date: 03/28/2025

Project Description: VARIOUS LOCATIONS WITHIN COLLIN, DALLAS AND TARRANT COUNTIES. IDENTIFY TRANSIT SERVICES OUTSIDE TRANSPORTATION AUTHORITY SERVICE AREAS.

Standard Place Code: NA  Env Clearance Type:  

Env Clearance Date:  
Why is the Performance End Date Important?

- The date is listed at the end of the FPAA with no explanation of its importance, so it can be overlooked until the project exceeds the date.
- If a project surpasses the PED and costs are incurred after that date, the implementing agency will be responsible for 100% of those costs.
- The PED can be modified after the previously approved date has passed, but work performed during the lapse period will not be reimbursed.
Recommended Agency Actions

• Local agencies should coordinate with their TxDOT districts to do the following:
  o Establish a PED that is realistic on future projects
  o Verify PEDs that have already been established
  o Extend a PED if it is not realistic

• Visit the PED guidance on FHWA’s website:
  https://www fhwa dot gov/cfo/projfundsmgt qa.cfm#a7
Questions?

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TRAIL OF THE MONTH

Highlighted Regional Trails

Surface Transportation Technical Committee

Matt Fall
Sustainable Development
December 6, 2019
OUTREACH INITIATIVE

- Make the public aware of the many great trail systems in the Dallas-Fort Worth region
- Over 773 miles built and 3,869 miles planned
- Highlight current and future investment by cities and the Regional Transportation Council
Videos highlight the benefits of our trail system, such as:

- Transportation
- Regional connectivity
- Access to job centers and schools
- Community enhancement
- History of the trails
Videos include interviews with:

- Local government leaders and staff
- Trail users
- Organizations, such as Friends of the Trail groups
SCHEDULE/CALENDAR OF TRAIL VIDEOS

- Santa Fe (August 2019)
- Cottonwood Creek (September 2019)
- River Legacy Trail (October 2019)
- Cotton Belt Trail (November 2019)
- Preston Ridge Trail (December 2019)
- DCTA Rail to Trail (January 2020)
- Trinity Trails – Ft. Worth – Benbrook – Westworth Village (February 2020)
- SoPac Trail (March 2020)
- Lone Star/Campion/Delaware Creek to Downtown Irving (April 2020)
- Central Trail (May 2020)
- Regional Trails Overview (June 2020)
Dallas
Santa Fe Trail
THANK YOU!

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Trail of the Month Videos:

nctcog.org/bikeweb
Community Development Block Grant - Mitigation (CDBG-MIT)


December 6, 2019

Surface Transportation Technical Committee (STTC)
Other Business (New) – Notice of State Action Plan Public Hearing (Dallas, TX)
CDBG-MIT Funds – State Action Plan
Program Overview and Notice of Public Hearing

- Federal Register Notice Published: August 30, 2019
- Draft State Action Plan Released: November 21, 2019
- Department of Housing and Urban Development (HUD)
  CDBG-MIT Texas Allocation: $4,297,189,000
  - 2015 Flood, 2016 Flood, and 2017 Hurricane Harvey impacts
  - Funding programs covering infrastructure, housing, buyouts/acquisition, economic development, and planning activities
  - 13 of 16 NCTCOG counties currently eligible to compete for $193,777,710 in flood mitigation and $344,859,450 in planning activities (pending public comments)

- Notice of Public Hearing:
  - Monday, December 9, 2019: 10:00am-2:00pm
  - Dallas County Community College District (DCCCD) Bill J. Priest Institute – 1402 Corinth Street Road, Dallas, TX 75215

- Public Comment Deadline: January 6, 2020
- Final State Action Plan Due: February 3, 2020
Focus on Mitigation and Resiliency

HUD’s Mitigation Definition

“Those activities that increase resilience to disasters and reduce or eliminate the long-term risk of loss of life, injury, damage to and loss of property, and suffering and hardship, by lessening the impact of future disasters.”

— CDBG-MIT Federal Register Notice (8/30/2019)
December 6, 2019

Surface Transportation Technical Committee (STTC)
Other Business (New) – Notice of State Action Plan Public Hearing (Dallas, TX)
TRANSPORTATION AND LAND USE INTERFACE - CHANGING INVESTMENT LANDSCAPE FOR MEGA DEVELOPMENTS

Surface Transportation Technical Committee
December 6, 2019

Michael Morris, P.E.
Director of Transportation
North Central Texas Council of Governments
BACKGROUND

The region continues to receive infrastructure funding requests for assistance in redeveloping major retail and economic centers/nodes.

Requests come from entities looking to relocate within our region and from local partners seeking new opportunities to revitalize existing areas.

Anticipate these requests to be a part of our future.

Creates an opportunity to use transportation investment to change land use and promote economic vitality of the region for mobility and air quality purposes.
EXAMPLES OF EXTERNAL AND “IN REGION” REQUESTS

External Partnership Opportunities
• Stadler
• Tesla Battery
• GE Test Track
• Amazon
• Uber

Local Partnership Opportunities
• American Airlines
• Northwest Highway Parking
• Midtown/Valley View Redevelopment
• Katy Lofts
• Butler Housing
• Opportunity Zones in Dallas
• General Motors
• Collin Creek Mall
ELEMENTS & METHODS TO IMPLEMENT

What:
• Support of sustainable, mixed-use, and transit-oriented development
• Economic development, redevelopment opportunities, modernizing retail
• Parking garages/parking management
• Transit interface
• Urban/suburban/rural context

How:
• Context sensitive design analysis and feedback
• Investment via both grants and loans
• Partnering with the Governor’s Office on economic development projects
CURRENT LOCAL PARTNERSHIP OPPORTUNITY

Collin Creek Mall Mixed-Use Redevelopment

• City of Plano has requested RTC participation in construction of a parking garage

• Total cost
  • Public Parking = $30 million (50% Greater/50% Less)

• Transit Shuttle
## TRANSIT OPPORTUNITY AT COLLIN CREEK

### Transit Demand Market

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<th>Market Segment</th>
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<tr>
<td>Residents</td>
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<tr>
<td>Students</td>
<td>Downtown, Collin Creek, DART Rail</td>
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<td>Visitors</td>
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<tr>
<td>Commuters</td>
<td>Downtown, Collin Creek, DART Rail</td>
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**Funding Sources:** CMAQ and FTA

### Circulator Route via Electric Vehicle

![Circulator Route Map](attachment:image.png)

- Collin Creek Development (CCD)
- 1 Mile Buffer from CCD
- Red Line
- Downtown Piano Station
- Silver Line
- Schools
CURRENT LOCAL PARTNERSHIP OPPORTUNITY

Collin Creek Mall Mixed-Use Redevelopment

• Proposal for RTC consideration:
  • Contribute $30 million in federal funds to garage
  • Include transit shuttle using next generation electric vehicles to Downtown Plano Light Rail Station
    • Fund with additional FTA or CMAQ funding
    • Need to coordinate with DART regarding operations
  • Parking garage must include park and ride spaces
  • Half of funding would be a grant and the balance would be a loan
  • Need assurances that the proposed development will materialize
  • Use standard interest rate (2.4%) on loan
  • RTC funding would only pay for publicly available parking
  • RTC funding for construction only, no land acquisition