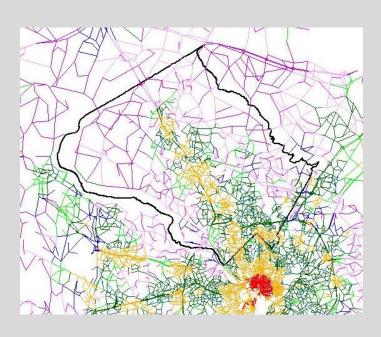
Regional Traffic Modeling - GSSC Master Plan Presentation to the GSSC Master Plan Implementation Committee October 9, 2012

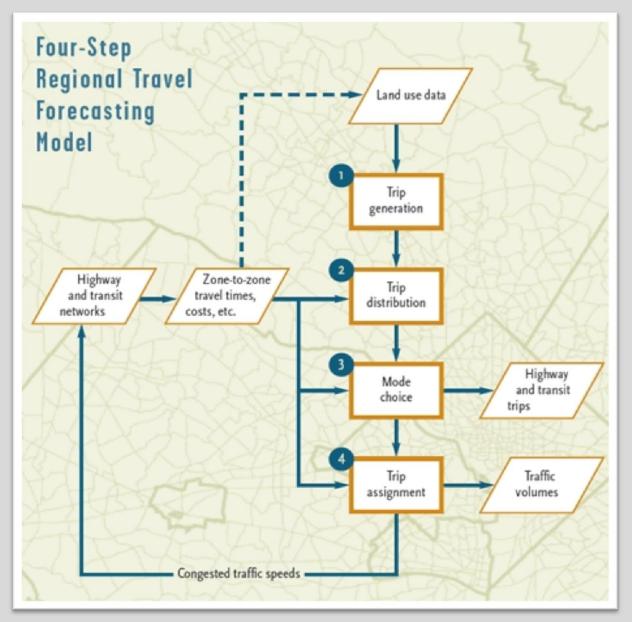


Regional Transportation Model



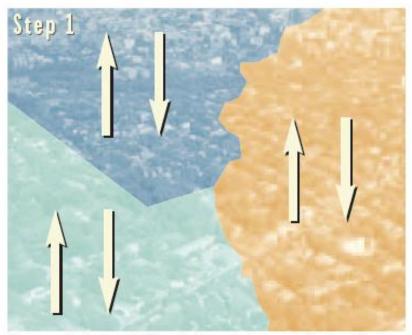
- Same tool as that used by Metropolitan Washington Council of Governments
- Reflects county-wide and regional traffic effects
- Output Policy Area Mobility Review (PAMR) and Transportation Policy Area Review (TPAR) results. Used to evaluate area-wide land use/transportation balance and transportation adequacy.

Regional Model Framework



Regional Model Framework

- **Trip Generation:** How may trips are produced?
- Trip Distribution: Where are people going?



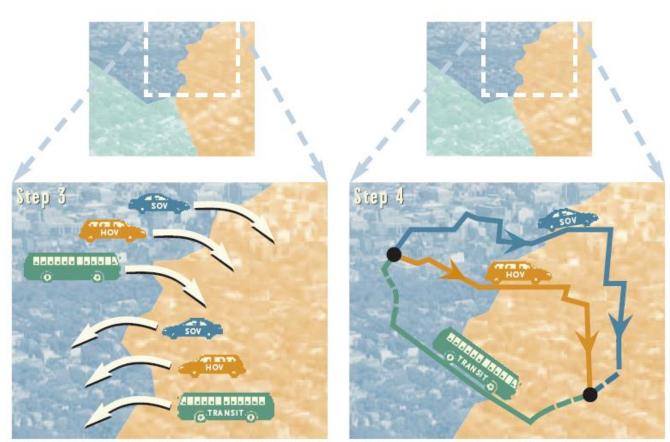
Trip generation in three fictitious traffic analysis zones: This step estimates the number of trips produced by and attracted to each zone.



Trip distribution among three fictitious zones: This step estimates how many trips are going from zone to zone.

Regional Model Framework

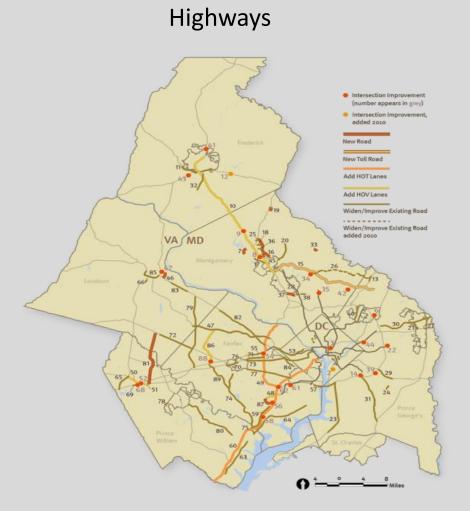
- Mode Choice: What method/mode of travel are people using?
- **Trip Assignment:** What route are people taking?



Mode choice between two fictitious traffic analysis zones: Estimating the way people get from zone to zone.

Trip assignment between two fictitious traffic analysis zones: Selecting the fastest route between zones.

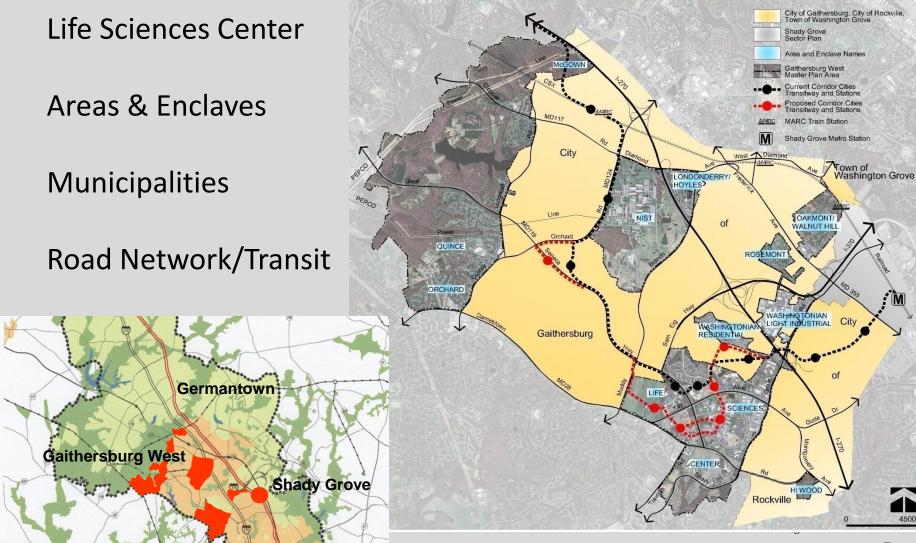
Transportation Network Assumptions: Constrained Long Range Transportation Plan (CLRP)



New Transit Station New Transit New Transit, added 2010 Transit Improvement Add HOT Lanes Add HOV Lanes Existing Metrorail VAMD

Transit

GSSC Master Plan

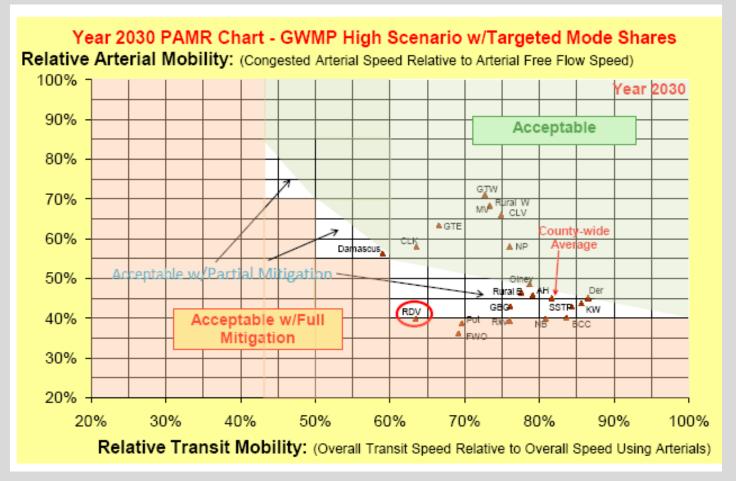


GSSC Master Plan Transportation Network



PAMR Chart – High Scenario

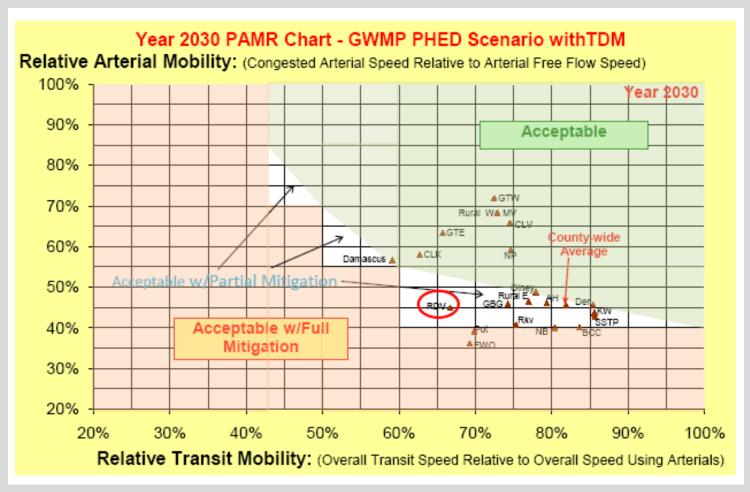
• Transportation/land use balance achieved



GSSC Master Plan – Land Use/Transportation Balance

PAMR Chart – PHED Committee Scenario

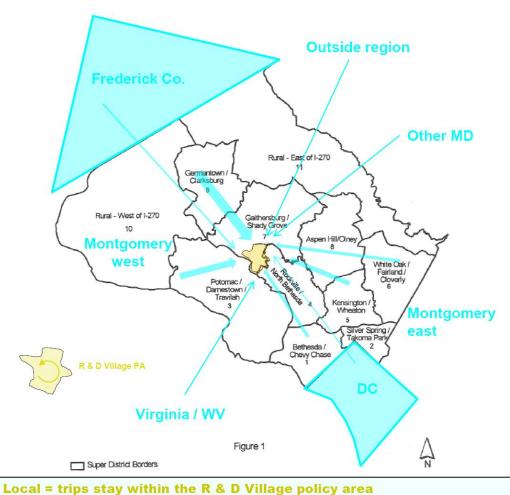
• Transportation/land use balance achieved



GSSC Master Plan

Where do LSC workers come from now?

2005 Journey-to-work Trip Patterns – R & D Village PA

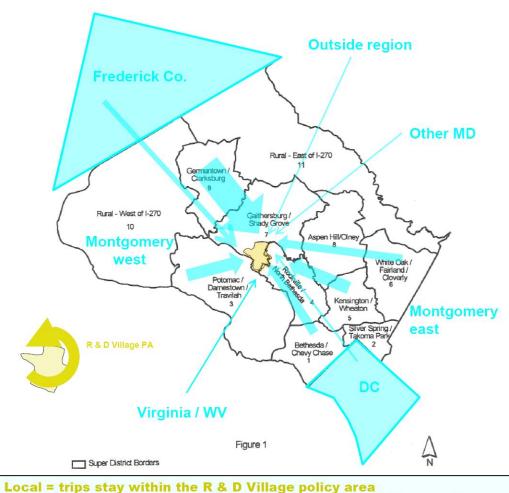


Inbound trips = journey to work traveling to the R & D Village policy area

GSSC Master Plan

Where will LSC workers come from in the future?

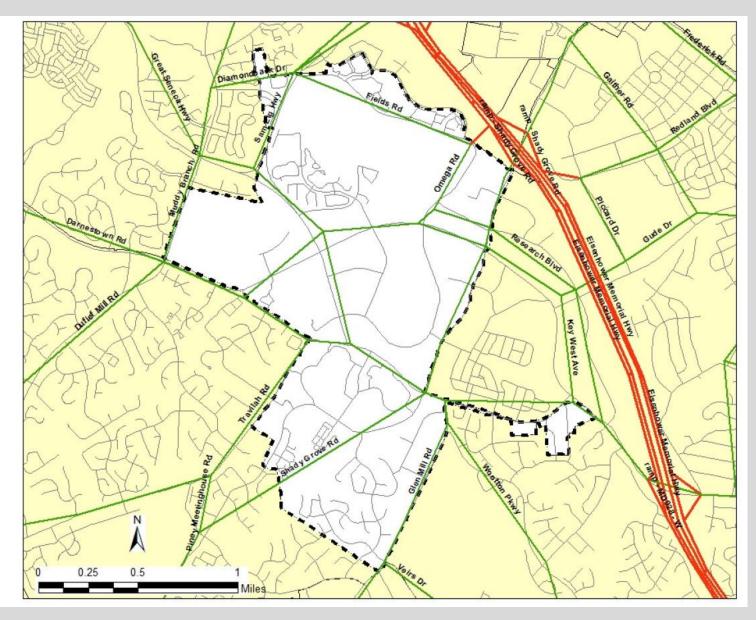
2030 Journey-to-work Trip Patterns – R & D Village PA ("High" Scenario)



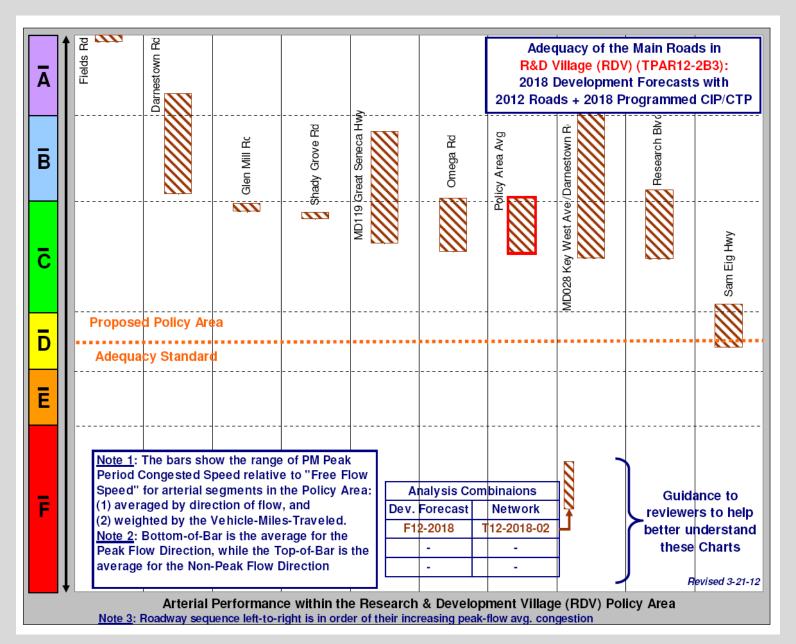
With more density , more internal trips, but most workers will still live in the I-270 Corridor.

Local = trips stay within the R & D Village policy area Inbound trips = journey to work traveling to the R & D Village policy area

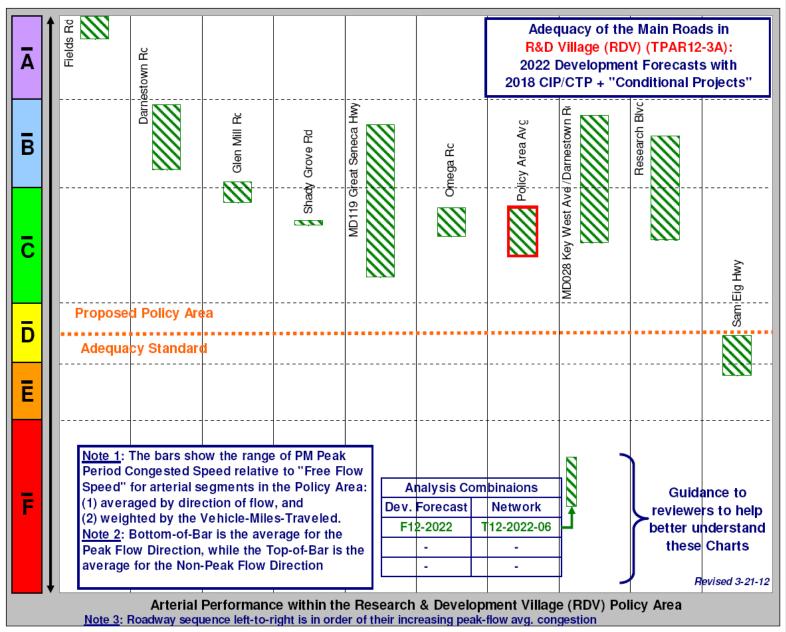
R&DV Policy Area Roadways



TPAR - 2018 Roadway Adequacy



TPAR - 2022 Roadway Adequacy



TPAR - 2040 Roadway Adequacy

