

Washington Metropolitan Area Transit Authority  
**Board Action/Information Summary**

Action  Information

MEAD Number:  
200212

Resolution:  
 Yes  No

**TITLE:**

Connecting Communities KPI

**PRESENTATION SUMMARY:**

This presentation describes a new Key Performance Indicator (KPI) to measure progress in achieving one of Momentum’s strategic goals: “Improve Regional Mobility and Connect Communities”. This measure will track the amount of new household growth located within Metro’s “transit catchment area”, a geographical unit of measure that is defined below. Calculation of the KPI is presented along with a summary of the considerations that helped define the methodology.

**PURPOSE:**

To brief the Committee on the new KPI for Goal 3 of *Momentum*: “Improve Regional Mobility and Connect Communities”.

**DESCRIPTION:**

*Momentum*’s third strategic goal, “Improve Regional Mobility and Connect Communities”, calls upon Metro to enhance its already-strong regional role by supporting the prosperity of existing and development of new livable communities and job centers that are navigable via the region’s transit system.

Measuring Metro’s role in connecting the region’s communities can be viewed in two primary methods:

1. People ride Metro because it provides them with a convenient way to get to where they want to go. Hence Metro’s contribution can be measured by tracking daily ridership on the transit system.
2. As the region adds households and jobs, this growth could cluster near transit generally and Metro specifically. This pattern would reflect in part transit’s role in providing a preferred means to access jobs, housing, entertainment, goods, services, and amenities. By tracking the share of the Compact jurisdiction’s new households and jobs that are locating within close proximity of transit system access points (stations and bus stops), one could ascertain whether Metro is connecting more or less of the region’s household and employment growth in any given year.

## Key Highlights:

- The new KPI will track how Metro and the region's jurisdictions contribute to connecting communities.
- This KPI tracks regional household and job growth within Metro's "transit catchment area", which is defined by Metro as area within ½ mile radius of Metrorail stations and within ¼ mile radius of Metrobus stops.
- This reflects academic literature confirming these radii as the appropriate boundaries for analysis,
- More importantly, this incorporates Metro staff's understanding of the current MWCOC travel demand forecasting model, which attributes at 65% to 80% of future increase in transit demand to changes in land use, while less than one fourth of the future change in transit demand is due to changes in transportation infrastructure alone.
- In the last two years, 60% of new households in the region have been located within the Metro transit catchment area.

## Background and History:

- Since 2010, Metro has published Vital Signs on a quarterly basis.
- In 2012, the Board adopted a new vision, mission, and strategic goals.
- In June 2013, the Board adopted Metro's new strategic plan *Momentum*; however, a performance metric for the strategic goal "Improve Regional Mobility and Connect Communities" has not been defined.

## Discussion:

Metro uses KPIs to track progress towards achievement of the Authority's strategic goals. Targets are set to guide actions and expectations. The results for each KPI are reported regularly in the Vital Signs Report.

### Methodology for New KPI

Communities with concentrations of jobs and households near transit have greater propensity for using transit generally and make better use of transit infrastructure and service. This KPI measures the combined effect of regional growth within areas located near transit and how well Metro connects growth in these transit-accessible communities.

Two elements are essential to developing the KPI — a transit catchment area and demographic/labor market information specific to that transit catchment area

- **Transit Catchment Area.** Transit catchment area is the area in which transit stations and stops have the greatest influence on household and employment site selection and therefore highest potential for influencing ridership growth. This is because within the transit catchment area, there is typically the highest level of transit usage relative to regional norms.

Metro's 2005 Development Ridership Survey found that people residing within ½ mile of Metrorail stations have significantly higher transit mode share and the 2012 Metrorail Passenger Survey confirmed ½ mile as the average walking distance to Metro stations. Furthermore, recent research by Professor Robert Cervero found that Californians living within ½ mile radius of a transit station are four times more likely to use transit than those outside this boundary, and that this radial boundary is in fact the best

This KPI uses the ½ mile radius as an effective catchment area for rail transit stations and the ¼ mile radius for bus transit stops.

- Land Use within Transit Catchment Area. Local jurisdictions often plan for land use of higher density and greater mix of uses within the transit catchment area to maximize the potential for ridership. Developers also have the incentive to build within the transit catchment area to meet the market demand for a transit-accessible community for people of all ages. For these reasons, development within the transit catchment Area is often referred to as transit oriented development.

This KPI uses household and job growth within the transit catchment area to measure and track how Metro connects with communities.

The new Connecting Communities KPI is currently defined as follows:

*Percentage share of new households (and jobs) that are walkable to Metrorail (1/2 mile) + Regional Metrobus (1/4 mile) vis-à-vis total household growth in the corresponding jurisdiction.*

### Reporting

This indicator will be updated and reported annually based on changes in regional growth (jobs and households), as well as any changes Metro has made to regional bus routes and rail stations. The annual reporting timeframe is different than other KPIs, which are reported quarterly, because the data used to measure household and job growth is delivered on an annual release schedule. This KPI will be reported out for the system and Compact jurisdictions as a whole as well as shown at the jurisdictional level. This allows Metro to measure its impact on the entire region as well as to examine inter-jurisdictional variations in this measure.

### Roles

Land use development is typically the responsibility of local jurisdictions. Metro does not control land use policy and is not able to directly impact new development or increased use of existing development towards transit-served areas as effectively as jurisdictions.

Transit service provision is the responsibility of Metro. However Metro is also often financially constrained when it comes to expanding service to serve growing areas.

The Connecting Communities KPI provides an opportunity for enhanced collaboration between jurisdictions and Metro, aiming for better integration between land use development and transit service improvements within the transit walk catchment area.

Other Considerations

- Transit service measured: Metro will measure access to Metrorail and Regional Metrobus only, since data provision of non-regional Metrobus is uneven across jurisdictions.
- Finalizing the jobs component of this KPI: The Metropolitan Washington Council of Governments (MWCOG) data on employment locations is released on a five-year schedule, which would not be suitable for annual reporting. Privately sourced job data is updated annually. While this data is good at measuring private sector jobs, it is less precise in reporting the exact locations of federal and military jobs. In its effort to incorporate jobs data into this KPI, Metro staff will consider, among other options, using privately-sourced jobs data, as private sector employment is arguably more market-sensitive than public sector employment. Alternatively, Metro will work to augment annually-reported jobs data with supplementary information on major federal/military job location changes.

**FUNDING IMPACT:**

No direct impact on funding for this information item.	
Project Manager:	Shyam Kannan
Project Department/Office:	Chief of Staff/Office of Planning

**TIMELINE:**

<b>Previous Actions</b>	None
<b>Anticipated actions after presentation</b>	Staff will continue to refine the methodology for this KPI and apply the KPI to track growth between 2013 and 2014.

**RECOMMENDATION:**

For Information only.



## Connecting Communities Key Performance Indicator (KPI)

Finance & Administration Committee

July 11, 2013



# Purpose

Describe a new KPI: "Connecting Communities"

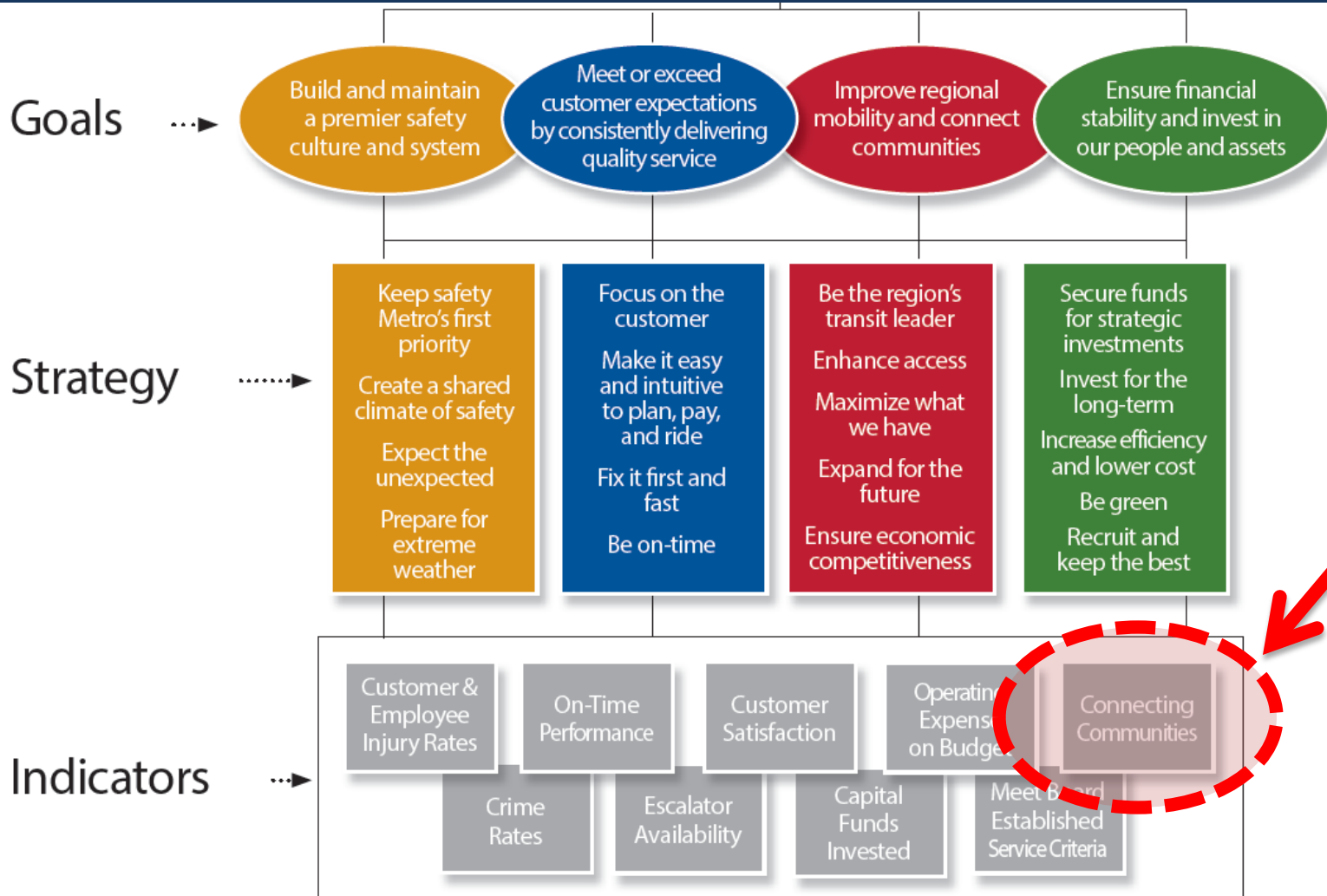


# Background

- A Key Performance Indicator (KPI) is a performance measure used to track progress towards a strategic goal
- Metro reports performance in the Vital Signs Report



# “Connecting Communities” KPI Will Support Metro’s Strategic Goals

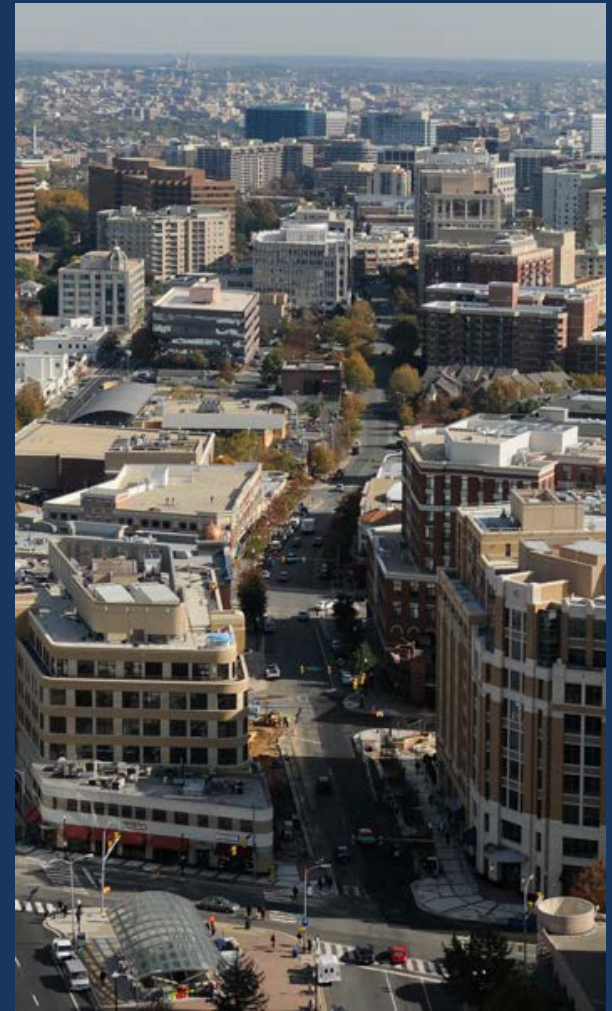






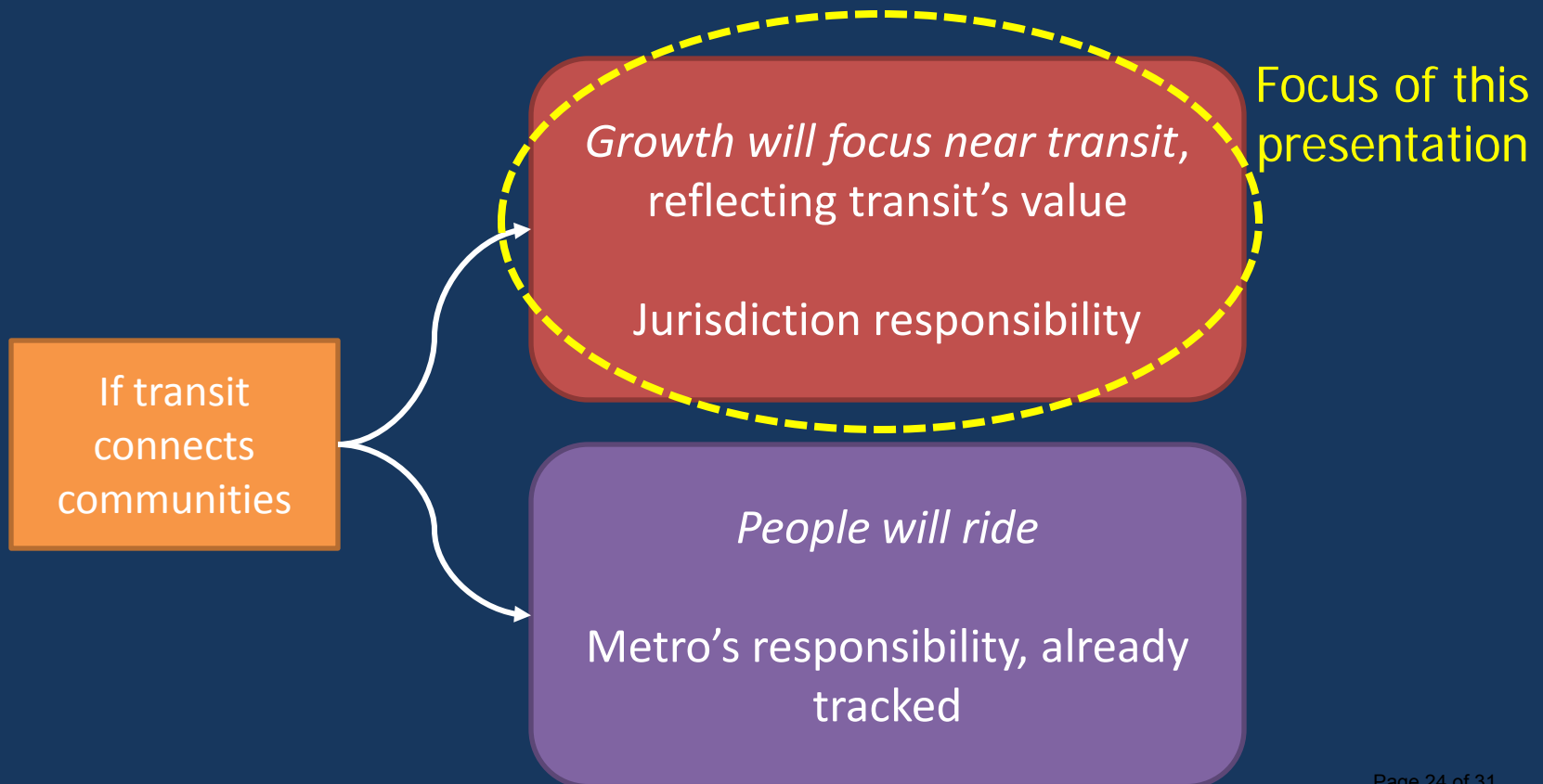
# The Importance of Connecting Communities

- Metro should enable people to access amenities and opportunity via transit
- We strive to serve growing areas, *and* concentrate growth near service
- The better we connect communities, the more ridership we attract



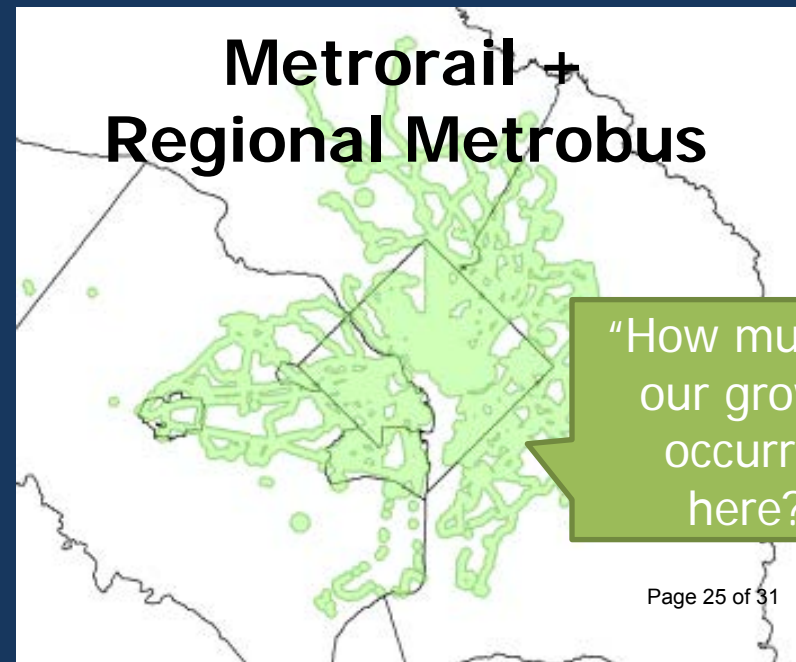
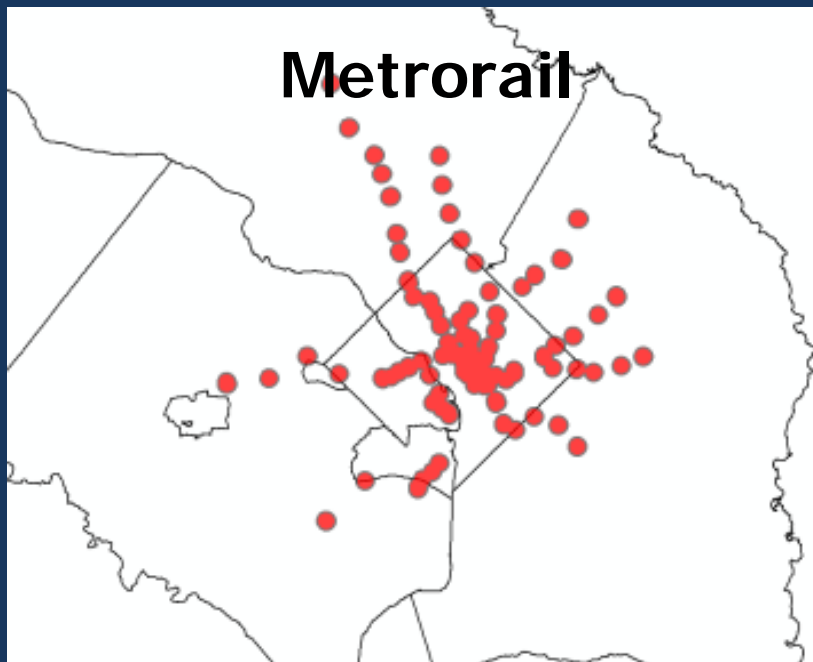
# Measuring a Connected Community

“Connecting Communities” can be measured in two ways:



# Defining Connecting Communities KPI

- Regional growth in Metro's "transit catchment area"
- Percent of households and jobs added near transit
- Area within ½ mile of rail and ¼ mile of bus has greatest influence on development and ridership





# What Connecting Communities KPI Explains

- It measures the combined effect of:
  - Growth near transit
  - **AND/OR**
  - Changes to Metro's service





# Regional Growth Around Transit

- Transit catchment area's share of growth in households
- 2010 to 2012, for example only:

	Share of Growth Occurring...	
	Near Metrorail	Near Metrorail + Regional Metrobus
Alexandria	24%	87%
Arlington	51%	95%
District of Columbia	68%	95%
Falls Church	6%	89%
Fairfax County	3%	27%
Fairfax City	0%	61%
Montgomery	13%	33%
Prince George's	7%	35%
<b>Compact Area</b>	<b>27%</b>	<b>60%</b>

“60% of new households in the region in the last 2 years located near Metro”

# Considerations



- Including local bus operators would be ideal, but would require local jurisdictions to update bus stop data consistently
- Development markets are inherently dynamic
- A good data source on jobs is being sought



# Next Steps

- Finalize data source for employment
- Complete assessment of GIS data on local bus stops
- Explore street-network walk connectivity
- Build this KPI into the annual Vital Signs Report and Scorecard
- Report KPI in mid-2014, for 2012-2013 changes

