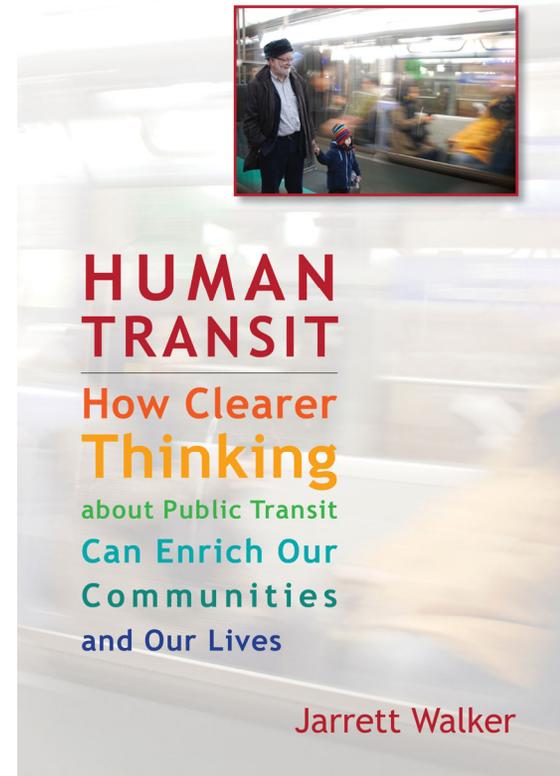


GRTC

Regional Public Transportation Plan



Public Transportation Working Group: Initial Discussion

What is our charge?

“The GRTC shall develop a plan for regional public transportation within Planning District 15 in collaboration with the Richmond Regional Transportation Planning Organization in conformance with the guidelines required by § 33.2-286. The GRTC shall annually provide to the Authority sufficient documentation, as required by the Authority, showing that the revenues distributed under subdivision D 2 were applied in accordance with Authority approval and the guidelines required by § 33.2-286.”

What does this mean?

- Develop a Regional Public Transportation Plan for the areas within PD15
 - Collaborate with RRTPO in this process
 - Be in conformance with the guidelines for Transit Strategic Plans
- Provide the plan and sufficient documentation to CVTA for approval of use of the 15% dedicated funding allocation.

Who is here to help us?

- Our Team:
 - GRTC Staff
 - Consultant Staff:
 - Lorna Parkins
 - Nick Britton
 - Ryan Furgerson
 - Jarrett Walker
 - Scudder Wagg



Interactive Polling

Open your browser

Go to www.rwpoll.com

Session ID:

XXXXXX

Two big questions

1. What kinds of service should the regional money fund?
2. How should that service be distributed?
 - We'll take the second one first.

What's a Fair Way to Distribute Service across a Region?

What should be regionally-funded?

- What kind of service?
 - Any transit service anywhere in the region?
 - Transit services that meet a standard of regional usefulness
 - Connect across jurisdictions
 - Connect major activity centers
 - Serve major regional corridors
 - GRTC Staff and Board have expressed a strong desire that regionally funded services meet some threshold of “regional connectivity” to be eligible.
- How should regional funding be distributed?

It's not like parks

- A park benefits the area around it.
- So it's easy to say that a park in an area is for that area.

- Transit's not like that.
- A transit line between areas X and Y benefits both X and Y.
- So it's wrong to say that service in area X is for area X. The entire line is “for” both X and Y.

Does ridership matter?

It usually seems fair to divide up a regional pie using something like:

- Local return (where the taxes come from).
- Population
- Population + jobs.

But as we'll show, these approaches tend to lead to low-ridership networks.

Some of your funding sources require high ridership.

What is high ridership transit?

High ridership transit arises from providing useful service, in places where many people can use it.

Those are places where lots of people can get to a bus stop, and where the service can run efficiently to get many people to their destinations.

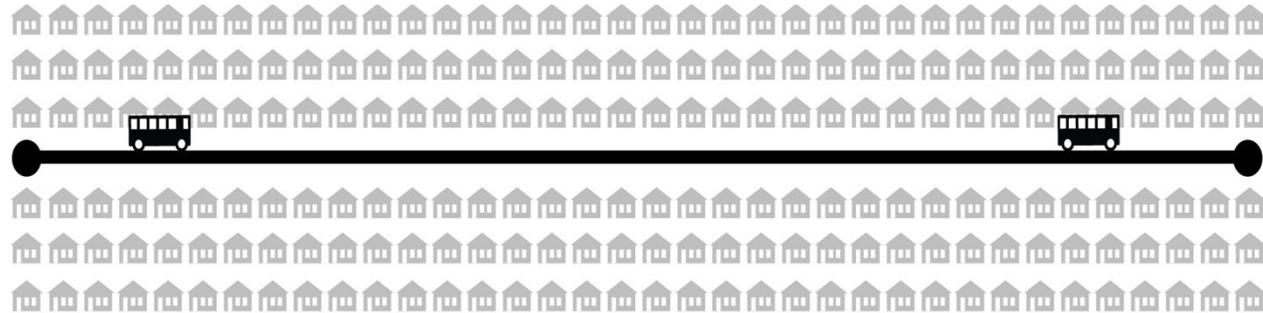
This is not a judgment about your community. It's just a fact that arises from how your community is laid out.

Density

How many people are near transit?

The more people are going to and from the area around each stop, the more people will ride transit.

High
Ridership



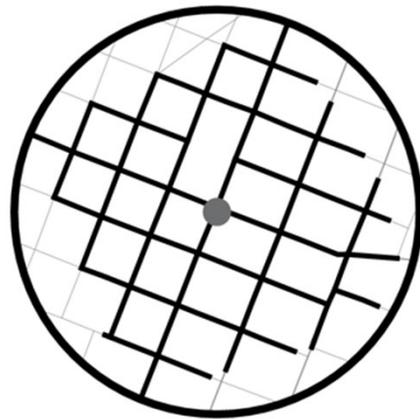
Lower
Ridership



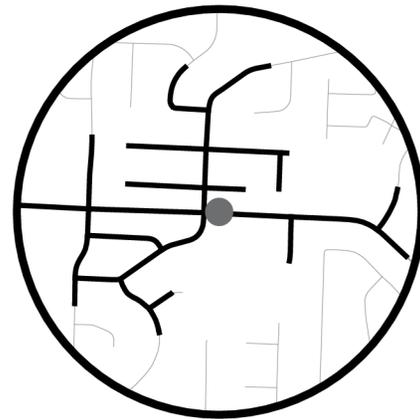
Walkability

Can the people around the stop walk to the stop?

High
Ridership



Lower
Ridership



Linearity

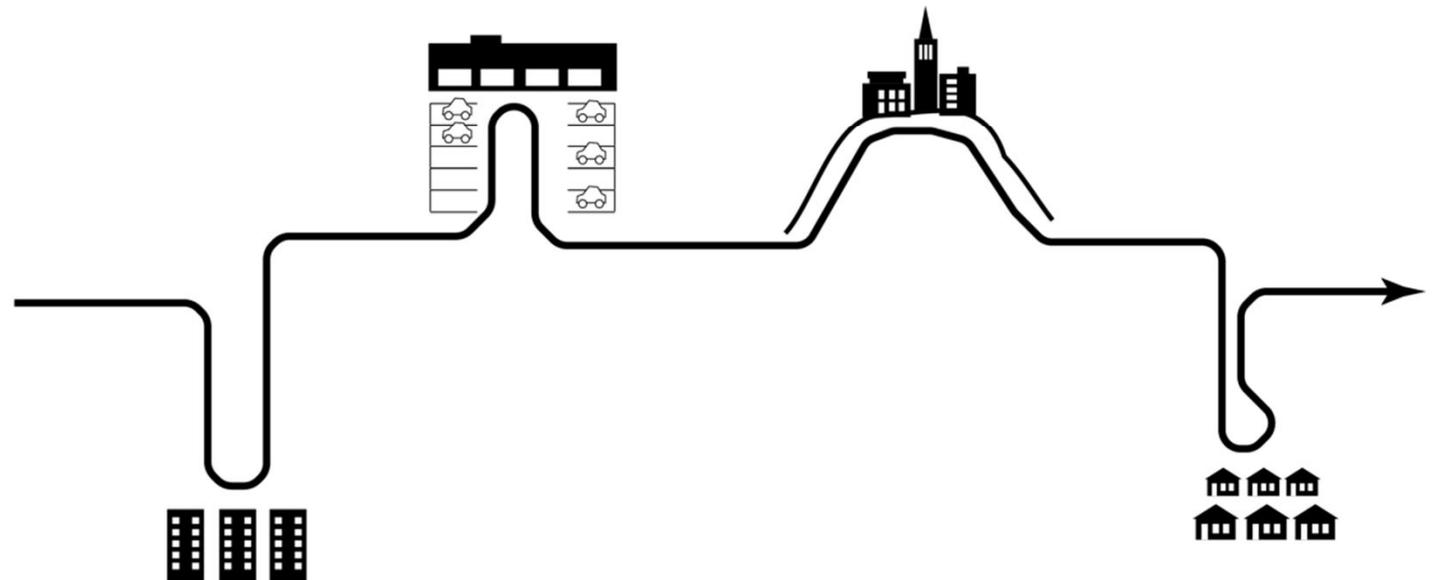
Can transit run in straight lines that are useful to through-riders?

The straighter the line, the shorter the journey, and the more people can find it useful.

High
Ridership



Lower
Ridership



Proximity

How far do we have to drive to connect people to destinations?

PROXIMITY *Does transit have to traverse long gaps?*



+ Short distances between many destinations are faster and cheaper to serve.

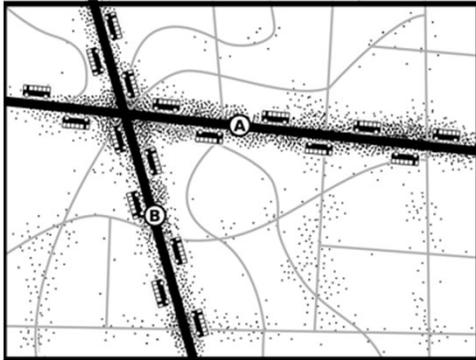


- Long distances between destinations means a higher cost per passenger.

But is Ridership What You Want?

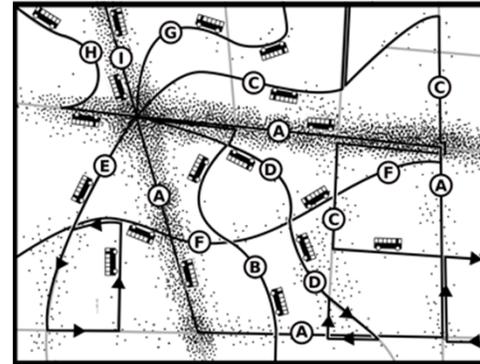
The Ridership-Coverage Tradeoff

So is ridership what you want?



Ridership Goal

- “Think like a business.”
- Focus where ridership potential is highest.
- Support dense and walkable development.
- Max. competition with cars
- Maximum VMT reduction



Coverage Goal

- “Think like a public service.”
- “Access for all”
- Support low-density development.
- Lifeline access for everyone.
- Service to every member city or electoral district.

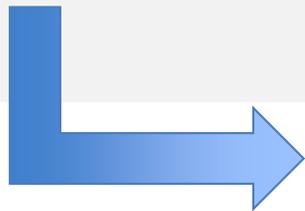
A maximum ridership network ...

Would go here:

- Long, straight corridors lined with many people and destinations.
- Links to big regional destinations in the three core jurisdictions.

... but not here:

- Rural areas.
- Small, distant towns.
- Most single-family residential in car-oriented patterns.
- Most industrial parks.



This will mean more service in Richmond, but only because Richmond's development pattern is more favorable to ridership.

Two ways to think about dividing resources?

1. A formula dividing service by jurisdictions.

- A set of rules on what % of resources to go each county.
- Rules would need to incorporate population but also ridership-driving features like density, walkability etc.

2. Balance of (a) division by county and (b) ridership.

- Distribute part of the resources by coverage.
 - Say, proportional to population.
- Use the rest to pursue maximum ridership, wherever that takes us.
- Boundary between these two slices is a policy decision.

1. Formula for Dividing by Jurisdiction

Example:

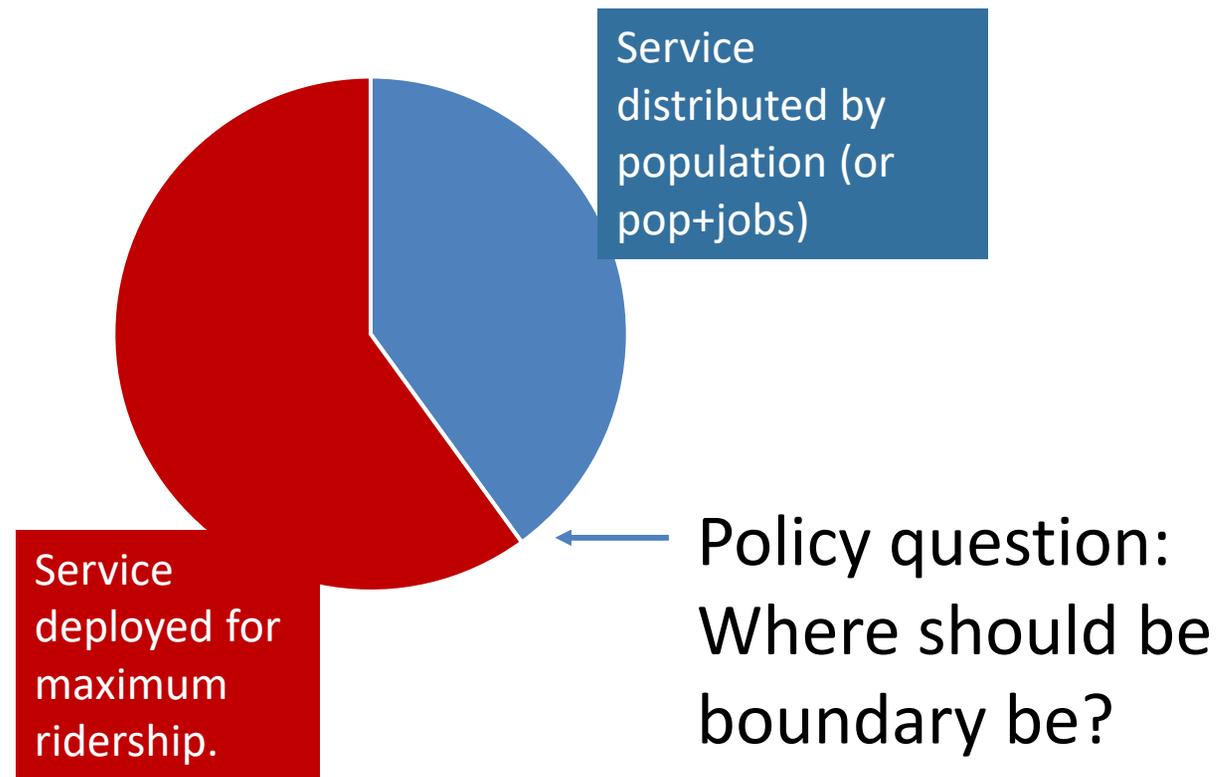
Jurisdiction share =

- Population % x Weight
- Population Density Factor x Weight
- Job % x Weight
- Job Density Factor x Weight
- Poverty Density Factor x Weight
- Additional Factors x Weight
-

Formula approach has many potential factors, wide range of possible assumptions. Everyone would need to agree on the black box.

2. Ridership and Coverage formulas

- This approach presents policymakers with a single clear choice: coverage or ridership?

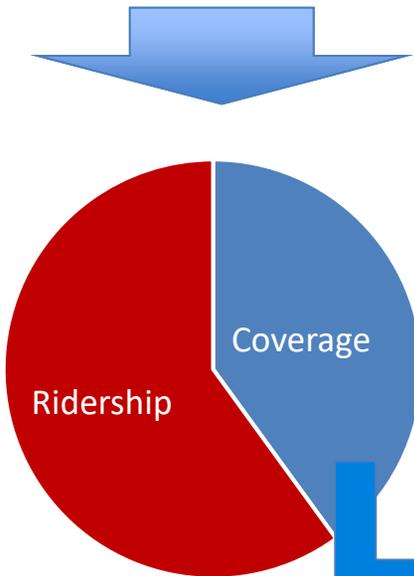


Coverage Service in Regional Context

- What does it mean to have a regionally-oriented coverage service?
 - Coverage service doesn't go just anywhere
 - Coverage services would still need to meet a standard of regional usefulness
 - Connect across jurisdictions
 - Connect major activity centers
 - Serve major regional corridors
- GRTC Staff and Board have expressed a strong desire that regionally funded services meet some threshold of “regional connectivity” to be eligible.

2. Ridership and Coverage formulas

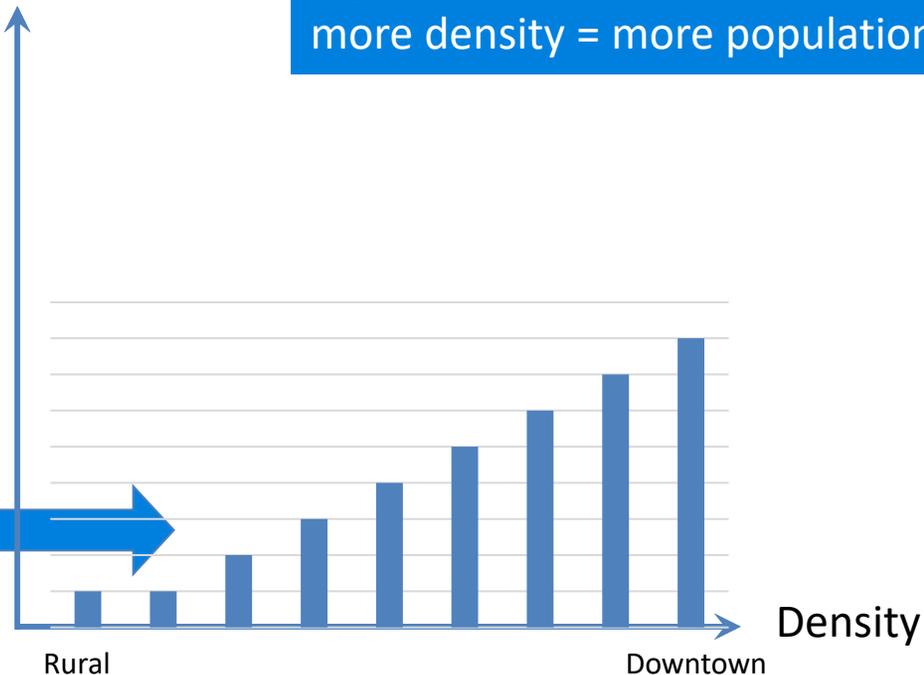
Decide how pie should be split between ridership and coverage goals.



Coverage slice is distributed by population of each area.

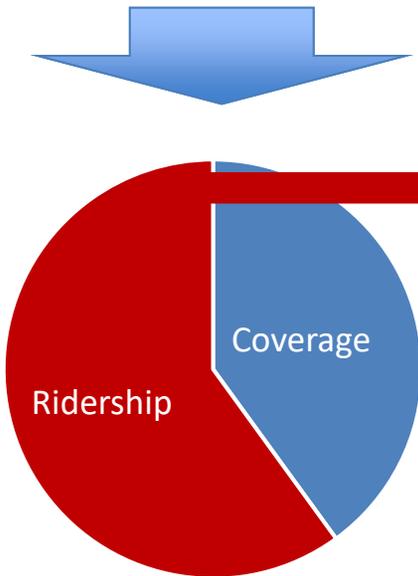
It goes up with density because more density = more population

Service Quantity



2. Ridership and Coverage formulas

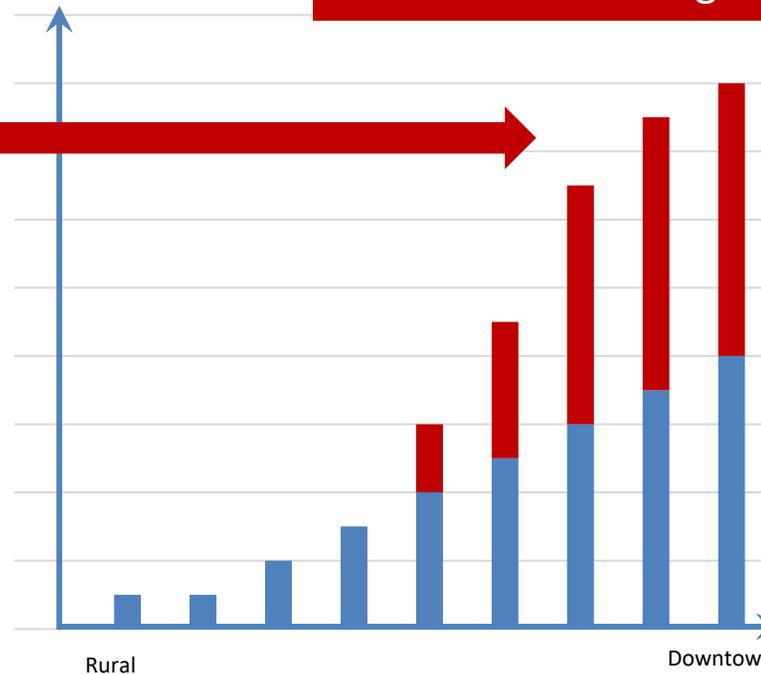
Decide how pie should be split between ridership and coverage goals.



Ridership slice is spent to maximize ridership.

This means more service linking denser areas across the region.

Service Quantity



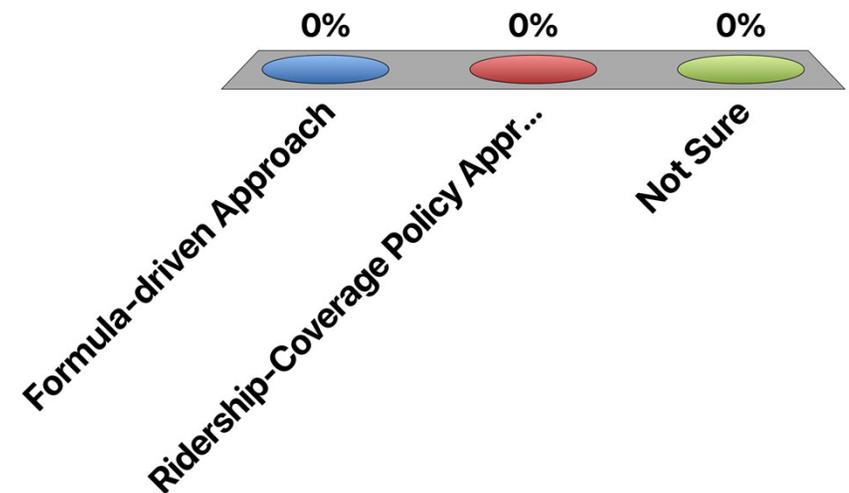
Density

Advantages of two-formula approach

- Makes clear that this is a policy decision about how much ridership to pursue, not just “who gets how much?” conversation.
- Policymakers have one key decision that expresses their priorities.
- No need to haggle over details of formula.

Which approach do you prefer?

- A. Formula-driven Approach
- B. Ridership-Coverage Policy Approach
- C. Not Sure

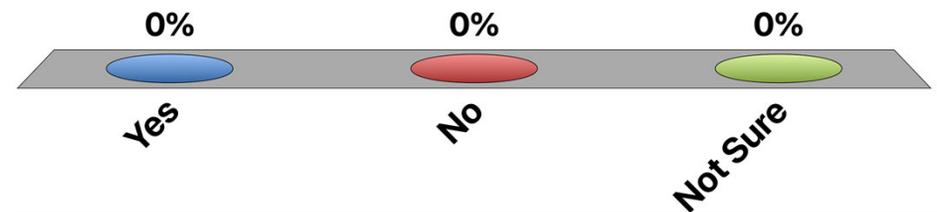


Should there be further limits on what regional service , even coverage service, can fund?

- Usefulness to relatively more people and jobs?
- This could mean:
 - Major links between centers, and to dense residential
 - But not purely local services such as demand-response or circulator.

Should all resources be limited in a way that tends to serve more people? E.g. NOT local circulation in low demand areas.

- A. Yes
- B. No
- C. Not Sure



How big is the pie?

FY 2019 and 2022

| Operating Contributions/ Revenues | FY 2019 \$ | FY 2019 Revenue Hours | FY 2022 \$ | FY 2022 Revenue Hours |
|--------------------------------------|--------------|-----------------------|--------------|-----------------------|
| City of Richmond | \$15,166,251 | 407,121 | \$8,069,887 | ? |
| Henrico County | \$8,357,290 | 53,766 | \$4,246,400 | ? |
| Chesterfield County | \$118,616 | 1,060 | \$1,231,636 | ? |
| CVTA | - | - | \$28,080,000 | ? |
| Total Local/Regional Contribution | \$23,642,157 | 461,948 | \$41,687,797 | 534,025* |

Local/regional contributions represented 46% of revenues in 2019.

*FY2022 Forecasted Revenue Hours minus Route 95x revenue hours.

FY 2019 Baseline

| Operating Contributions/Revenues | FY 2019 \$ |
|----------------------------------|--------------|
| Federal | \$8,431,201 |
| State | \$9,801,751 |
| Bus Fares/Passes | \$7,410,139 |
| Total Fed/State/Fares | \$25,643,091 |

Fed/State/Fares represent 49% of revenues

FY 2019 Baseline

| Operating Contributions/Revenues | FY 2019 \$ |
|----------------------------------|--------------|
| Local/Regional | \$26,642,157 |
| Fed/State/Fares | \$25,643,091 |
| Other Revenues* | \$3,001,054 |
| Total Revenues | \$52,286,302 |

2019 NTD Reporting indicates about 88% is spent on Fixed Route Service (about \$46 million).

FY 2019 Cost per revenue hour was about \$99.60

FY 2022 Cost per revenue hour is projected to be \$105.03

*Other includes paratransit fares, Petersburg's contribution for Route 95, advertising, and other smaller revenue sources.

FY 2026 Forecast (High and Low End)

| Operating Contributions/Revenues | FY 2026 \$ | % of Local/Regional Contribution |
|--|---------------------|----------------------------------|
| City of Richmond | \$9,102,832 | 20% |
| Henrico County | \$4,857,477 | 11% |
| Chesterfield County | \$1,389,285 | 3% |
| CVTA | \$30,630,000 | 67% |
| Total Local/Regional Contribution | \$45,979,595 | |

Local contributions are assumed to grow by 3% from 2022 Baseline.
 CVTA funding based on revised forecasts from Michael Baker staff.

FY 2026 Forecast

| Operating Contributions/Revenues | FY 2026 \$ (Low End) | FY 2026 \$ (High End) |
|----------------------------------|----------------------|-----------------------|
| Federal | \$9,130,000 | \$9,130,000 |
| State | \$13,340,698 | \$13,340,698 |
| Bus Fares/Passes | \$6,721,484 | \$6,881,396 |
| Total Fed/State/Fares | \$29,282,182 | \$29,442,093 |

Low End Assumes 2.5% fare growth

High End Assumes 3.2% fare growth

FY 2026 Revenue Forecast

| Operating Contributions/Revenues | FY 2026 \$ (Low End) | FY 2026 \$(High End) |
|----------------------------------|----------------------|----------------------|
| Local/Regional | \$45,979,595 | \$45,979,595 |
| Fed/State/Fares | \$29,282,182 | \$29,442,093 |
| Other Revenues* | \$3,888,330 | \$4,355,579 |
| Total Revenues | \$79,150,107 | \$79,777,267 |
| 88% to Fixed Route | \$69,652,094 | \$70,203,995 |

*Other includes paratransit fares, Petersburg's contribution for Route 95, advertising, and other smaller revenue sources.

Boiling it down to Revenue Hours

- In FY2022 Baseline:
 - Approximately \$56,350,000 in Fixed Route Service
 - 536,498 Revenue Hours
 - \$105.03 per revenue hour
- If costs escalate at about 4.8% per year
 - FY 2026 Cost per revenue hour = \$126.49
 - At Low End that would buy 550,639 Revenue Hours
 - **3% more service than today**
- If costs escalate at about 2.9% per year
 - FY 2026 Cost per revenue hour = \$116.99
 - At High End that would buy 600,092 Revenue Hours
 - **12% more service than today**
- Locals can expand the pie with additional direct investment
- **May need to set aside more Federal \$ for capital**

How could we distribute this pie?

- **Distribute Revenue Hours by Local Contribution alone**
 - Each entity that pays in gets a share of revenue hours equal to contribution.
 - This splits the Federal/State/Fare dollars evenly by contribution.
- **Reserve Federal, State, and Fares for ridership maximizing service**
 - This puts the external revenue sources in a separate bucket to fund services that maximize those same revenue sources.
 - Distribute remaining revenue hours by contribution.

Distribute by Contribution

| Operating Contributions/ Revenues | % of Local/Regional Contribution | Revenue Hours (Low End) | Revenue Hours (High End) |
|--------------------------------------|----------------------------------|-------------------------|--------------------------|
| CVTA (distributed by policy) | 67% | 365,169 | 398,113 |
| City of Richmond | 20% | 108,523 | 118,314 |
| Henrico County | 11% | 57,911 | 63,135 |
| Chesterfield County | 3% | 16,563 | 18,057 |

- Each entity that pays in, gets a share of revenue hours equal to contribution
- This splits the Federal/State/Fare dollars evenly by contribution

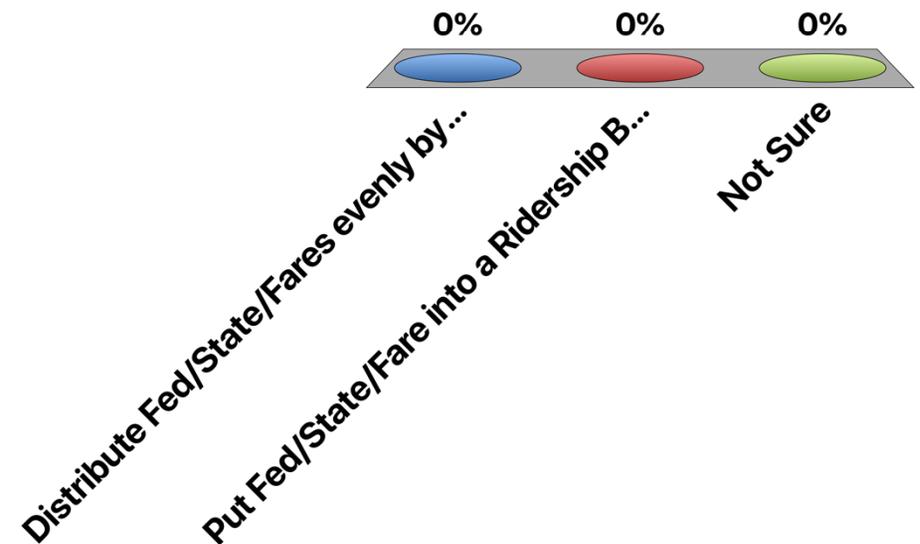
Distribute by Contribution, but separate Fed/State/Fares

| Operating Contributions/ Revenues | % of Contribution | Revenue Hours (Low End) | Revenue Hours (High End) |
|---------------------------------------|-------------------|----------------------------|-----------------------------|
| Fed/State/Fares (Ridership Bucket) | 39% | 213,275 | 233,290 |
| CVTA (distributed by policy) | 41% | 223,092 | 242,703 |
| City of Richmond | 12% | 66,300 | 72,128 |
| Henrico County | 6% | 35,379 | 38,489 |
| Chesterfield County | 2% | 10,119 | 11,008 |

- Each entity that pays in, gets a share of revenue hours equal to contribution, but fed/state/fares is a separate bucket
- Fed/State/Fares bucket would be used primarily for ridership-oriented services.

Which approach do you prefer?

- A. Distribute Fed/State/Fares evenly by contribution
- B. Put Fed/State/Fare into a Ridership Bucket
- C. Not Sure

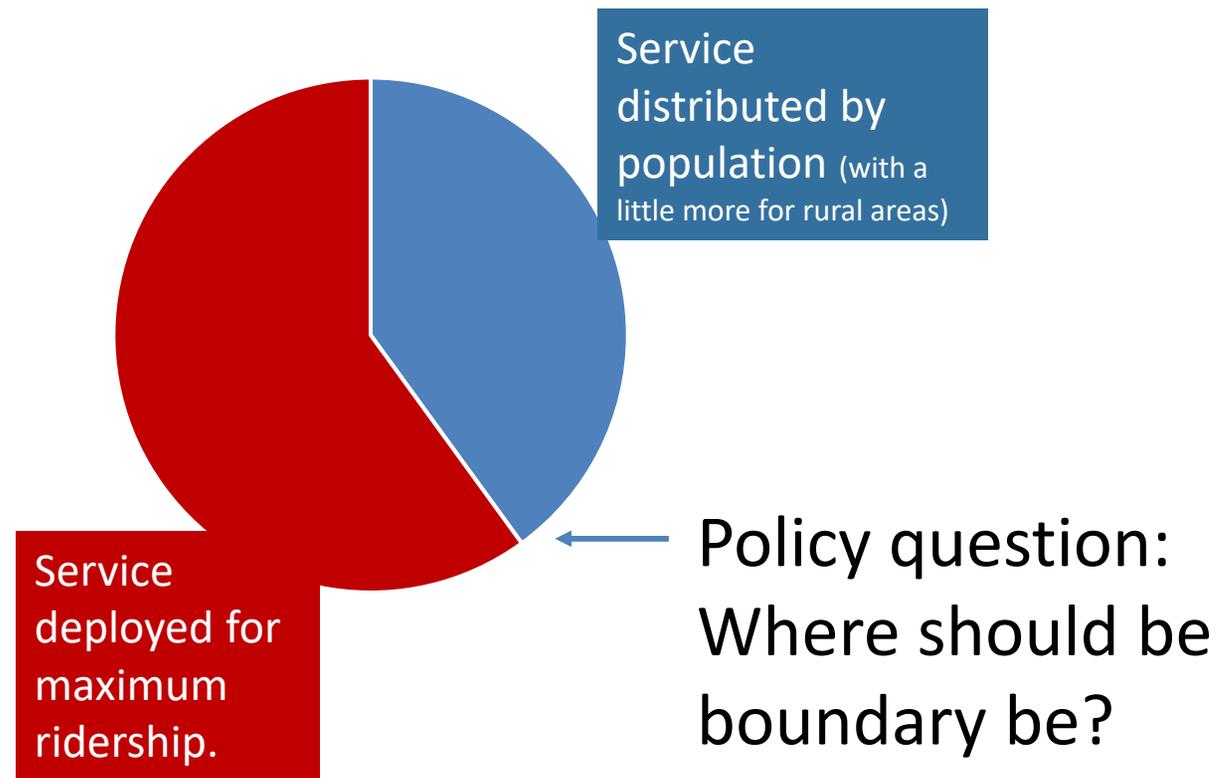


How to distribute CVTA Rev Hrs

- If we use the Ridership/Coverage Policy then
 - One bucket is for Coverage service to be designed by GRTC with service allocated to all or most jurisdictions based on simple formula
 - Population
 - Population + jobs
 - % of revenue raised (like the 50% distribution from CVTA)
 - Second bucket is set aside for Ridership services for the region
 - To be designed by GRTC in coordination with local and regional planning staff
- How much in each bucket? It's a value choice about how to split the CVTA budget between Ridership and Coverage.
 - The higher the coverage %, the harder it is to completely backfill to maintain existing service levels in currently served jurisdictions.

Ridership and Coverage balance

For the CVTA portion, where should we draw the line?

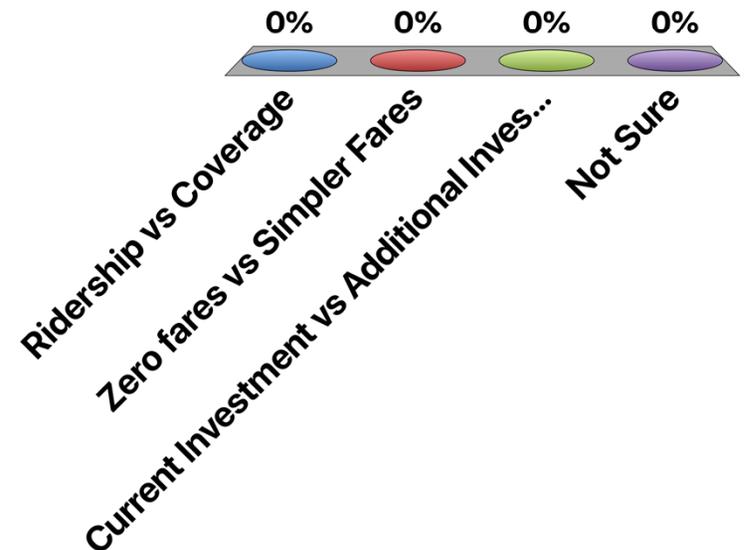


Next Steps

- Refine these financial projections (GRTC and Consultant Team)
 - Local input on any revised assumptions about local contributions
- Develop alternatives for stakeholder/public consideration
 - Core Design Retreat January 19-22
 - Local representatives are invited to participate
- What policy spectrum should we explore?
 - Ridership vs Coverage
 - Zero fares vs Simpler Fares
 - Current Investment vs Additional Investment

Which policy spectrum should we explore?

- A. Ridership vs Coverage
- B. Zero fares vs Simpler Fares
- C. Current Investment vs Additional Investment
- D. Not Sure



Discussion