

Regional Transit Authority Plan

Task 2b, Task 2d & Task 2e
Technical Report

Service Strategies

Addendum –Option 4A

December 3, 2007



Submitted by:
Vanasse Hangen Brustlin, Inc.
8300 Boone Blvd., Suite 700
Vienna, VA 22182

Submitted to:
Thomas Jefferson Planning District
Commission
401 East Water Street
Charlottesville, VA 22902

Addendum to Service Strategies Technical Report

The Service Strategies Technical Report was reviewed with the MPO Board at a meeting on November 21, 2007. At that meeting the members of the Board expressed support for the more extensive options – Option 3 and Option 4 - but requested that an additional option be developed that would include:

- A more direct service connecting the Pantops area with the northern portions of the Route 29 corridor
- Provide service on Rio Road east of Belvedere
- Provide more frequent service on the CTS routes operated in the City of Charlottesville

The materials in this addendum present the requested option. The additional services are added to Option 4 – Priority Transit, as presented in the Service Strategies Technical Report. For convenience the new service is named Option 4A. The option is illustrated in Figure A1. The projected operating costs for Option 4A would be approximately \$16.7 million per year. These costs by route are summarized in Table A1. Changes from base Option 4 are shown in red. The allocation of revenue hours between the City and the County is estimated to be:

<u>Jurisdiction</u>	<u>Revenue Hours</u>	
	<u>No.</u>	<u>Percent</u>
City	108,229	45.0%
County	132,385	55.0%
Total	240,613	100.0%

The expanded service would also require a larger fleet of buses. The capital costs for Option 4A are summarized in Table A2, with changes from base Option 4 shown in red. The cost for buses would vary depending on the type of equipment purchased but is estimated to be between \$19 and \$30 million. The remainder of the capital cost for this Option, as in base Option 4, is for implantation of the BRT facilities. While a slightly larger facility for bus storage and maintenance might be required to house the larger fleet, the costs of such expansion have not been estimated.

Table A1: Option 4A Summary of Operating Characteristics

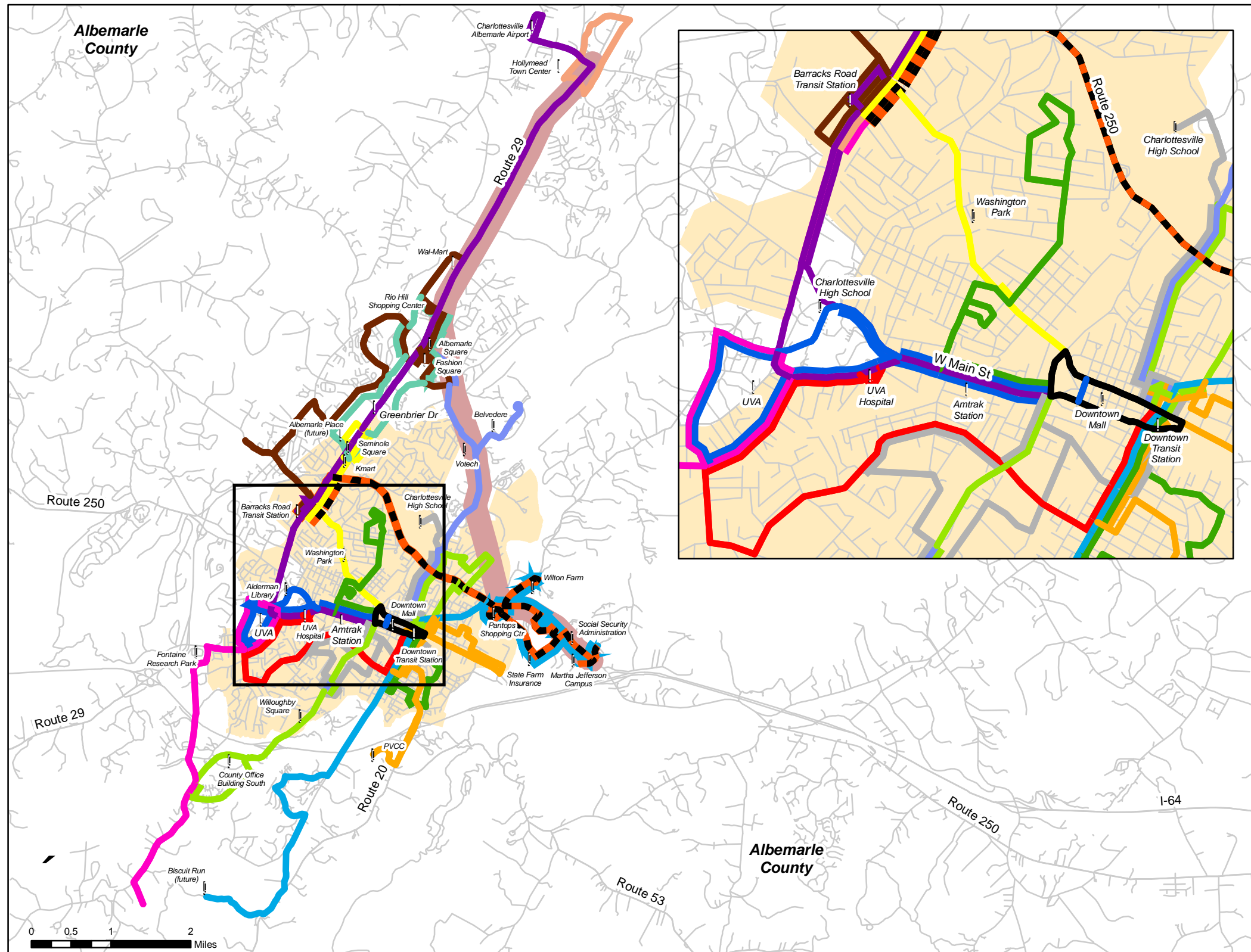
Day Service	Status	Funding	Headway (min)	Peak Buses	Revenue Miles	Revenue Hours	Operating Cost
FREE Trolley	Existing	City	15	3	85,745	10,975	\$760,000
Route 1A	Existing	City	15/30	0.5	18,758	4,813	\$333,000
Route 1B	Existing	City	15/30	0.5	28,367	6,411	\$444,000
Route 2A	Existing	City	15/30	0.5	24,744	4,813	\$333,000
Route 2B	Existing	Split	15/30	0.5	30,209	6,411	\$444,000
Route 3A	Existing	City	15/30	0.5	20,354	4,813	\$333,000
Route 3B	Existing	City	15/30	0.5	27,630	6,411	\$444,000
Route 4	Existing	City	15/30	2.0	60,070	11,552	\$800,000
Route 5	Existing	County	15/30	3.0	140,729	15,642	\$1,083,000
Route 6	Baseline Route 6B	City	15/30	2.0	61,154	10,938	\$757,000
Route 8A	Baseline Route 6A	City	15/30	1.0	33,501	4,813	\$333,000
Route 8B	Proposed	City	15/30	1.0	31,314	6,074	\$467,000
Route 10A	Baseline Route 10	County	15/30	2.0	78,554	11,916	\$825,000
Route 10B	Proposed	County	15/30	2.0	46,208	11,552	\$800,000
Hollymead Route	Proposed	County	15	1.0	41,445	3,838	\$266,000
Rio Road East	Proposed	County	15/30	1.0	39,910	11,552	\$800,000
Biscuit Run Route	Proposed	County	15	3.0	117,335	15,964	\$1,106,000
Route 29 Circulator	Proposed	County	15/30	1.0	43,103	5,649	\$391,000
Crosstown Route	Proposed	County	15/30	1.0	52,282	11,552	\$800,000
Pantops-Hollymead	Proposed	County	30	To be determined		11,052	\$765,000
Priority Transit A	Proposed	Split	20	6.0	278,971	23,946	\$1,658,000
Priority Transit B	Proposed	Split	20	4.0	155,158	15,555	\$1,077,000
Subtotal				36.0	1,415,541	216,241	\$15,019,000
Night Service	Status	Funding	Headway (min)	Peak Buses	Revenue Miles	Revenue Hours	Operating Cost
FREE Trolley	Existing	City	15	2.0	34,998	3,070	\$213,000
Route 5	Existing	County	30	n/a	n/a	3,454	\$239,000
Route 21	Existing	City	30	1.0	38,682	1,535	\$106,000
Route 22	Existing	City	30	1.0	30,086	1,535	\$106,000
Route 23	Existing	City	30	0.5	8,443	1,535	\$106,000
Route 24	Existing	County	30	0.5	8,443	1,535	\$106,000
Priority Transit A	Proposed	Split	40	3.0	57,225	4,912	\$340,000
Priority Transit B	Proposed	Split	40	2.0	24,499	2,456	\$170,000
Subtotal				10.0	202,374	20,032	\$1,386,000
Sunday Service	Status	Funding	Headway (min)	Peak Buses	Revenue Miles	Revenue Hours	Operating Cost
FREE Trolley	Existing	City	30	1.0	5,928	520	\$36,000
Route 7	Existing	City	30	2.0	13,230	980	\$68,000
Subtotal				3.0	19,158	1,500	\$104,000
Express Bus	Status	Funding	Headway (min)	Peak Buses	Revenue Miles	Revenue Hours	Operating Cost
Rivanna Express	Proposed	County		1	16,830	1,020	\$71,000
Piney Mountain	Proposed	County		1	24,480	1,020	\$71,000
Subtotal				2.0	41,310	2,040	\$142,000
Other Service	Status	Funding	Headway (min)	Peak Buses	Revenue Miles	Revenue Hours	Operating Cost
Other	Proposed	City	n/a	n/a	3,150	800	\$55,000
Subtotal					3,150	800	\$55,000
Total					1,681,533	240,613	\$16,706,000

(1) "Split" funding indicates that funding responsibility is split 50/50 between Charlottesville & Albemarle Co.

Table A2: Option 4A Capital Cost Summary

Day Service	Status	Funding	Additional Vehicles	Vehicle Cost (Low)	Vehicle Cost (High)
FREE Trolley	Existing	City	0	\$0	\$0
Route 1A	Existing	City	0.5	\$190,000	\$280,000
Route 1B	Existing	City	0.5	\$190,000	\$280,000
Route 2A	Existing	City	0.5	\$190,000	\$280,000
Route 2B	Existing	Split	0.5	\$190,000	\$280,000
Route 3A	Existing	City	0.5	\$190,000	\$280,000
Route 3B	Existing	City	0.5	\$190,000	\$280,000
Route 4	Existing	City	2	\$760,000	\$1,120,000
Route 5	Existing	County	3	\$1,140,000	\$1,680,000
Route 6	Baseline Route 6B	City	4	\$1,520,000	\$2,240,000
Route 8A	Baseline Route 6A	City	1	\$380,000	\$560,000
Route 8B	Proposed	City	1	\$380,000	\$560,000
Route 10A	Baseline Route 10	County	2	\$760,000	\$1,120,000
Route 10B	Proposed	County	2	\$760,000	\$1,120,000
Hollymead Route	Proposed	County	0	\$0	\$0
Rio Road East	Proposed	County	3	\$1,140,000	\$1,680,000
Biscuit Run Route	Proposed	County	3	\$1,140,000	\$1,680,000
Route 29 Circulator	Proposed	County	2	\$760,000	\$1,120,000
Crosstown Route	Proposed	County	4	\$1,520,000	\$2,240,000
Pantops-Hollymead	Proposed	County	3	\$1,140,000	\$1,680,000
Priority Transit A	Proposed	Split	6	\$2,880,000	\$5,400,000
Priority Transit B	Proposed	Split	4	\$1,920,000	\$3,600,000
Subtotal			43	\$17,340,000	\$27,480,000
Night Service	Status	Funding	Additional Vehicles	Vehicle Cost (Low)	Vehicle Cost (High)
FREE Trolley	Existing	City	0	\$0	\$0
Route 5	Existing	County	0	\$0	\$0
Route 21	Existing	City	0	\$0	\$0
Route 22	Existing	City	0	\$0	\$0
Route 23	Existing	City	0	\$0	\$0
Route 24	Existing	County	0	\$0	\$0
Priority Transit A	Proposed	Split	0	\$0	\$0
Priority Transit B	Proposed	Split	0	\$0	\$0
Subtotal			0	\$0	\$0
Sunday Service	Status	Funding	Additional Vehicles	Vehicle Cost (Low)	Vehicle Cost (High)
FREE Trolley	Existing	City	0	\$0	\$0
Route 7	Existing	City	0	\$0	\$0
Subtotal			0	\$0	\$0
Express Bus	Status	Funding	Additional Vehicles	Vehicle Cost (Low)	Vehicle Cost (High)
Rivanna Express	Proposed	County	1	\$480,000	\$900,000
Piney Mountain	Proposed	County	1	\$480,000	\$900,000
Subtotal			2	\$960,000	\$1,800,000
Other Service	Status	Funding	Additional Vehicles	Vehicle Cost (Low)	Vehicle Cost (High)
Other	Existing	City	0	\$0	\$0
Subtotal			0	\$0	\$0
Other Capital Costs	Status	Funding	No.	Cost (Low)	Cost (High)
Bus Stops	Proposed	Split	162	\$11,000	\$2,185,000
BRT Stations	Proposed	Split	10	\$600,000	\$3,000,000
Road Improvements (miles)	Proposed	Split	6.6	\$23,100,000	\$103,620,000
Subtotal				\$23,711,000	\$108,805,000
Total			45	\$42,011,000	\$138,085,000

Figure A1: Option 4A



Charlottesville Albemarle Regional Transit Authority Study

Figure A1: Option 4A

! (vertical line)	Stations
! (vertical line)	Landmarks
Orange shaded area	Charlottesville
Route	
Black line with white dashes	Overlapping Routes
Blue line	Free Trolley
Orange line	Route 1
Light green line	Route 2
Green line	Route 3
Red line	Route 4
Brown line	Route 5
Yellow line	Route 6
Grey line	Route 8
Light blue line	Route 10
Light orange line	Hollymead Route
Blue line	Rio Road East
Pink line	Biscuit Run Route
Light green line	Route 29 Circulator
Black and orange dashed line	Crosstown Route
Purple line	Priority Transit
Brown shaded area	Pantops - Hollymead Service (Route to be determined)