

COMMONWEALTH OF VIRGINIA
DEPARTMENT OF HIGHWAYS

PRIMARY ROADS RECOMMENDED FOR TRANSFER
TO SECONDARY SYSTEM

A SUPPLEMENT

to the

PRELIMINARY REPORT OF MARCH 1939 ON
THE FUTURE DEVELOPMENT OF THE PRIMARY SYSTEM

- FOREWORD -

In the Preliminary Report on the Future Development of the Primary System, dated March 1939, there was presented an approximate estimate of the cost of improving the entire mileage of the system to certain standards. It was pointed out and emphasized, however, that there was a considerable portion of this mileage upon which there was so little travel that consideration should be given to its transfer to the Secondary System.

There is attached, as a supplement to the Preliminary Report, a list of those roads recommended for transfer from the Primary System to the Secondary System.

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- PRIMARY STATE HIGHWAY SYSTEM -

ROADS RECOMMENDED FOR TRANSFER TO SECONDARY STATE SYSTEM

Although the first State Highway Commission was appointed as an official agency of the State government in 1906, it was not until 1916 that the demands for motor vehicle transportation became so urgent that the General Assembly appointed a commission to lay out a definite system of trunk highways comprising the main arteries of travel between centers of population. This committee submitted their report to the Assembly of 1918 and in that year the original State System of 4,002 miles was officially adopted.

Since that year the mileage in the State System has increased rapidly. In 1922 a law was passed whereby the Highway Commission could add each year mileage from County roads equal to 2-1/2 percent of the original system. In 1924 another law was passed authorizing the Commission to add, for the years 1924 and 1925, 2 percent of the system mileage in the preceding year and, in 1926, still another law was passed which added, during the years 1926 and 1927 yet another 2 percent. By 1928 the system had grown to over 5,200 miles and in that year, under the Vaughan Act, 1,587 miles of County road were added. This was followed in the short space of two years by the Porter-Rhodes Act which increased the total mileage by another 1,587 miles.

At the present time the State, or Primary System, is comprised of 9,432 miles, which is more than double the mileage in the original trunk system. And, although it seems unquestionable that the intent behind the law creating the original system was to provide State-wide transportation and arterial connections between Cities, large Towns and other population centers, the system by now has so grown that it contains, as will be pointed out later in this report, many miles upon which the word "Primary" could only be interpreted to refer to their administrative significance. As almost irrefutable evidence of this is the fact that the original system of 4,002 miles served last year over 70 percent of the total travel carried by the entire system of 9,432 miles as now established.

Figure 1

PERCENT OF TOTAL TRAVEL ON PRIMARY SYSTEM IN 1938

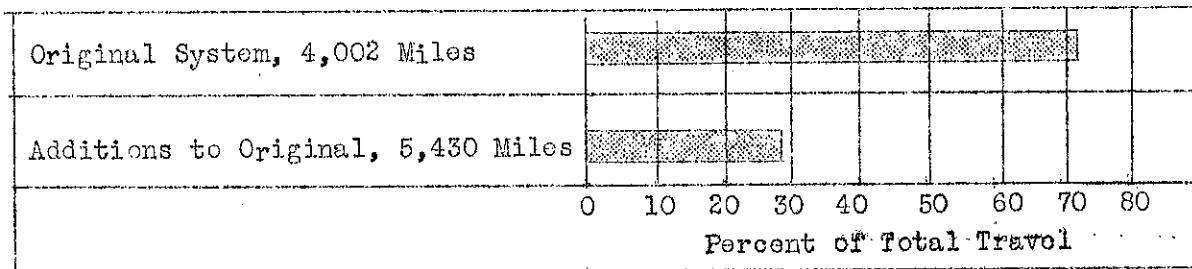


Figure 1 shows that approximately 42 percent of the total mileage serves 70.73 percent of the total travel.

It would be a mistake, however, to assume that this growth has been at all like that of "Topsy." There was a reason, and a perfectly legitimate reason, behind the Acts which created the additional mileage. Prior to 1932 the counties built and maintained their own road systems and it must be remembered that the public demands made on the county governments for improvement to their roads was increasing in like proportion to the demands made upon the Highway Commission for improvement to State roads. Motor vehicle revenues available for development of the State System were increasing rapidly and as many of the counties were forced to use a large portion of their revenue for bonded obligations previously incurred for road purposes, it was perfectly logical to expect the State to assume a larger share of the burden and thus relieve the counties in like proportion. It was this desire to help the counties which has resulted in so many county roads upon which the travel is almost entirely local being added to the State System.

The passage of the Secondary Road Act in 1932 however, has completely changed the picture. The State now has assumed responsibility for the construction, improvement and maintenance of both State Roads and County Roads ^{1/}, and there is no longer a logical reason why the Primary, or main trunk system, should contain many hundreds of miles of local roads. Moreover, the very fact that the State now controls both systems and must improve the roads in each system in accordance with their relative importance to that system, tends to nullify the very intent behind the Acts which added local roads to the primary system. Hundreds of miles of these local roads carry so little traffic and have so little bearing on State-wide transportation that their importance in relation to other trunk line highways is small, with the result that their priority rating for improvement to primary standards will delay their construction for many years. However, if these roads had remained in, or should be transferred back to, the Secondary System, they would in most cases have a high degree of importance in relation to other secondary roads and so take a high priority rating for improvement in that System. In other words, their inclusion in the primary system may actually delay rather than expedite their improvement.

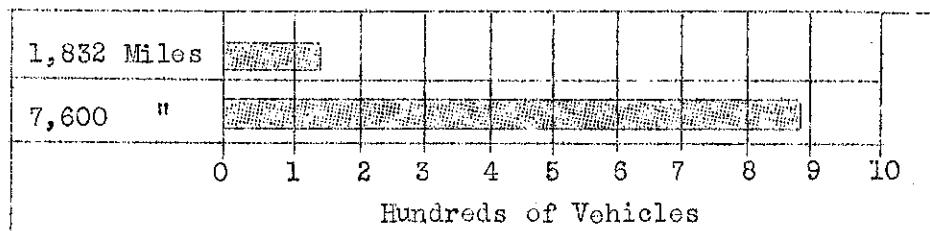
There is attached a description of those roads which have little significance from a standpoint of state-wide transportation, and upon which, with few exceptions, there is relatively little travel. Moreover, their geographical locations in relation to other primary routes, Cities, Towns and rural density of population is such that it is not believed they would develop, if improved, to the extent that their inclusion in a trunk system would be justifiable.

1/ In all but three counties: Henrico, Arlington and Warwick

It will be noted from the attached list that although there are a few sections of road upon which there is considerable travel, the average for the entire 1,832 miles is only 141 vehicles per day; the range being from an average of 104 vehicles per day on 329 miles in the Staunton District to 210 per day on the 209 miles in the Suffolk District. The average traffic on this 1,832 miles when compared to the average on the remaining 7,600 miles of the system is:

Figure 2

ANNUAL AVERAGE 24 HOUR TRAFFIC



It will be noted from Figure 2 that average traffic on the 1,832 miles of local roads is only one-sixth as great as that on the remaining 7,600 miles of the system.

Of even greater significance is the amount of annual motor vehicle revenue produced on these 1,832 miles in relation to their estimated cost of construction to primary standards and their maintenance and replacement cost after such construction.

The average miles driven per gallon of gasoline consumed, was in 1937: for Virginia passenger cars 15.7 and for Virginia trucks 10.14. The average license fee paid was: Virginia passenger cars \$10.28, Virginia trucks \$23.05. The annual average mileage driven was: Virginia passenger cars 8,056, Virginia trucks 11,874. The percent of total travel by the two classes of Virginia vehicles was: passenger cars 77.41, trucks 22.59. The percent of travel by out-of-State vehicles to total travel on Virginia primary highways was: passenger cars 20.0 percent, trucks 2.80 percent. Out-of-State vehicles buy gasoline in Virginia and so contribute to the gas tax. They do not however contribute in license fees. Therefore, for both Virginia passenger cars and trucks:

$$\frac{\text{Gas tax per gallon}}{\text{Miles per gallon}} = \text{Gas tax per mile of travel}$$

5 cents = \$.003184 for passenger cars

15.7

and

5 cents = \$.004931 for trucks

10.14

so, .003184 x percent passenger car travel + .004931 x percent truck travel = total gas tax revenue per mile from Virginia vehicles.

$$.003184 \times .7741 + .004931 \times .2259 = \$.003579$$

And, for both Virginia passenger cars and trucks:

License Fee = License fee per mile of travel
Average Annual Miles Driven

$$\frac{\$10.28}{8,056} = .001276 \text{ for passenger cars}$$

and = .001941 for trucks
 $\frac{\$23.05}{11,874} = .001941$

so,

.001276 x .7741 + .001941 x .2259 = \$.001426 = total license fee per mile of travel from Virginia vehicles.

and,

Gas tax of \$.003579 + license fee of \$.001426 = \$.005005 = total tax received from Virginia vehicles per mile of travel.

It is estimated that out-of-State vehicles do not purchase gasoline in Virginia in direct proportion to their travel on Virginia roads, the relation of gas purchased to miles driven being 88 percent. This loss is probably due to the gas tax differential in the District of Columbia and Maryland.

Therefore:

gas tax per mile, \$.003579 x .88 = \$.003150 = gas tax from foreign vehicles per mile of travel.

Therefore:

Total tax received from Virginia vehicles x percent Virginia travel on Primary System + gas tax from foreign vehicles x percent foreign travel on Primary System = total revenue on Primary System per mile of travel.

Or,

$$.005005 \times .772 + .003156 \times .228 = \$.004582$$

And, Average 24 hour traffic \times \$.004582 \times 365 days = annual revenue produced on any one mile of average Primary Highway.

As the average traffic in the year 1938 on the 1,832 miles of little traveled road was 141 vehicles per day it can be easily calculated that the average revenue produced per mile was approximately \$235. Traffic for the State as a whole is estimated to double by 1960, ^{1/} however, revenue from motor vehicle imposts is not expected to double. Historic trends in gasoline consumption indicate that advances in carburetion of both passenger cars and trucks will mean more miles per gallon in future years. Therefore, revenue is only estimated to increase 1.65 times that of the present, whereas traffic is estimated to double. This would mean that the average road producing \$235 per mile in 1938 will produce $\$235 \times 1.65 = \388 per mile in 1960, or an average for the 22 year period of \$312 per mile.

On the other hand, the cost of constructing the 1,832 miles to primary standards by 1960 is estimated at \$26,100 per mile, or a total cost of \$47,754,100. Moreover, the roads have to be maintained and the surfacing replaced as it periodically wears out. This annual cost can be conservatively estimated on the Primary System at \$250 per mile per year for ordinary maintenance plus \$250 per mile for replacement, or a total of \$500 per mile. It can thus be seen that the estimated revenue produced on these roads would be insufficient to pay even their cost of upkeep and that their entire construction cost of over \$47,000,000 would have to be subsidized from revenue produced on other roads and streets. It does not appear either logical or equitable to subsidize these roads to this extent.

It is therefore recommended that these 1,832 miles of primary highway be transferred to the Secondary System and that they be given a standard of improvement commensurate with other secondary roads rendering like service to the traveling public. It is to be noted that 849 miles of these roads are already surface-treated and up to secondary standards, so that only 983 miles would have to be improved. The improvement of these 983 miles to a surface-treated standard with a surface width of 16 feet, based on the State average per mile cost of improving Secondary System roads ^{2/}, is estimated at \$3,398,346. It can therefore be seen that the transfer of the 1,832 miles, and their improvement to secondary standards instead of primary standards would effect an estimated saving in construction costs of over \$40,000,000.

1/ See report on Primary System

2/ See report on Secondary System Table 6

As it would not be equitable to transfer this large mileage to the Secondary System without making provision for their improvement and maintenance, it is further recommended that an amount necessary to cover the cost of such improvement and maintenance be allotted out of Highway funds and that this amount be in addition to the appropriations which the Secondary System would normally receive. As the improvement cost is estimated at \$3,398,346 and the annual cost of maintenance and replacement of surface-treated roads on the Secondary System at \$337 per mile ^{1/}, the estimated total cost of these roads, on the Secondary System, over a 20-year period is estimated at \$15,746,026 or \$787,300 per year.

1/ See report on Secondary System Table 4

PRIMARY ROADS RECOMMENDED FOR TRANSFER TO SECONDARY SYSTEM

SUMMARY

District	Length	Average 24 Hour Traffic 1938	Annual Revenue in Gas Tax & License Fee produced per mile of road			Estimated cost of construct- ion to Primary Standards including large Bridges	
			In 1938 (1938 Revenue X 1.65)	Estimated in 1960	Average to 1960	Per Mile	Total
Bristol	Miles	Motor Vehicles	Dollars	Dollars	Dollars	Dollars	Dollars
Culpeper	315.33	135	225	371	298	39,300	12,248,700
Fredericksburg	164.23	110	184	304	244	27,600	4,540,800
Lynchburg	142.94	162	270	446	358	20,400	2,913,000
Richmond	237.35	151	252	416	334	24,000	5,696,400
Salem	230.09	169	282	465	374	17,300	3,981,900
Staunton	203.74	107	179	395	287	22,100	4,512,700
Suffolk	329.67	104	174	287	230	24,700	8,108,900
Total	209.41	210	351	579	465	27,500	5,751,700
	1832.74	141	235	388	312	28,100	47,754,100

PRIMARY ROADS RECOMMENDED FOR TRANSFER TO SECONDARY SYSTEM

BRISTOL DISTRICT

Route	County	Description		Length Miles	Average 24 Hour Traffic 1938	Annual Revenue in Gas Tax & License Fee produced per mile of road		Estimated cost of construct- ion to Primary Standards including Large Bridges
		From	To			In 1938	Estimated in (1938 Revenue X 1.65)	
42	Bland	Int. Rt. 21	Smyth Co. Line	15.06	74	205	164	\$342,800
42	Smyth	Bland Co. Line	Int. Rt. 88	6.90	74	205	164	410,500
42	Washington	Int. Rt. 19	Scott Co. Line at Faley Gap	17.00	101	169	279	665,600
58	Smyth	Int. Rt. 88	Washington Co. Line	19.42	65	109	180	144
58	Washington	Smyth Co. Line	Int. Rt. 81	6.55	123	205	338	272
59	Wise	Int. Rt. 23 at Donkey	Int. Rt. 629	5.00	83	139	229	184
61	Tazewell	Int. Rt. 87	Bland Co. Line Rt. 641	9.53	151	252	416	334
62	Lee	Int. Rt. 58	Tenn. State Line	3.70	69	115	190	1188
64	Lee	Int. Rt. 66	Int. Rt. 65	8.30	537	897	1480	45,000
64	Lee	Int. Rt. 58	Tenn. State Line	13.99	131	219	361	373,500
70	Russell	Int. Rt. 64	Scott Co. Line	7.00	112	187	290	532,700
70	Scott	Russell Co. Line	Int. Rt. 651	20.22	145	242	399	532,700
70	Wise	Int. Rt. 58 & 23	Int. Rt. 58	7.75	85	142	234	188
72	Wise	Int. Rt. 64	Scott Co. Line	5.95	210	351	579	465
72	Scott	Wise Co. Line	Int. Rt. 71	14.18	151	252	416	334
74	Russell	Int. Rt. 71	Int. Rt. 613	6.36	44	73	120	96
75	Washington	Int. Rt. 58	Int. Rt. 700	5.15	123	205	338	38,500
76	Washington	East Corp. Limits of	Int. Rt. 11	4.00	76	127	210	200,200
77	Washington	Bristol	Int. Rt. 58	12.00	167	279	460	370
79	Smyth	Int. Rt. 11	Int. Rt. 58	4.00	248	414	685	54,8
80	Dickenson	Int. Rt. 610	Int. Rt. 602	12.70	53	98	145	116
80	Buchanan	Dickenson Co. Line	Russell Co. Line	10.89	139	232	383	308
80	Russell	Buchanan Co. Line	North Corp. Limits of	6.70	217	362	597	480
80	Russell	Int. Rt. 19	Homaker	6.20	90	150	248	199
80	Washington	Russell Co. Line	Washington Co. Line	5.70	76	127	210	168
81	Tazewell	Int. Rt. 19	Int. Rt. 689 Hyters	12.00	167	279	460	370
81	Smyth	Tazewell Co. Line	Gap	4.00	248	414	685	54,8
82	Russell	Int. Rt. 19	Smyth Co. Line	22.65	137	229	378	38,500
87	Tazewell	Int. Rt. 61	Int. Rt. 42	0.50	93	155	256	82,400
90	Wythe	Int. Rt. 21 & 52	Int. Rt. 600 near	7.00	205	342	564	44,900
91	Wythe	Int. Rt. 690 near Aben	Cleveland	8.00	171	286	472	40,000
93	Grayson	Int. Rt. 58	Int. Rt. 623 Burkes Cdn.	5.55	48	80	132	320,000
94	Grayson	Int. Rt. 58	Int. Rt. 680	14.24	118	197	325	106
95	Grayson	Int. Rt. 94	Int. Rt. 90	1.60	16	27	45	261
97	Wythe	Int. Rt. 96	North Carolina State	1.20	47	794	794	36,000
121	Wythe	Int. Rt. 11	Line	1.96	245	404	404	154,300
289	Wythe	Int. Rt. 21	Int. Rt. 626	0.15	5	8	13	539,100
								139,800
								27,700
								54,200
								2,000
								15,000
								2,000
								12,248,700
								38,800
								298
								371
								225
								135
								315.35
								DISTRICT SUB-TOTALS

PRIMARY ROADS RECOMMENDED FOR TRANSFER TO SECONDARY SYSTEM

CULPEPER DISTRICT

Route	County	Description			Annual Revenue in Gas & Tex & License Fee Produced per mile of road		Estimated cost of construction to Primary Standards including Large Bridges	
		From	To	Length	Average 24 Hour Traffic 1938	In 1938	Estimated in 1960 (1938 Revenue X 1.65)	Per Mile
16	Louisa	Orange Co. Line	Fluvanna Co. Line	Miles	Motor Vehicles	Dollars	Dollars	Dollars
		Holiday Bridge		20.08	57	96	158	127
16	Fluvanna	Int. Rt. 614	10.97	92	154	254	204	24,600
20	Albemarle	Int. Rt. 6	Cumberland Co. Line	0.15	221	202	333	26,100
28	Fauquier	Int. Rt. 211	Buckingham Co. Line	2.12	205	347	573	735,000
28	Prince William	Fauquier Co. Line	Prince William Co. Line	7.35	203	347	573	9,900
162	Fluvanna	Int. Rt. 16	Int. Rt. 233	0.10	65	109	180	15,700
230	Albemarle	Int. Rt. 29	Int. Rt. 6	5.10	98	164	271	15,000
230	Albemarle	Int. Rt. 250	635 Batesville	20.80	78	130	214	16,500
230	Greene	Int. Rt. 250	Greene Co. Line	20.80	78	130	214	16,500
230	Madison	Albemarle Co. Line	Madison Co. Line	11.80	133	222	366	34,900
231	Madison	Greene Co. Line	Int. Rt. 634 Oak Park	14.99	92	154	254	286,700
232	Rappahannock	Int. Rt. 16	Int. Rt. 611 Syria	3.88	169	316	521	110,300
232	Culpeper	Int. Rt. 16	Culpeper Co. Line	5.40	58	97	160	21,000
233	Fauquier	Rappahannock Co. Line	Int. Rt. 5	2.20	96	144	238	143,000
234	Prince William	Int. Rt. 17	Int. Rt. 295	15.47	90	150	247	55,000
234	Loudoun	Int. Rt. 211	Loudoun Co. Line	6.60	70	117	195	491,100
234	Loudoun	Prince William Co. Line	Int. Rt. 50	7.51	70	117	193	129,800
235	Fairfax	Int. Rt. 690	Int. Rt. 7	2.90	735	1227	2025	155,200
241	Fairfax	Mt. Vernon	Int. Rt. 1 Gun Springs	2.20	415	695	1143	1626
242	Rappahannock	Int. Rt. 3	Int. Rt. 611	0.90	203	339	559	918
242	Rappahannock	Int. Rt. 3	Feuquier Co. Line	4.75	62	103	170	76,000
242	Fauquier	Int. Rt. 647	Int. Rt. 647 Ada	5.59	89	189	316	17,200
243	Greene	Int. Rt. 29	Int. Rt. 55	4.00	82	137	521	26,400
243	Greene	Int. Rt. 33	Int. Rt. 604	4.00	56	94	226	94,800
245	Rappahannock	Int. Rt. 7	Bluemont	0.50	237	396	155	100,000
246	Fluvanna	Int. Rt. 5	Int. Rt. 16	4.87	21	35	653	131,700
247	Rappahannock	Int. Rt. 6	Int. Rt. 624	0.60	16	27	47	7,500
248	Rappahannock	Int. Rt. 211	Int. Rt. 622	1.00	142	237	391	25,000
335	Albemarle	Int. Rt. 6	Nelson Co. Line	0.80	242	404	667	3,000
								23,500
								78,400
								98,000
								24,4
								27,600
								4,540,300
								DISTRICT SUB-TOTALS

PRIMARY ROADS RECOMMENDED FOR TRANSFER TO SECONDARY SYSTEM

FREDERICKSBURG DISTRICT

Route	County	Description		Length Miles	Average 24 Hour Traffic 1938	Annual Revenue in Gas Tax & License Fee produced per mile of road		Estimated in 1960 (1938 Revenue X 1.65)	Average 1938 to 1960	Per Mile	Total	Estimated cost of construct- ion to Primary Standards including Large Bridges
		From	To			In 1938	Dollars					
51	Spotsylvania	Int. Rt. 210	Spotsylvania Co. Line	Caroline Co. Line	16.40	240	401	662	531	16,300	224,700	268,000
51	Caroline			Hanover Co. Line	5.40	209	349	576	462	24,100	130,400	130,400
124	King William	Int. Rt. 30	Int. Rt. 642	Port Richmond Airport	1.20	87	145	239	192	15,000	18,000	42,000
198	Mathews			Int. Rt. 14	1.05	519	535	879	706	40,000	42,000	56,400
201	Lancaster			Int. Rt. 5 (Lively)	4.70	180	301	497	399	12,000	120,000	120,000
201	Lancaster	Int. Rt. 3 (McNeils Corner)	Lancaster Co. Line	Northumberland Co. Line	4.00	209	349	576	462	30,000		
201	Northumberland	Int. Rt. 360	Int. Rt. 3	Richmond Co. Line	7.00	209	349	576	462	32,100	224,700	224,700
202	Westmoreland	Westmoreland Co. Line	Int. Rt. 5	Int. Rt. 5	1.80	121	202	333	267	15,000	24,000	24,000
202	Richmond	Int. Rt. 202	Kinsale	Int. Rt. 3	7.50	121	202	333	267	10,000	75,000	75,000
203	Westmoreland	Int. Rt. 1	Int. Rt. 2	Int. Rt. 2	1.35	141	255	388	311	40,000	54,000	54,000
208	Caroline	Int. Rt. 51	Int. Rt. 601	Granite Springs Post Office	10.00	75	125	206	165	19,600	195,700	195,700
209	Spotsylvania	Int. Rt. 51	Int. Rt. 3	Int. Rt. 610	18.78	179	299	493	396	30,000	563,400	563,400
210	Spotsylvania	Int. Rt. 1	Brooke	Int. Rt. 3	12.40	109	182	300	241	15,000	186,000	186,000
212	Stafford	Aquia Church	Fauquier Co. Line	Int. Rt. 1	3.50	144	240	396	318	15,000	52,500	52,500
213	Stafford			Int. Rt. 1	11.25	164	274	452	363	16,200	182,800	182,800
215	Essex	Int. Rt. 17	Int. Rt. 627	Int. Rt. 17	7.30	112	187	309	248	15,700	114,500	114,500
217	Gloucester	Int. Rt. 17	Int. Rt. 617	Int. Rt. 17	4.31	119	199	328	263	15,000	64,600	64,600
223	Mathews	Int. Rt. 198	Gwynns Island	Int. Rt. 198	2.20	274	458	756	607	40,000	88,000	88,000
226	Middlesex	Int. Rt. 17	Waterview Post Office	Int. Rt. 17	5.30	128	214	353	283	15,000	79,500	79,500
228	Richmond	Int. Rt. 5	Sharps Post Office	Int. Rt. 5	6.50	195	326	538	432	35,000	220,500	220,500
229	Caroline	Int. Rt. 1	Int. Rt. 51	Int. Rt. 51	4.50	227	379	625	502	15,000	67,500	67,500
293	King William	Int. Rt. 30	Lanesville	Int. Rt. 633	5.70	79	132	218	175	15,000	85,500	85,500
DISTRICT SUB-TOTAL					142.94	162	270	446	358	20,400	2,913,000	

PRIMARY ROADS RECOMMENDED FOR TRANSFER TO SECONDARY SYSTEM

LYNCHBURG DISTRICT

PRIMARY ROADS RECOMMENDED FOR TRANSFER TO SECONDARY SYSTEM

RICHMOND DISTRICT

Sheet 6 of 10 sheets

Route	County	Description		Length 24 Hour Traffic 1938	Annual Revenue in Gas & License Fee produced per mile of road (1938 Revenue X 1.65)	Estimated in 1960		Estimated cost of construct- ion to Primary Standards including Large Bridges	Total	
		From	To			Miles	Motor Vehicles	Dollars		
16	Powhatan	Cumberland Co. Line	Int. Rt. 60	10.70	134	224	370	297	7,800	
30	Hanover	Int. Rt. 51	Louisa Co. Line	5.60	315	523	865	693	15,000	
35	Prince George	Int. Rt. 301	Sussex Co. Line	4.20	315	526	868	697	15,000	
36	Chesterfield	Int. Rt. 602	Int. Rt. 600 Matoca	10.50	249	416	686	551	15,000	
44	Chesterfield	Int. Rt. 147	Powhatan Co. Line	4.20	179	299	493	396	15,000	
44	Powhatan	Chesterfield Co. Line	Int. Rt. 49	15.27	179	299	493	396	15,000	
49	Nottoway	Int. Rtes. 360 & 460	Inceburg Co. Line	9.55	195	322	531	427	15,300	
49	Lunenburg	Nottoway Co. Line	Int. Rt. 136	4.55	195	322	531	427	15,300	
51	Hanover	Caroline Co. Line	Int. Rt. 1	16.90	258	451	711	571	21,100	
136	Lunenburg	Int. Rt. 40	Int. Rt. 635 Gary P. O.	8.94	45	75	124	100	15,000	
137	Brunswick	Int. Rt. 1	Nottoway Co. Line	10.15	197	329	543	436	17,200	
137	Nottoway	Int. Rt. 40	Int. Rt. 40	5.90	249	416	686	551	18,800	
138	Mecklenburg	Int. Rt. 58	Int. Rt. 618	6.15	244	408	675	540	27,100	
139	Brunswick	Int. Rt. 58	Int. Rt. 659 near Temple Store	3.95	134	224	370	297	18,700	
140	Brunswick	Int. Rt. 58	Lawrenceville Airport	1.00	31	52	86	69	15,000	
141	Dinwiddie	Int. Rt. 1	Prince George Co. Line	12.88	90	150	248	199	5,800	
141	Prince George	Dinwiddie Co. Line	Int. Rt. 301	0.25	195	326	538	432	15,000	
141	Prince George	Int. Rt. 141	Int. Rt. 301	0.85	204	341	563	452	15,400	
142	Y	Int. Rt. 1	South Corp. Limits of Petersburg	2.60	355	590	974	782	25,800	
143	Nottoway	Int. Rt. 460	Int. Rt. 646	1.70	55	92	152	122	38,500	
144	Chesterfield	Int. Rt. 145	Int. Rt. 10	1.80	303	506	835	671	30,000	
145	Chesterfield	Int. Rt. 10	Int. Rt. 1	5.00	311	519	856	688	38,600	
148	Amelia	Int. Rt. 360	Powhatan Co. Line at Genito	7.50	108	186	297	297	14,000	
149	Amelia	Int. Rt. 49	Int. Rt. 635 Lodore	3.52	76	127	210	169	15,000	
153	Nottoway	Int. Rt. 460	Amelia Co. Line	6.89	215	359	592	476	30,000	
153	Amelia	Nottoway Co. Line	Int. Rt. 38	4.70	195	326	538	432	30,000	
153	Amelia	Int. Rt. 602	Ghesterton Co. Line	1.15	142	237	391	314	19,600	
153	Chesterfield	Amelia Co. Line	Int. Rt. 360	12.00	142	237	391	314	22,500	
154	Prince George	Int. Rt. 10	Int. Rt. 460	9.60	103	172	284	228	16,000	
155	New Kent	Int. Rt. 33	St. Peters Church	1.55	40	67	111	84	4,600	
156	Henrico	Int. Rt. 60	Osborne Pike	14.28	85	142	234	188	12,000	
157	Henrico	Int. Rt. 6	Port Harrison	Int. Rt. 33	8.20	129	215	355	285	14,000
159	Goochland	Int. Rt. 250	Int. Rt. 6 Grouzler	5.60	270	451	744	598	12,300	
160	Henrico	Int. Rt. 250 Short	Goochland Co. Line	3.80	203	359	559	449	15,000	
160	Goochland	Pump	Int. Rt. 620 Rockville	0.50	203	339	559	449	15,000	
160	Hanover	Henry Lee Co. Line	Int. Rt. 602	3.40	205	339	559	449	15,000	
162	Goochland	Goochland Co. Line	Int. Rt. 250	5.45	65	109	180	145	6,000	
163	New Kent	Int. Rt. 60	Charles City Co. Line	0.85	107	179	295	237	20,000	
163	Charles City	New Kent Co. Line	Int. Rt. 602 Nance	0.70	107	179	295	237	81,000	
DISTRICT SUB-TOTALS				250.09	169	282	465	374	3,981,900	

PRIMARY ROADS RECOMMENDED FOR TRANSFER TO SECONDARY SYSTEM
SALEM DISTRICT

Route	County	Description		Length	Average 24 Hour Traffic 1938	Annual Revenue in Gas Tax & License Fee produced per mile of road			Estimated cost of construct- ion to Primary Standards including Large Bridges		Total
		From	To			Miles	Motor Vehicles	Dollars	Per Mile		
18	Graig	Alleghany Co. Line	Int. Rt. 311	5.36	73	122	201	161	22,000	118,200	
24	Bedford	Campbell Co. Line	Paint Bank	26.04	63	105	173	139	21,100	546,300	
40	Franklin	Int. Rt. 109	Int. Rt. 616	1.65	41	68	112	90	24,800	41,000	
40	Patrick	Franklin Co. Line	Chamblissburg	10.60	41	68	112	90	21,300	225,500	
42	Craig	Int. Rt. 615	Patrick Co. Line	2.17	275	459	757	608	23,800	51,600	
43	Bedford	Int. Rt. 24	Newcastle	8.76	150	250	412	351	22,000	192,700	
43	Botetourt	Int. Rt. 11 (Buchanan)	South Corp. Limits of Bedford	19.80	98	164	271	217	25,400	503,400	
97	Carroll	Graysen Co. Line	Int. Rt. 615	6.56	299	499	823	611	23,900	157,000	
102	Montgomery	Int. Rt. 110	Floyd Co. Line	12.25	64	107	177	142	21,200	259,600	
102	Floyd	Montgomery Co. Line	Fairbrick Co. Line	26.55	63	105	175	139	26,800	711,900	
104	Patrick	Floyd Co. Line	Int. Rt. 58	3.30	105	175	289	232	20,000	66,000	
105	Patrick	Int. Rt. 103	North Carolina State Line	12.40	63	105	175	139	22,200	273,300	
108	Henry	Int. Rt. 58	Int. Rt. 626	5.66	104	174	287	230	21,600	122,200	
108	Franklin	Int. Rt. 657	Franklin Co. Line	2.00	130	217	358	288	10,000	20,000	
112	Giles	Figsboro	Int. Rt. 41	14.45	130	217	358	288	20,400	295,000	
113	Craig	Henry Co. Line	Mountain Lake	17.00	66	108	178	143	10,000	70,000	
114	Roanoke	Int. Rt. 511	Craig Healing Springs	6.90	50	84	139	112	20,000	138,000	
116	Roanoke	Int. Rt. 460	Bottetourt Co. Line	0.70	300	501	827	664	25,000	17,500	
116	Franklin	South Corp. Limits of Roanoke	Franklin Co. Line	5.10	524	875	1444	1160	26,300	134,200	
120	Franklin	Roanoke Co. Line	Int. Rt. 122	10.61	116	194	320	257	20,000	212,200	
127	Bedford	Int. Rt. 602	Int. Rt. 40	4.64	88	147	242	194	22,900	103,900	
128	Bedford	Campbell Co. Line	Int. Rt. 460	8.10	145	242	399	320	22,800	184,500	
294	Botetourt	Campbell Co. Line	Int. Rt. 460	0.50	104	174	287	230	20,000	6,000	
		Int. Rt. 230	Trinity	2.96	196	327	540	434	20,000	59,200	
DISTRICT SUB-TOTAL		203.74		107		179		395		22,100	
										4,512,700	

PRIMARY ROADS RECOMMENDED FOR TRANSFER TO SECONDARY SYSTEM SITUATION DISTRIBUTION

PRIMARY ROADS RECOMMENDED FOR TRANSFER TO SECONDARY SYSTEM

STATION DISTRICT (continued)

PRIMARY ROADS RECOMMENDED FOR TRANSFER TO SECONDARY SYSTEM

SUFFOLK DISTRICT

Route	County	Description		Length	Average 24 Hour Traffic 1938	Annual Revenue in Gas Tax & License Fee produced per mile of road		Estimated cost of construct- ion to Primary Standards including Large Bridges		Total
		From	To			In 1938	Estimated in 1960 (1938 Revenue X 1.65)	Dollars	Per Mile	
31	York	Magnuder	Int. Rt. 168	Miles	Motor Vehicles	Dollars	Dollars	Dollars	Dollars	
31	Sussex	Int. Rte. 10 Surry Co. Line	Sussex Co. Line Southampton Co. Line Rt. 528	3.50 10.85 9.10	168 344 262	281 574 458	464 947 723	372 760 580	15,500 47,500 29,900	54,200 515,900 272,200
32	Sussex	Int. Rte. 631	Greenville Co. Line	4.30	135	222	366	294	42,300	181,800
32	Greenville	Int. Rte. 608	Southampton Co. Line	13.60	219	365	602	483	44,100	600,300
32	Greenville	Int. Rte. 301	Southampton Co. Line	13.87	135	222	566	294	16,700	232,000
32	Southampton	Greenville Co. Line	Int. Rt. 195	9.50	109	162	866	241	16,600	183,300
35	Sussex	Prinze George Co. Line	Southampton Co. Line	17.77	298	498	822	660	6,000	106,500
35	Sussex	Sussex Co. Line	Int. Rt. 312	10.00	381	636	1049	942	17,900	179,000
35	Sussex	South Corp. Limits of Boykins	North Carolina State Line	2.12	435	726	1198	42,300	89,700	
40	Sussex	Clarendon	Sussex Co. Line	15.81	187	512	515	414	41,400	571,200
40	Sussex	Surry Co. Line	Int. Rt. 460	3.05	205	339	559	449	40,700	124,100
156	Isle of Wight	Int. Rt. 10	Rescue	4.00	184	307	506	406	32,500	129,200
166	Norfolk	Int. Rt. 27	Oak Grove	3.60	200	334	551	442	42,300	152,300
166	Princess Anne	Norfolk Co. Line	Int. Rt. 165	3.81	200	334	551	442	42,300	161,200
175	Accomac	Locate	Int. Rt. 13	0.20	132	220	363	292	32,300	6,500
179	Northampton	Int. Rt. 13	Onley	3.30	70	117	193	155	32,300	106,600
185	Accomac	Int. Rt. 13	East Corp. Limits of Eastville Int. Rt. 631	0.88	229	382	630	506	65,600	57,700
187	Accomac	Modestown	Int. Rt. 13	1.75	217	362	597	480	32,300	56,500
188	James City	Int. Rt. 607 Croaker	Int. Rt. 607 Croaker	2.30	185	309	510	410	15,500	35,600
189	Southampton	Nansesmond Co. Line	Int. Rte. 158 Franklin	3.57	314	524	865	695	32,400	115,700
190	Norfolk	Int. Rt. 165	Princess Anne Co. Line	2.73	186	311	513	412	11,000	50,200
190	Princess Anne	Norfolk Co. Line	Int. Rt. 615	7.02	186	311	513	412	12,000	84,100
191	Norfolk	Int. Rt. 58	Int. Rt. 460	5.25	131	219	361	290	42,300	137,500
191	Norfolk	Int. Rt. 27	Northwest	12.25	105	175	289	232	16,000	195,900
194	Southampton	Int. Rt. 35	Newcome	3.50	295	493	813	653	42,500	159,600
196	Sussex	Int. Rte. 31	Surry Co. Line	0.87	141	235	388	512	11,500	10,000
196	Surry	Sussex Co. Line	Int. Rt. 630	5.20	141	235	388	312	11,500	59,800
288	York	Int. Rt. 60	Int. Rt. 604	1.00	130	217	358	288	15,500	15,500
288	Accomac	Int. Rt. 15 Temperance Ville	Int. Rt. 695	1.40	242	404	667	536	32,300	45,200
308	Sussex	Int. Rt. 40	Southampton Co. Line	10.37	188	250	380	305	14,000	144,700
308	Southampton	Sussex Co. Line	Int. Rt. 609	0.44	158	230	380	305	15,500	6,800
312	Southampton	Int. Rt. 35	Int. Rt. 616	22.21	196	327	540	435	39,100	867,700
312	Isle of Wight	Int. Rt. 621	Int. Rt. 158	4.49	190	317	523	420	23,900	107,100
			Smithfield							
		DISTRICT SUB-TOTALS		209.41	210	351	579	465	27,500	
									5,751,700	