Staff Paper Series

LOCAL FUNDING OF RURAL PUBLIC SERVICES

by
Wilbur R. Maki

Department of Agricultural and Applied Economics

University of Minnesota
Institute of Agriculture
St. Paul, Minnesota 55101

P74-17   August 23, 1974

LOCAL FUNDING OF RURAL

PUBLIC SERVICES

Wilbur R. Maki

LOCAL FUNDING OF RURAL PUBLIC SERVICES

Wilbur R. Maki

Rural public services are viewed here as the local governmental functions performed in areas of submetropolitan status. Water supply and wastewater treatment, hospitals and health care, libraries and education, public housing, police and fire protection, refuse collection, and road maintenance are included among these services.

Local funding sources include primarily real estate taxes, service charges and debt financing. Use of a local sales tax and a local income tax is authorized in several states. In almost all states, local governments derive small amounts of income from fees for licensing business, making inspections, new construction permits and miscellaneous function.

Some rural services are provided most efficiently at the area level -- for example, waste water treatment -- and are financed from area sources. Other services, like public education are of local scale in their provision but of area or state scale in financing. A major concern here is the identification of those services which are best provided and financed locally and those which are not.

Scale, scope and proximity considerations are involved in identifying an appropriate level of governmental organization for providing a public service. For example, improved efficiency is achieved by consolidation of small units into larger ones or by cooperation and co-

ordination among several governmental units. Alternatively, purchases

of services from private vendors or from other governmental units may

offer an efficient alternative to the direct delivery of these services by

a governmental agency.

Trade-offs occur between management efficiency and improved

access to a public service in a geographically decentralized service

delivery system. Consumer access is a function of spatial proximity as

well as income levels (11, p. 333).

Finally, an expanded local resource base for public services is

sought with growth-inducing public outlays. An important issue is the

portion of total governmental resources which is set aside for basic

economic growth as contrasted to those resources used to simply

maintain existing public services and provide for the needs of an existing

population. Benefit spillover and income redistribution considerations

are of primary importance in identifying appropriate funding sources for

these services.

Rural Public Services

A primary concern of this paper is the effective organization of

public service delivery in rural areas in terms of the community resource

base and fiscal capabilities. Data for a multi-county area in Minnesota

are used to illustrate the area economic dimensions of public service

delivery (14). A set of area economic accounts has been prepared which

includes output and income estimates for an aggregate of public service

sectors (table 1). [1] Only the public industry sectors are presented; these include all municipal service enterprises (i. e. , water and sewer systems, electric power systems, hospitals, and liquor stores) and all tax-supported services (highway and road design and maintenance, public safety, garbage collection and disposal, health, education, welfare, libraries, recreation, and general government).

A major contention of this paper is that rural public services can be viewed realistically for policy and planning purposes only in the context of the total economy of an area. The area economic accounts are extended, therefore, to include the local institutional linkages in the financing of public services (table 2).

Producing public services

The gross output of public industry (Class 2) sectors was equivalent to about 28 percent of total household consumption in the given rural area. Public education and public administration accounted for 82 percent of public industry output. These two sectors include most of the tax-supported services.

Major current input requirements of the public industry sectors were local labor (62 percent of total) and local goods and services (20 percent of total). Interindustry purchases of capital inputs (by Class 7

Table 1. Estimated income payments of public industry (Class 2), household consumption (Class 3), and public finance (Class 4) sectors to specified income-receiving sectors, West Minnesota, 1967. 1/

Income receiving sectors		Class 2						Class 3	Class 4			
		Construction 24	Utilities 25	Other retail trade 26	Health 27	Education 28	Public administration 29	Household consumption 30	Sales tax 31	Property ty tax 32	Assessments 33	Other taxes 34
Private industry	1-23	1,874	1,088	453	1,119	9,052	4,214	116,098	0	0	0	0
Public industry	24-29	12	125	4	15	313	146	6,491	0	0	0	0
Sales taxes	31	4	3	1	5	2	1	12,711	0	0	0	0
Property taxes	32	0	0	0	0	0	0	21,010	0	0	0	0
Assessments	33	19	17	4	23	127	60	492	0	0	0	0
Other taxes	34	31	25	7	40	49	23	8,316	0	0	0	0
Household	36	2,419	1,267	782	4,501	34,299	15,970	0	0	0	0	0
County	37	0	0	0	0	0	0	0	0	11,274	169	24
Municipal	38	0	0	0	0	0	0	0	0	3,277	1,147	2,224
Township	39	0	0	0	0	0	0	0	0	15,590	0	0
School district	40	0	0	0	0	0	0	0	0	15,898	0	1,037
Spec. distr.	41	0	0	0	0	0	0	0	0	0	35	1
State	42	0	0	0	0	0	0	0	13,676	2,502	0	6,554
Federal	43	0	0	0	0	0	0	0	7,523	0	0	5,469
Public industry	46	370	654	159	1,041	150	71	0	0	0	0	0
Household consump.	47	0	0	0	0	0	0	36,000	0	0	0	0
Institutional	48	0	0	0	0	0	0	20,000	0	0	0	0
Ecologic	49	0	0	0	0	0	0	0	0	0	0	0
ROW	50	1,881	671	260	1,718	7,121	3,315	119,329	0	0	0	0
Subtotal	30-50	4,723	2,637	1,213	7,326	41,751	19,440	217,858	21,199	34,540	1,351	15,309
Totals	1-50	6,609	3,850	1,670	8,460	51,116	23,800	349,447	21,199	34,540	1,351	15,309

1/ Income payments of the public industry (Class 2) sectors to the public finance accounts are less, per $1 of total outlay, than corresponding industry sectors; the difference is absorbed in the ROW sector (Row 50). Capital outlays of the household (Class 3) sector are included under the capital (Class 8) sector except the allocation for depreciation (Row 47) and interest (Row 48) payments. An additional $606,000 income payment (to public education) is included in the Sector 30 allocation for the public industry accounts (with the new total being $6,491,000 rather than $5,885,000 total in the earlier input-output tables).

Table 2. Estimated income payments of institutional (Class 5) sectors to specified income-receiving sectors, West Minnesota, 1967. 1/

Income receiving sectors	Business 35	House-hold 36	Local Government County 37	Munic. 38	Town-ship 39	School dist. 40	Special distr. 41	State gov't. 42	Fed. gov't. 43	Prop. inc. 44
				($1,000)						
Construction 24	0	0	3,927	1,270	1,412	0	0	0	0	0
Health 27	0	0	253	19	0	0	0	5,015	557	0
Education 28	0	0	991	238	0	38,445	0	9,247	1,143	0
Pub. adm. 29	0	0	6,411	1,150	352	0	206	4,381	11,300	0
Subtotal 24-29	0	0	11,582	2,677	1,764	38,455	206	18,643	13,000	0
Household consumption 30	0	340,447	0	0	0	0	0	0	0	0
Prop. tax 32	0		0	0	0	0	0	0	0	0
Household 36	10,741	0	8,462	81	91	0	0	0	21,311	10,741
County 37	0	0	0	0	0	0	0	15,776	157	0
Municipal 38	0	0	179	0	0	0	0	910	41	0
Township 39	0	0	102	0	0	0	0	160	0	0
School dist. 40	0	0	2,424	0	0	310	0	21,208	0	0
Spec. dist. 41	0	0	11	0	0	0	0	0	19	0
State 42	549	8,780	0	0	0	0	0	0	0	0
Federal 43	8,870	66,773	0	0	0	0	0	0	0	0
Property inc. 44	2,638	0	0	0	0	0	0	0	0	0
Public ind. 46	0	0	4,870	4,318	0	11,583	55	0	0	0
Household 2/ consump. 47	0	20,000	0	0	0	0	0	0	0	0
Institutional 48	2,420	0	13,602	6,322	21	3,267	0	0	0	0
Subtotal 30-50	25,218	436,000	29,650	10,721	112	15,160	55	38,054	21,528	10,741
Totals	25,218	436,000	41,232	13,398	1,876	53,615	261	56,697	34,528	10,741

1/ Income payments of local government sectors to the public industry sectors cover a portion of total outlays not covered by service charges. Any remaining outlays are covered by the income payments of state and federal governments. Because of the limitations of the input-output format presented earlier, these entries were consolidated earlier in the export sector.

2/ The capital accounts of the combined institutional sector (Row 48) receive all income payments savings (business, household and government).

sectors) were equivalent to 20 percent of current output. Total capital

outlays -- largely in education and municipal service enterprises --

was 35 percent of total current outlays (table 3).

Scale economies occur in the utilities sector -- particu-

cularly wastewater treatment -- and hospitals and health services.

Political proximity to these services is not essential (except for

primary health care units). Hence, some early candidates for consoli-

dation are the two municipal service enterprises -- wastewater treat-

ment plants and hospitals. In addition, planning services could be pro-

vided more efficiently on an area rather than local scale.

An important distinction occurs in the production of a specialized

service and its distribution among users. While wastewater treatment

plants are early candidates for areawide management, the sewer dis-

tribution network may remain an individual municipal responsibility.

Similarly, the large hospital with a variety of specializations may serve

a large area, but individual community clinics are essential in assur-

ing easy access to primary health care services.

Major benefit spillovers can be expected from the three public

services cited earlier, along with education and public housing.

Income redistribution is achieved through public financing of health

care, education and housing. The three public services thus are

logical candidates for areawide (or state and federal) rather than

local financing (assuming income redistribution is not a local function).

Table 3. Estimated income payments of private industry (Class 6), public industry (Class 7), household consumption (Class 8), and institutional (Class 9), capital sectors, and ecologic (Class 10) and rest of world (Class 11) to specified income receiving sectors, West Minnesota, 1967. [1]/

Income receiving sectors		Class 6 Private 45	Class 7 Public 46	Class 8 Household consumption 47	Class 9 Insti-tutional 48	Class 10 Eco-logic 49	Class 11 Rest of world 50
				($1,000)			
Mining, construction	4	38,709	15,677	3,488	0	0	2,331
Food products	7	78	32	0	0	0	4,002
Lumber, furniture	8	78	32	436	0	0	6,578
Stone, clay products	10	704	285	872	0	0	1,870
Machinery	11	1,276	516	0	0	0	0
Other manufacturing	12	6,868	2,781	3,759	0	0	0
Other wholesale	16	94	38	87	0	0	0
Other	1-23	0	0	0	0	0	395,471
Other retail	26	_0	0	0	0	0	362
Subtotal	1-29	47,807	19,361	8,642	0	0	410,614
Sales taxes	31	382	0	327	0	0	0
Business	35	0	0	0	0	0	0
Household	36	0	0	0	46,257	0	0
County	37	0	0	0	13,883	0	0
Municipal	38	0	0	0	5,620	0	0
Township	39	0	0	0	24	0	0
School district	40	0	0	0	12,738	0	0
Special District	41	0	0	0	195	0	
State	42	0	0	0	0	0	24,636
Federal	43	0	0	0	0	0	-54,107
Property income	44	0	0	0	8,103	0	0
Private industry	45	0	0	0	5,428	0	4
Public industry	46	0	0	0	25,068	0	0
Household consumption	47	0	0	0	5,398	0	0
Institutional	48	0	0	0	0	0	36,205
ROW	50	7,657	13,935	27,031	0	0	0
Subtotal	30-50	8,039	13,935	27,358	117,269	0	0
Totals	1-50	55,846	33,296	36,000	117,265	0	417,348

[1]/ Income payments of the capital sectors cover the final demands of the business, household and government sectors identified earlier in the input-output tables. Private industry (Sector 45) payments are identical to gross investment and public industry (Sector 46) payments are identical to government purchases. Household consumption (Sector 47) payments are less than household purchases in the input-output tables (since the household sector is exogeneous to the 29 industry sectors). However, together with the current household consumption (sector 30) income payments, the two sets of payments for household consumption equal the value of household purchases under final demand.

Financing public services

Except for the municipal service enterprises, each public

service is supported largely by local property taxes. Nearly one-half

of local tax receipts were diverted to school districts in the study area.

However, transfers from state government to school districts exceeded

total tax income -- a pattern more pronounced now than in 1967 because

of an expanded educational aid program (7, p. 4). State government in

Minnesota has attempted to reduce local fiscal disparities by under-

taking an increasing share of the burden of education (and, also, wel-

fare).

Additional efforts in reducing fiscal disparities relate to two

criteria noted earlier, i. e., spillover effects and income redistribu-

tion. In 1971, the Minnesota state legislature provided for the

regionalization of 40 percent of the new (post 1971) property tax for

local education. This particular legislation may have other problems

besides being challenged in the courts, but the concept of pooling

property taxes on a regional scale merits serious consideration as

a means of reducing fiscal disparities and, also, costly intra-area

competition for new industry (8).

Because of the regressive nature of the property tax, the pooling

of the local tax base to reduce educational disparities is likely an

interim solution. Logically, the financing of public education is a

responsibility of state government while the financing of public wel-

fare is a responsibility of the federal government (22, p. 173-184).

Presently, however, local governments still support a significant

share of both functions.

Local Funding Alternatives

The provision and financing of rural services is viewed in terms

of criteria for choosing an appropriate governmental level for these

functions. Important here is the competition for local resources be-

tween the development and the maintenance functions of local govern-

ments. For rural areas, particularly, a strong case is being made for

allocating a share of total outlays to stimulate local economic growth

and, thus, the economic viability of the local tax base (16, p. 90).

Stimulating economic growth

Local government outlays to stimulate economic growth are

effective mostly when the economic problem is not to stimulate growth

but to control it. Development outlays in the growing areas, therefore,

are confined largely to infrastructure investment, i. e., sewer, water,

streets and schools. Land use controls are established to reduce

development pressures and overextended public sector commitments

to build required infrastructure on demand (5, p. 10). The development

timing ordinance is one of the newest and most sophisticated techni-

ques for reducing the potential growth in an area. 2/

Despite the development pressures in growing areas the financial

markets react favorably to the issuance of general obligation and/or revenue bonds by local governments. [3/] Use of development districts, tax-increment financing and other new approaches to available sources of funding also is more attractive in growing than in declining areas. Again, local government is utilized to further local business interests in the guise of stimulating needed economic growth (in large part because of the heavy burden of new infrastructure development).

In declining rural areas, growth-inducing infrastructure outlays are minimal. Growth potentials are limited by external conditions which are not influenced by the local investments. Instead, maintenance expenditures are large in part because of an ageing population and the heavy burden of public welfare. In declining areas, therefore, local pressures to increase maintenance outlays are difficult resist, but the lack of economic growth gradually weakens local fiscal capabilities to adequately support needed maintenance functions.

Maintenance expenditures

Maintenance expenditures of local governments, such as health care and education, generally result in cost and benefit spillovers and income redistribution, especially for declining rural areas. Hence, a strong case can be developed for state and federal participation in financing local maintenance activities. [4/] Moreover, an areawide rather than a local approach is called for in providing the essential maintenance services. User proximity, however, is an important consideration in the

location of the service facilities, which may require some physical decentralization within an areawide delivery system.

In some areas, practically the entire public outlay supports maintenance activities while in others these activities may account for less than half of total outlays. If some target level of maintenance expenditures were prescribed, say 80% of total outlays, then an internal constraint would be imposed on the level of growth-inducing or developmental outlays and, hence, on the level of total government outlays. The division of total public outlays between growth and maintenance functions thus becomes an important consideration in the development decisions in the private sector and the financing decisions in the public sector. Citizen involvement in the local decision making processes is important, too, especially when local values may conflict with area and state goals for population growth and distribution.

Area Growth Policy

Both the provision and the financing of rural public services are constrained eventually by areawide potentials for stimulating economic growth and supporting welfare maintenance activities. Improvement in the delivery and availability of rural public services is a precondition for improvement in the economic potential of rural areas (16, p. 87). An economically healthy community base is needed to support these services. Missing in rural development efforts in the past has been a concept of the rural area as part of a regional settlement system in which public policies and expenditures affect in varying degrees, the location and distribution of population and economic activity.

Growing areas

Public services in growing rural areas may be expanding but inadequately because of rapid population and economic growth. For these areas, the deliberate implementation of an area growth policy offers one approach to the rationalization of the development process in the light of local funding constraints.

The Marshan Township experience (in Dakota County, Minnesota) is indicative of changing public attitudes to the open growth philosophy traditionally promoted by developers in growing rural areas (12, p. 4). Unless the staged-growth alternative is the result of an open, non-exclusionary planning process, however, the courts are likely to hold that the limitations on growth are "capricious and un-reasonable." The long-term capital improvements program of the local community must provide for specific staging of the construction activities and subsequent provision of basic municipal services. The objective is to reduce the public costs of private development rather than to exclude particular socio-economic groups from future access to land and housing in the area.

Because growing rural areas typically are part of an expanding metropolitan region, the provision and financing of local public services is influenced by regional plans and programs. Much of the total public outlay for basic community facilities in the region is determined by regional boards which are concerned with capital

improvements of regional impact, i.e., highways, air and water terminals, wastewater treatment plants, libraries, sports stadiums, parks and recreation areas, and public transit systems. Again, the spatial-economic interdependencies between growing urban and rural areas provide strong support for areawide planning of major public services and facilities

Rural community participation in areawide planning is one approach to learning about alternative futures for both urban and rural communities in the planning area. Local financing problems stemming from the expansion of the urbanized area into the rural periphery would be perceived as an areawide planning problem. Restriction of the metropolitan infrastructure development to a prescribed development zone would result in additional pressures of new development in the rural periphery in the absence of an areawide approach to an urban growth policy. However, local efforts to shift development costs to the new residents (e.g., by use of an incremental treatment capacity connection charge to cover plant expansion) would reduce some of these pressures for the existing residential population (23, p.13).

Growing rural areas outside metropolitan areas are confronted with the additional problem of being in the commuting zone of the metropolitan labor force. Here, the public costs of in-migration (from both metropolitan core and outstate areas) are evident in higher local outlays for public welfare and schools (as well as basic municipal

services). However, an areawide approach to development planning and financing in this case would lack the participation of the metropolitan core area communities. The potential for controlling private development and, thus, local government outlays, would be less than in the metropolitan planning area. Here, multi-area and statewide planning approaches are needed to formulate and implement regional development plans.

Emerging from the rationalization of the development planning process is the use of population and employment targets and related land use controls for an entire multi-county planning area. The economic targets would be translated into estimates of land use requirements and population intensities. A land use plan would be implemented by zoning and subdivision ordinances and public expenditure commitments. Local development expenditures would be limited to levels prescribed in the land use and development plans.

Declining areas

Public services in declining rural areas also may inadequately meet local needs but not because of competition from growth-inducing expenditures. Here, the setting of development targets in terms of population and economic activity would depend upon the development targets established in the growing areas. Growth in public services would be guided by these targets and, also, by the availability of public

financing, including proceeds from sale of general obligation or revenue bonds of local governments. A technical capability is needed, however, for simulating infrastructure development and service delivery alternatives for the declining areas in the context of the total regional or statewide settlement system.

The set of economic accounts cited earlier, when projected to a target year (e. g. , 1980), help identify the infrastructure requirements of the target population and industry. All funding services for each expenditure category are identified, also.

Two obvious conclusions emerge from study of the economic projections for the target year, namely, that public infrastructure requirements are increasing more rapidly than local funding sources and that local governments are increasingly dependent on state (and federal) funds for essential public services (18). Use of a staged-growth concept for reducing public financing requirements would be inappropriate. Instead, a statewide approach to local capital improvements programming is needed. A series of statements on statewide development prospects is envisioned which specifies in some detail the local fiscal implications of area growth policy alternatives.

Local governments in declining areas may exercise one or more options on growth policy, but in the context of statewide development planning. Statewide forecasts of funding levels and sources for local public services would be prepared as part of state-

level development planning efforts.

An areawide financing approach also would improve local access to financial markets. The concept of areawide pooling of at least a part of the local tax base also would improve the fiscal prospects of declining rural areas. In addition, the new development district legislation can be used to revive the declining downtown business community in the major area service center or to build an industrial park for new industry moving into the area. Use of new funding sources, such as tax-increment financing of infrastructure development, also would be approached on an areawide scale. In this case, the tax increments resulting from the additional economic activity and the expanded tax base would be used to retire the local bonded indebtedness incurred by the new infrastructure outlays.

Improved pay-off prospects for growth-inducing infrastructure outlays in some declining rural areas may lead to a re-ordering of financing priorities. The proportion of total government outlays allocated to growth functions would become larger as the declining areas improve their long-term economic prospects.

In summary, the prospects for local funding of rural public services are severely limited by the local tax base. In growing rural areas, a strong local commitment to development results in a disproportionately large allocation to growth-inducing capital improvements and public services. In declining rural areas an ageing

population and lack of profitable development prospects results
in disproportionately large allocation to maintenance functions.

A rationalization of public service systems is perceived in the
context of areawide and statewide development planning. Public
service delivery is consolidated on a multi-county area scale in the
case, specifically, of wastewater treatment, hospitals and health
care, and public transportation. Scale, scope and proximity considera-
tions determine the appropriate governmental level for service delivery.

Local funding of rural public services logically is confined to
those services which are lacking in significant benefit and cost spill-
over and income redistribution effects. Water and sewer lines, local
streets and sidewalks, and local parks are included in this category.

In both the provision and financing of rural public services a
statewide development planning approach is needed, especially in the
case of declining areas. Needed, also, is a technical capability for
simulating local fiscal impacts of area growth policy alternatives.
Part of such a capability is a set of economic accounts for each
development planning area which shows the fiscal and institutional
linkages between the public and private sectors. Even more important
is an ability to present alternatives and to assess their fiscal implica-
tions for local communities.

FOOTNOTES

1/ Detailed data for the 23 private industry sectors are available in ref. 18, p. 36-54. Public industry sectors are treated exactly like the private industry sectors with reference to input purchases. However, public industry outputs are allocated to purchasing sectors in proportion to service charges; the remaining outputs not covered by service charges are allocated to the public sectors which support these services.

2/ In the case of Golden v. Ramapo, the New York Court of Appeals decided in May 1972 that a municipality may stage its capital improvements program over a prescribed number of years -- in this case, 18 -- and it may hold private developers to this rate of development (10, p. 10). The concept that local officials would determine growth policy is being extended to a rural township in the Minneapolis-St. Paul metropolitan area (12, p. 10). Here, a six-month moratorium on all development proposals was voted by the Town Board to give township officials time to adopt a comprehensive plan and zoning ordinance. The staged growth approach to planning was approved subsequently in May 1973.

3/ In the study of local public facility needs prepared for the Joint Economic Committee (see, ref. 27) an extensive survey was made of the sources of financing of capital outlays by State and local agencies with particular reference to the municipal securities

market.

4/ A contrary view is represented in the urban economics literature which refers to the "fiscal neglect of urban areas by state government" (see, ref. 20, p. 137). However, the measurement of spill-over benefits from local financing of public education has been neglected in this leterature, along with other-term income distribution effects of rural-to-urban migration and commuting and the rural-urban incidence of state and local taxes.

REFERENCES

1. Advisory Commission on Intergovernmental Relations, <u>Performance of Urban Functions: Local and Areawide</u> Report M-21, September 1963.

2. Advisory Commission on Intergovernmental Relations, <u>State and Local Finances: Significant Features 1967 to 1970,</u> Report M-50, November 1969.

3. Advisory Commission on Intergovernmental Relations, <u>Measuring the Fiscal Capacity and Effort of State and Local Areas,</u> Report M-58, March 1971.

4. Blase, Nicolaas A., James A. Macmillan and Fu-lai Tung, <u>Simulation of Local Government Performance, Revenue and Expenditure Alternatives,</u> Res. Bul. No. 731, Dept. of Agr. Econ. and Farm Management, University of Manitoba, Winnipeg, Manitoba, May 1973.

5. Beckman, Norman, "National urban growth policy: 1973 congressional and executive action," <u>Journal of the American Institute of Planners,</u> 40 (4): 226-242, July 1974.

6. Bosselman, Fred P., "The right to move, the need to grow," <u>ASPO Planning,</u> September 1973, p. 8-12.

7. Brownlee, D. H., <u>Analysis of the Effects of the Minnesota Property Tax Reform and Relief Act on the Financial Position of Local Governments,</u> Minnesota State Planning Agency, St. Paul, Minn.

November 1970.

8.   Citizen League Fiscal Disparities Committee, Breaking the

Tyranny of the Local Property Tax, Citizens League, 84 South

6th St., Minneapolis, Minn., March 20, 1969.

9.   Committee for Economic Development, Modernizing Local Govern-

ment. A statement by the Research and Policy Committee of the

Committee for Economic Development, 477 Madison Avenue, New

York, N. Y., 10022, July 1966.

10.   Freilich, Robert H., "A new dimension in American planning law,"

Minnesota Municipalities, 58 (8): 8-11, August 1973.

11.   Hirsch, Werner Z., "Local versus areawide urban government

services," National Tax Journal, 17:33-339, December 1966.

12.   Iseberg, Gunnar, "The Marshan Township experience," Minnesota

Municipalities, 59 (4): 4-11, April 1974.

13.   Lee, Alvin T. M., "Taxes and financing of public services," Agri-

cultural Science Review, 10:23-29, 1972.

14.   LeRoy, Stephen F. and Peggy Brockschmidt, "The property tax

and school finance," Monthly Review, Fed. Reserve Bank of

Kansas City, December 1972.

15.   LeRoy, Stephen F., "A future look at the property tax -- an

alternative idea," Monthly Review, Fed. Reserve Bank of

16. Maki, Wilbur R., "Infrastructure in rural areas," In: Rural Poverty in the United States, U.S. Gov't. Printing Office, Washington, 1968, p. 86-109.

17. Maki, Wilbur R., "Spatial-economic decentralization and mergers in a metropolitan region," The Regional Science Association Papers, 25:19-132, 1970.

18. Maki, Wilbur R., Area Financing of Water Resource Development in West Minnesota, Bulletin 66, Water Resources Research Center. University of Minnesota, Minneapolis, Minn., 1974.

19. Maxwell, James A., Financing State and Local Governments, The Brookings Institution, Washington, D.C., 1969.

20. Morgan, Daniel C. Jr., "Fiscal neglect of urban areas by a state government," Land Economics, 50: 137-144, May 1974.

21. Netzer, Dick, Impact of the Property Tax: Its' Economic Implications for Urban Problems, Joint Committee Print, 90th Congress, 2nd Session, Supplied by the National Commission on Urban Problems to the Joint Committee Congress of the United States U.S. Gov't. Printing Office, Washington, 1968.

22. Netzer, Dick, Economics of Urban Problems, Basic Books, Inc., New York, 1970.

23. "New method of financing sewage treatment plant expansion," Minnesota Municipalities, 58 (a): 15-16, September 1973.

24. Rose, Jerome G., "New directions in planning law: a review of the 1972-1973 judicial decisions, "Journal of the American Institute of Planners, 40 (4): 243-254, July 1974.

25. Schreiner, Dean F. "Developing rural services with emphasis on financing and servicing local government, "Paper presented at the Southern Farm Management Research Committee Meeting, New Orleans, La., November 19-20, 1970.

26. Stam, Jerome M. and Thomas F. Hady, "Alternatives to the property tax for educational finance, " ERS-USDA, 1972.

27. State and Local Public Facility Needs and Financing Volume 2 Public Facility Financing. Study prepared for the Subcommittee on Economic Progress of the Joint Economic Committee, Congress of the United States, U.S. Gov't. Printing Office, Washington 1966.

28. Ulrich, Martin A. and Wilbur R. Maki, Financing Public Services in West Minnesota, Minn. Agr. Exp. Sta. Bulletin 509, University of Minnesota, St. Paul, 1973.

29. Wycoff, J.C. and J. M. Huie, Financing State and Local Government II. Strategies for Local Government, National Public Policy Education Pamphlet No. 2, Agricultural Extension Service, University of Minnesota, St. Paul, 1973.