

APPENDIX C

Technical Memo #5: Transportation Concurrency Literature Review¹

Completed: November 2002

1. LEVEL OF SERVICE DEFINITIONS AND MEASURES

Below is literature that addresses transportation Level of Service (LOS) and efforts to incorporate multiple modes of travel in calculating LOS.

- Draft Technical Memorandum for the Bellevue, Redmond, Kirkland and Issaquah Concurrency Study, Task 4c Literature Review, by Haliburton, Peter, and Paul Ryus of Kittleson & Associates, Inc.

This document reviews state-of-the-art methodologies being used or considered in Florida and elsewhere for including alternative travel modes — including transit, bicycle, and pedestrian travel — in the transportation concurrency process. The report also summarizes other ongoing work in Florida to implement transit concurrency, and descriptions of existing methodologies for analyzing alternative modes.

http://depts.washington.edu/trac/concurrency/pdf/lit_review.pdf

- Land Developer Participation in Providing for Bus Transit Facilities and Operations, by Hendricks, Sara J., and Cecilia Dyhouse of the Center for Urban Transportation Research, University of South Florida. March 2002.

This report overviews various non-regulatory and regulatory approaches for gaining private sector land developer contributions toward the provision of public bus transit capital facilities and the cost of operations. This report focuses on involvement by land developers in cases of new land development or redevelopment in which funding or other contributions was provided to public bus capital facilities or operations, under circumstances applicable to Florida localities.

<http://depts.washington.edu/trac/concurrency/pdf/hendricks.pdf>

- Transportation Service Standards – As if People Matter, by Ewing, R., Transportation Research Record 1400: 10-17.

This paper argues for a paradigm shift in performance measurements away from speed to personal mobility, accessibility, livability and sustainability, and it identifies and assesses alternative performance measures used around the United States.

¹ For complete report and links to article summaries, visit
http://depts.washington.edu/trac/concurrency/lit_review/lit_review.html

- Roadway Level of Service in an Era of Growth Management, by Ewing, R., Transportation Research Record 1364: 63-70.

This paper calls for fresh thinking about the ways roadway level of service is calculated and recommends the following innovations in the calculation: a) a simple regression method for estimating average travel speeds and, from them, arterial level of service; b) average levels of service to determine adequacy of facilities within travel corridors; and c) the 100th rather than 30th highest hourly traffic volumes as the basis for determining roadway level of service.

- Performance Standards for Growth Management, by Porter, D.R., PAS Report 461. APA Planning Press: Chicago, IL., ed. 1996.

The first five chapters of this report discuss the various performance measures, including those for transportation, that communities throughout the country have employed. The sixth chapter argues for moving beyond volume- and speed-based measures for transportation, and the last chapter discusses some of the key legal issues in performance standards and zoning.

- Assessing Level of Service Equally Across Modes, by Winters, P.L., C. Francis, E. Mierzejewski, and Lisa, T. White Paper. Prepared for Florida Department of Transportation by Center for Urban Transportation Research, College of Engineering, University of South Florida. December 2001.

The primary aim of this paper is to assess the need for developing an LOS system that can be assessed equally for motor vehicle, bicycle, pedestrian, and transit modes. This paper is motivated by the knowledge that current LOS classification schemes make total transportation system performance and multimodal tradeoff decisions difficult to evaluate. Hence there is a need to find a method for assessing level of service across modes in a way that is consistent, as well as easily interpretable.

<http://www11.myflorida.com/planning/systems/sm/los/pdfs/AssessingLOSFinal.pdf>

2. LAND USE – TRANSPORTATION CONNECTION

Below are described a couple of reviews of studies that deal with the connection between land use and transportation.

- Travel and the Built Environment: A Synthesis, by Ewing, R., and R. Cervero. Transportation Research Record, 1780: 87-114. 2001.

The authors review the literature to explore the effects of the built environment on key transportation outcome variables: trip frequency, trip length, mode choice, and composite measures of travel, vehicle miles traveled, and vehicle hours traveled.

-
- Walk and Ride: Factors Influencing Pedestrian Access to Transit, by Cervero, R. Journal of Public Transportation, 3(4): 1-23. 2001.

By analyzing a) aggregate data from the San Francisco Bay Area and b) access trips to Washington Monorail services by residents of Montgomery County, Maryland, the author shows that urban design, particularly sidewalk provisions and street dimensions, significantly influences whether or not someone reaches a rail stop by foot. The article advocates conversion of park-and-ride lots into transit-oriented developments as a means of promoting walk-and-ride transit usage.

<http://www.cutr.eng.usf.edu/pubs/jpt3-4.htm>

3. INTER-JURISDICTIONAL COOPERATION

Both reports examining cooperation among local governments (counties, municipalities, and special districts) and inter-local agreements were reviewed. The emphasis here is not solely on transportation but on cooperation in general.

- Linking transportation and land use by fostering inter- jurisdictional cooperation: Enabling legislation in eight states, by Carlson, D., and S. King. Institute of Public Policy and Management, Graduate School of Public Affairs, University of Washington. 1998.

This reports highlights the lack of institutional mechanisms available for coordinating transportation and land-use authority at the local, regional, and state levels. It calls for practical multi-jurisdictional efforts at the regional and sub-regional levels to fill the void.

- King County and City of Seattle Transfer of Development Credit (TDC) program

Through an inter-local agreement between King County and the City of Seattle, this program allows property owners to sell the development potential from a site in rural King County and transfer the development credits to a site in the Denny Triangle Neighborhood in downtown Seattle. This program is one of the many that the county has developed with cities to promote denser urban development and preservation of rural land and open space.

Source: Turning Regional Visions into Real Results. Carlson, D., and E.L. Schroer. Project Report. Daniel J. Evans School of Public Affairs, University of Washington, Seattle. 2001.

<http://depts.washington.edu/visions>

- Mile High Compact, Denver Region, Colorado (Voluntary Coordination of Local Plans)

The Mile High Compact is a binding, inter-local agreement among 31 municipal and

county governments in the Denver region. It is a voluntary pact designed to implement Metro Vision 2020, the regional comprehensive plan. Signatory governments agree to explicitly link their comprehensive/master plans to Metro Vision 2020, which includes open space buffers between cities and a multi-modal transportation system.

Source: Turning Regional Visions into Real Results. Carlson, D., and E.L. Schroer. Project Report. Daniel J. Evans School of Public Affairs, University of Washington, Seattle. 2001.

<http://depts.washington.edu/visions>

More information about Mile High Compact is available at:

<http://www.metromayors.org/MHCompact.html>

- Transportation Capital Transition Agreement between City of Vancouver and Clark County

Under this inter-local agreement, responsibility for managing the county's Transportation Improvement Program (TIP) moves from the county to the city of Vancouver as areas are annexed. The city adopts and intends to implement the county's TIP. The city reserves the right to modify, create, and define design standards and parameters for projects or portions of projects with a local share provided by the city. Revenues for local match, public shares that were collected into the county's Road Fund, will now flow into the city's General Fund. The city assumes responsibility for the local share of all projects in the annexed areas after the date of annexation.

The city is to manage the Traffic Impact Fee (TIF) districts that are wholly or partially included within the annexing area. The county transfers to the city all fund balances in these TIF districts. For districts falling under both jurisdictions, a joint decision making process for project selection and prioritization is established. Existing road improvements and financing agreements entered into by the county will be assigned to the city, which will participate in and be signatory to any such agreements for projects falling within both jurisdictions.

The Inter-local Agreement can be reviewed at
<http://www.mrsc.org/Subjects/Planning/growth.aspx>

- Revenue Sharing Agreement Between Grant County and the City of Moses Lake (September 20, 1999)

Grant County and the city of Moses Lake reached a mediated agreement to provide for timely annexations by Moses Lake while protecting the financial viability of the Grant County Road fund. The agreement contains reimbursement formulas to help the county adjust to reduced road revenues. The city will reimburse the county at a decreasing rate over a six-year period, corresponding with the time frame of the county's capital improvement program. Separate formulas are established for resource-based and non-resource based property annexations. The agreement also addresses city-county cost sharing for maintenance costs on a specific road. The city will also reimburse the county for the locally funded portion of any capital investments made by the county within the unincorporated urban growth area at the time of annexation.

A copy of the complete agreement is available at <http://www.mrsc.org/govdocs/G76-revshare.aspx>

Source: http://www.mrsc.org/Site_Map.aspx

- Urban Growth Area Agreement: A component of the City of Walla Walla and Walla Walla County Comprehensive Plan Implementation Program

Walla Walla County and the city of Walla Walla have signed an agreement that establishes a framework to address fiscal impacts of the annexation of significant developed commercial and industrial properties. In the agreement, the city and county have established a formula that will compensate the county for lost revenue resulting from annexation and compensate the city for expenditures for services to the annexed area.

To view the complete agreement go to <http://www.mrsc.org/govdocs/W33-ugama.pdf>

- Snohomish County's Inter-local Agreements

The county enters into many inter-local agreements with local jurisdictions such as cities, special purpose districts, and state or federal departments. These agreements essentially list the details of responsibility and actions. They are reviewed by the County Council and executed by the County Executive. Specific agreements briefly described include Master Annexation Inter-local Agreements and Annexation-specific Inter-local Agreements

Source: <http://www.co.snohomish.wa.us/PDS/900-Planning/interlocals/default.asp>

4. CONCURRENCY AND ADEQUATE FACILITIES

Below are reports on Florida's concurrency program, Maryland's Adequate Facilities Provision Ordinance (AFPO), and the salient features of a model AFPO. (Note that there is some overlap in the material included in this section and Section 1, "Level of Service Definitions and Measures.")

- Florida's Transportation Concurrency: Are the current tools adequate to meet the need for coordinated land use and transportation planning?, by Steiner, R. University of Florida Journal of Law and Public Policy, 2001(Spring): 269-297.

This paper first reviews the history of Florida's transportation concurrency requirements, then discusses the process of implementing transportation concurrency. Finally, recommendations are made for improving the current system.

- Growth management and smart growth in Florida, by Nicholas, J.C., and R.L. Steiner. Wake Forest Law Review, 35(3): 645-670. 2000.

This article reviews Florida's growth management history from 1972 to the present

and also its transportation concurrency program. The review and recommendations about the transportation concurrency program are similar to those in the above article. In sum, the article argues for tying local comprehensive planning to budgeting because lack of funding has been suggested as a major factor in the failure of Florida's transportation concurrency system.

Article available through Lexis-Nexis

- Adequate Public Facilities Ordinances and Transportation Management, by White, S.M. PAS Report 465. APA Planning Press: Chicago, IL. 1996.

This report outlines the various aspects of Adequate Public Facility Ordinances (AFPO), including their history, the legal issues involved, and issues to be considered while designing such an ordinance. The report also outlines the AFPO of Montgomery County, Maryland; the concurrency system of Florida; and concurrency management regulations of Washington State.

- TDM Evaluation Model from FHWA

The TDM Evaluation Model is a software program that analyzes the vehicle-trip reduction effects of a wide range of travel demand management strategies. The TDM model has been widely applied throughout the U.S. to analyze transportation control measures or other TDM programs. The model can address the following TDM strategies:

- improved transit
- HOV lanes
- carpooling and vanpooling promotion
- telecommute and work hour strategies
- pricing and subsidies

http://www.fhwa.dot.gov/environment/cmaqeat/descriptions_tdm_evaluation_model

5. FUNDING MECHANISMS

Below are reviews of various innovative or regional funding mechanisms.

Also included are documents that look conceptually at some of the regional funding mechanisms and regional coordination models that might be relevant for the East Side Concurrency Study.

- Cases on External Funding Sources: Dedicated Local Taxes. Chapter IV (1) in Funding Strategies for Public Transportation (Part B). Transit Cooperative Research Program (TCRP) Report 31 Volume 2, pg: 29-54. National Academy Press: Washington D.C., 1998.

This chapter looks at the way local taxation has been used by Atlanta, Georgia, and Pullman, Washington, to fund their transit services.

- Transit Impact Development Fee: San Francisco Municipal Railway, San Francisco, California. Chapter IV (2) in Funding Strategies for Public Transportation (Part B). Transit Cooperative Research Program (TCRP) Report 31 Volume 2, pg: 55-66. National Academy Press: Washington D.C., 1998.

This chapter reviews the key feature of the ordinance authorizing San Francisco to collect a Transit Impact Development Fee (TIDF). The fee was designed to recover the operating subsidy and capital expansion costs of the San Francisco Municipal Railway (MUNI).

- Real Estate Transfer Taxes

Real estate transfer taxes rely on real estate transactions. Unlike impact fees that are generally based only on the value of new improvements, real estate transfer taxes are based on sales price, reflecting the value of both the land and the infrastructure improvements. Because real estate transfer taxes are not dependent on new development but rather on an active real estate market, revenues from real estate transfer taxes are more predictable than revenues from other financing schemes such as impact fees.

Source: <http://www.vapreservation.org/growth/pf.htm>

- San Jose, California: Real Estate Transfer Tax to Fund Facility Development

In 1972, San Jose adopted a real estate conveyance tax that assesses a value-added tax on every sale or transfer of real property in the city. Revenues from the tax are earmarked for the acquisition and development of parks, libraries, fire stations, and emergency services. Under the current allocation formula, a minimum of 48 percent of tax revenues must be spent on parks within the district, up to 16 percent may be expended on parks outside the district, and a maximum of 36 percent can be spent for specified non-park uses. The majority of San Jose's real estate transfer tax revenues are from developed property rather than from new development.

Source: <http://www.vapreservation.org/growth/sjcr1.htm>

- Boston, Massachusetts: Real Estate Transfer Taxes Linked to Public Facility Management

Boston instituted its affordable housing linkage policy in December 1983 with an amendment to its zoning code. Under Boston's housing linkage law, developers of large commercial projects are required either to build affordable housing or to contribute money to build such housing. The charge assessed to developers is calculated at \$5 for every square foot they develop over 100,000 square feet. By 1990, developers had committed to pay over \$76 million in housing linkage fees, with over \$28 million in linkage fees already committed to create over 2,900 housing units,

80 percent of which were targeted for low- and moderate-income residents.

Source: <http://www.vapreservation.org/growth/bmlr1.htm>

- Minneapolis-St. Paul, Minnesota: Regional Tax Base Sharing Used to Fund Public Facilities

The regional property tax sharing program within the seven-county Minneapolis-St. Paul metropolitan area was established by the Fiscal Disparities Act of 1971, and the state legislature implemented it in 1975. Under the Act's requirements, a local jurisdiction compares its commercial and industrial property values with its 1971 assessment for those properties. Forty percent of the increase over the 1971 assessment is put in a metropolitan pool, which is then redistributed according to each community's population and overall tax base. When the program began, Minneapolis and St. Paul were the major beneficiaries. Minneapolis is now a net contributor because of the successful redevelopment of its downtown, and St. Paul's redevelopment efforts have reduced its dominance of the recipient pool. Small communities are now the major beneficiaries of the program.

Source: <http://www.vapreservation.org/growth/mspm1.htm>

- Hackensack Meadowlands, New Jersey: Another Innovative Example of Regional Tax Base Sharing

In New Jersey's Hackensack Meadowlands, a regional commission controls development and apportions property tax revenue among fourteen municipalities. The tax-base sharing program is aimed at ensuring that those communities that contain valuable tidal wetlands do not suffer financially because wetlands can not be developed for business or industrial development. The 1972 Hackensack Meadowlands Development Commission and Redevelopment Act provides the legal basis for the tax-base sharing program. Each town's tax base as of 1970 is unaffected by the arrangement, and all the revenues from that tax base continue to go to the individual towns. Forty percent of the increase in the tax base over the 1970 valuation is subject to the tax-sharing program. Redistribution is based on the number of school children and the proportion of property the town has in the Meadowlands District. All new tax revenues are distributed among the fourteen towns, with no diversion of tax revenue to the regional commission.

Source: <http://www.vapreservation.org/growth/hmnj1.htm>

- Nelson Symposium on Florida's Growth Management Legislation, University of Florida Journal of Law and Public Policy. 2001 (Spring), Issue 2.

The eight articles and one commentary articles can be reached through Lexis-Nexis are as follows:

- The Ups and Downs of Growth Management in Florida, Nicholas, James C.

- Integrating Water Management and Land Use Planning: Uncovering the Missing Link in the Protection of Florida's Water Resources?. Angelo, Mary Jane
- Concurrency, Concurrency Alternatives, Infrastructure, Planning and Regional Solution Issues. Weaver, Ronald L.
- Florida's Transportation Concurrency: Are the Current Tools Adequate to Meet the Need for Coordinated Land Use and Transportation Planning?. Steiner, Ruth L, Ph.D.
- Restructuring Florida's Growth Management System: Alternative Approaches to Plan Implementation and Concurrency. Pelham, Thomas G.
- A Role for State Planning: Intergenerational Equity and Adaptive Management. Bosselman, Fred.
- Reforming Growth Management in the 21st Century: The Metropolitan Imperative. Porter, Douglas R.
- A Call to Revitalize the Heart of NEPA: The Alternatives Analysis. Wittorff, Kelly.
- CASE COMMENT: Commercial Speech: Mandatory Disclaimers in the Regulation of Misleading Attorney Advertising, Mason v. Florida Bar, 208 F.3d 952 (11th Cir. 2000). Borisov, Stacy.

