A G E N D A

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METRO

Meeting: **FUTURE VISION COMMISSION**

Date: September 13, 1993

Day: Monday

Time: 4:00 p.m. - 6:30 p.m.

Place: Metro, Room 370

	Approximate Time
1. CALL TO ORDER	5 minutes
3. ROLL CALL	
2. PUBLIC COMMENT (*two minute limit, please*)	
4. MINUTES Approval of August 30, 1993 Minutes	
5. Proposed Timeline DISCUSSION - Seltzer, Group	120 minutes
6. PUBLIC COMMENT on Items not on the Agenda	5 minutes
7. OTHER	

Please R.S.V.P. to Barbara Duncan at 797-1750 by September 10th if you are unable to attend

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FUTURE VISION COMMISSION
Meeting Summary, August 30, 1993

Members in attendance: Len Freiser, Chair; Lisa Barton-Mullins, Judy Davis, Mike Gates, Wayne Lei, Robert Liberty, Peggy Lynch, Peter McDonald, Susan McLain, John Magnano, Ted Spence, Rod Stevens and Robert Textor.

Others in attendance: Karen Buehrig, Andy Cotugno, Barbara Duncan, Ken Gervais, Ethan Seltzer and Mark Turpel.

I. Call to Order and Roll Call
The meeting was called to order at 4:10 by Chair Freiser and a quorum was declared.

II. Public Comment - none

III. Minutes
Approval of August 30, 1993 minutes. Rod Stevens clarified his comments to the Chair, which were related at the last meeting. His comment was that you start with the concept and then work backwards to the specifics. With that correction, the minutes were accepted.

IV. Region 2040 Presentation and Discussion
Andy Cotugno gave some background on the Region 2040 process. Region 2040 has two phases: Phase 1 asks what urban form options should we be looking at, Phase 2 evaluates those urban form options and writes a choice among those options. Overlapping the Region 2040 timeline is the Future Vision time frame to produce its product and the Council to consider adoption of that product.

Mark Turpel stated that the Regional Urban Growth Goals and Objectives (RUGGO) contains two parts or goals. Goal one addressed:

- Citizen participation
- RPAC (Regional Policy Advisory Committee)
- Implementation
- Amendment procedures

Goal two addresses:

- Water
- Air
- Natural areas and parks
- Agriculture and forest land preservation
- Housing
- Public services
- Transportation
- Economic opportunity
- Urban/Rural transition
- Urban Growth Boundary
- Urban Design

Ken Gervais stated that the first phase of Region 2040 was a process of information gathering on

public opinion about growth and change. The results of this information gathering is in the document "Summary of Round 1 of Public Involvement". Out of this information, the three growth concepts were formed.

Andy Cotugno went over the three growth concepts, A, B and C. When we asked if this was the right range of options to be looking at, it was decided a "base case" was needed. It attempts to project ahead based on current policies and practices. Concept A is similar, but takes into consideration adaptations that would be made in order to meet Vehicle Miles Traveled reductions, air quality and other mandated requirements. Concept B holds growth within the current UGB. Concept C increases density within teh current UGB but also provides for target development of communities outside of the UGB. Andy Cotugno stated that in Phase 2 of Region 2040 the growth concepts are being developed in more detail, such as how much growth will happen in each area.

Mark Turpel distributed a memo on Descriptive Indicators, and discussion followed regarding the Request for Proposal that Metro is now accepting bids on, and which indicators will be measured by Metro staff and which will be measured by a consultant. Andy Cotugno stated that by the end of the year they will publish a document defining these concepts in terms of maps, detailed evaluation and depictions of urban design.

V. Discussion of FVC Workplan

Ethan Seltzer distributed a memo on the Future Vision Commission Workplan. Discussion followed questioning if the main role of the Commission is to make a recommendation to the Council on the choice of a growth concept. Ken Gervais stated that the Charter Committee had felt the FVC would not create a regulatory document, but that the Commission would create a intellectually and emotionally compelling document. The compelling vision will suggest a concept. Wayne Lei suggested the document may be a more lyrical than technical.

Motion: Robert Liberty moved that the Commission arrange its workplan in order to give specific and timely recommendations on choice of growth concepts to the Metro Council. Mike Gates seconded the motion.

Discussion followed on reaching consensus versus voting on motions.

Amendment: Wayne Lei proposed an amendment that the Commission's recommendation to the Metro Council be in the form of a draft vision document. The amendment did not receive a second.

Vote: A vote was taken on the motion (without the amendment), it passed unanimously.

Discussion of the workplan timeline continued. Mike Gates suggested a more detailed timeline be developed. Rod Stevens requested a detailed 12 month schedule. Peggy Lynch stated that results of public involvement efforts should be presented to the Commission, and that Metro's Committee for Citizen Involvement an appropriate body to help arrange public involvement. Robert Liberty requested that there be outside critics and advocates to speak on each concept. Wayne Lei suggested a questionnaire to determine Commissioners' knowledge. An informal session after the September 13th meeting was planned.

The meeting was adjourned at 6:40pm.

Respectfully submitted by Barbara Duncan.

Future Vision Commission

Draft Workplan Schedule
9/11/93

What follows is a proposed schedule for Commission activity, meeting by meeting, through next July. Please note that the schedule is predicated on preparing the Commission to comment uniquely from its vantage point on the Region 2040 urban form alternatives next summer. The Region 2040 process gives the Commission the opportunity to both provide a unique perspective to the Metro Council and to test the utility of the vision statement prepared by that date.

The Commission will begin with a discussion of what ought to be kept, changed, and added for each of four topic categories. The topic categories have been identified using the notes from previous Commission meetings and are proposed to be:

1) The Natural Environment

2) Sense of Place and the defining Icons for our Communities (built environment and cultural landscape)

3) Economic Vitality (access and opportunity for both employers and employees)

4) Community and Social Well-being (our social contract with each other)

This list can be revised. After the fifth meeting, the Commission will have a draft "vision" statement that can be used as the basis for discussions with invited commenters. Further review and revision of the vision statement will take place following incorporation of comments, other public contact, and background studies.

The Commission may want to move the schedule back somewhat in order to ask for and receive information needed by commission members to enable them to participate fully in the discussion. This would also have the advantage of providing a logical time for a tour. Note that the photo project would be targeted to coincide with the Commission's discussion of Sense of Place and defining Icons.

The first column lists the meeting number. The second column describes the nature of the Commission's work for that meeting. The third column describes the work of staff in preparation for that meeting. The fourth column describes public contact activities to support the activities of the Commission. Please note that this last column will be filled in based on the discussion of the Commission regarding tie-ins with the participatory activities planned for the Region 2040 project.

The schedule is presented in the context of the five-step process outlined at your last meeting. The conclusion of the second Commission discussion has been moved back to the end of January to accommodate more invited commenters, though the Commission will probably want to have some kind of formal comment as part of almost every meeting. Again, this schedule only goes through the first ten months. Keep in mind that a second phase of Commission activity, concerning implementation and preparing for a substantive linkage between the Future Vision and the Regional Framework Plan, will be developed in the months ahead.

Meeting		Commission Discussion	Staff Work	Public
Begin Step 1:				
		1) Commission Discussion I - The Commission will begin by discussing:		
		-- boundaries for the work of the Commission; and		
		-- what, within those boundaries, ought to be kept, added, or changed in the metropolitan region. Commission members would be asked to organize their thoughts according to specific categories, including landscape, natural resources, communities, economy, education, culture, families, and linkages. Complete by end of October.		
(Sept.)	1	Workplan/Environment	Calendar	Develop List
	2	Sense of Place/Icons	Contact Plan/Slides	Invite Commmenters
(Oct.)	3	Economic Vitality	Parallel Activities	Growth Conference
	4	Community/Social	Parallel Activities	
(Nov.)	5	Review Draft	Write Revised Draft	
Begin Step 2:				
		2) Invited Commenters - The Commission has indicated a desire to invite community leaders into the process at an early date. To make the most of their time, and to focus their comments on the task before the Commission, the results of the Commission's discussion will be written up and provided in advance to invited commenters. Invitees will be asked to consider the same set of questions as the Commission -- what should be kept, added, and changed -- and to comment on the results of the Commission's discussions to date. Ongoing through April.		
	6	Commenters		
(Dec.)	7	Commenters	Summarize	
	8	Commenters	Summarize	
(Jan.)	9	Commenters	Summarize	
	10	Commenters	Summarize	
Begin Steps 3 and 4:				
		3) Commission Discussion II - Based on what it hears, the Commission will revise the results of its first discussion and define background studies needed to provide a reality check on the product of the its discussions to date. Complete by December.		

4) Testing and Revision - The background studies will be used by the Commission to test the ideas in its discussion to that point, and to help establish the relationship between and relative priority of the elements to be kept, added, and changed. Complete by May.

(Feb.)	11	Review Background Docs.	Link to Documents
	12	Review Background Docs.	Link to Documents/Summmarize
(Mar.)	13	Discuss and Revise	Discussion Questions
	14	Discuss and Revise	Summarize
(Apr.)	15	Review Draft	Write Revised Draft

Begin Step 5:

5) Document Editing and Public Review - Discussion with the public and decisionmakers to focus and refine the vision statement. Complete by September.

	16	Commenters	Develop Discussion Questions
(May)	17	Commenters	Summarize
	18	Discuss and Revise	Write Discussion Questions
(June)	19	Test against 2040	Review 2040 Plan
	20	Draft 2040 Comments	Write Discussion Questions
(July)	21	Implementation	Draft Comments

THE TRAVEL AND URBAN FORM IMPLICATIONS OF TELECOMMUNICATIONS TECHNOLOGY

by

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Discussion Paper for FHWA/LILP Workshop
METROPOLITAN AMERICA IN TRANSITION:
Implications for Land Use and Transportation Planning
September 9-10, 1993
Washington, DC

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ABSTRACT

Telecommunications technology could affect travel in three ways: by substituting for travel, by stimulating new travel, and by making more efficient or in some way rearranging travel that would have occurred anyway. Collectively, these three types of effects have implications for urban form. Due to the complex interactions among those effects, however, the implications are not straightforward. Conventional wisdom holds, with reason, that telecommunications will lead to increased decentralization -- greater urban sprawl. Several points are discussed regarding that view, partly supporting and partly moderating it.

Specifically: the direct travel impacts of telecommuting are likely to be small, as are the relocation impacts of telecommuting. The impact of IVHS technology on decentralization is likely to be much greater, as more people will use IVHS, more often, than will telecommute. It is important to distinguish micro-scale decentralization (relocation to the urban fringe) from macro-scale decentralization (relocation to a different region or country); telecommunications can lead to both, but the impacts and issues can be quite different. Finally, telecommunications is only a facilitator, that permits centralization as well as decentralization; other factors actually drive and determine location decisions.

A number of research studies are suggested, involving the impacts of telecommunications in urban areas, exurban areas, as a tool for rural/small town economic development, and internationally. Several policy issues are implicit in these studies, such as the continued sociodemographic fragmentation of American society, the provision of infrastructure to support large shifts in population, and the commitment to economically viable CBDs.

THE TRAVEL AND URBAN FORM IMPLICATIONS OF TELECOMMUNICATIONS TECHNOLOGY

1. Introduction

The potential impacts of telecommunications technology on travel can be classified into three different types (Salomon, 1986). *First, telecommunications may substitute for travel.* Since much travel derives from the need to communicate information, the increased ability to communicate that information electronically rather than physically may reduce some kinds of trips. Telecommuting, teleconferencing, teleshopping, and telebanking are often-cited examples. These and other applications of telecommunications technology are even sometimes referred to as "tele-substitutions" (see, e.g., USDOT, 1993). That designation can be misleading, however, in that such applications by no means always substitute for a trip. In many cases they represent new communication that would not have occurred otherwise.

Second, then, telecommunications may generate additional travel. This stimulation may be direct or indirect. Directly, increased access to information and ease of communication is likely to increase all forms of communication -- face-to-face (requiring passenger travel), hard copy (involving goods movement), and telecommunications (Mokhtarian, 1990). For example, on-line information services may make it easier to learn about, and buy tickets for, cultural events that are then attended in person. They may also make it easier to discover people of like interests, generating travel to meet face-to-face.

Indirectly, telecommunications may increase travel in the short term by freeing up time (due to trip substitution) that may be partly used for more passenger travel. In the goods

movement area, the telecommunications-supported just-in-time inventory management system has led to more numerous and inefficient deliveries of less-than-truckload shipments (see, e.g., Gordon, 1993b). Over the long term, telecommunications may facilitate more dispersed land use patterns, that will in turn lead to longer trips. This point is addressed in more detail below.

Finally, telecommunications may modify travel that would have occurred anyway. Such modifications include making trips faster because of increased efficiencies made possible by telecommunications. Other modifications include changes in departure time, destination, mode, and route induced by telecommunications technology. Potential Intelligent Vehicle/Highway System (IVHS) applications can have these types of effects; various applications available today can have similar impacts. These trip modifications have implications for total vehicle miles traveled (VMT) as well as other trip characteristics.

Of course, the same application may have multiple effects on travel. Telecommuting may substitute for the commute trip but stimulate other travel in the time saved. Teleshopping may save the consumer a trip to the store, but generates or modifies travel for the commercial package delivery firm. Making trips faster due to IVHS may induce more or longer trips. Thus, a rigorous study of the travel impacts of telecommunications is likely to require a broad, systemwide analysis.

Collectively, these three types of effects have implications for urban form. Due to the complex interactions among those effects, however, the implications are not straightforward.

2. Telecommunications and Decentralization

Conventional wisdom holds that telecommunications will lead to increased decentralization - greater urban sprawl - with all the negatives that implies (see, e.g., Goddard and Pye, 1977; Kutay, 1986). There is sound historical reason for this belief: past transportation improvements that have increased the speed of travel have generally contributed to dispersion to lower-cost land and lower-density development on the urban fringe (see, e.g., Muller, 1986). To the extent that telecommunications is "traveling at the speed of light", it is logical to expect decentralization to result.

However, several points regarding that view deserve further discussion. These points partly support the decentralization assumption and partly moderate it.

First, the direct travel impacts of telecommuting are likely to be small in the aggregate. Individual travel impacts are substantial for those who telecommute: an average of 38 person-miles (27 vehicle-miles) per day, or 75% of total daily person-miles, according to the major empirical studies to date (Handy and Mokhtarian, 1993b). However, telecommuting occasions are likely to remain a relatively small proportion of total work occasions, even after considerable growth beyond current levels. Examining a variety of data sources, Handy and Mokhtarian (1993a) estimate that currently, 1.4% of workers telecommute on any given weekday in California. Since average telecommuting frequency is only about 1.2 days per week, this means that about 5.8% of the California workforce telecommutes at some time today. In a companion study (Handy and Mokhtarian, 1993c), they project an equilibrium level of 9.6% of the workforce telecommuting on a given weekday -- to be achieved some-

time around 2015. This translates into relative reductions in person-miles of about 7%. A reduction of this amount will be more than swamped out by overall increases in travel over the next 22 years.

Second, any negative relocation impacts of telecommuting may also be small. Empirical evidence to date is limited, since project evaluations have been short-term (one or two years). What evidence there is (Nilles, 1991; Mokhtarian, 1993) suggests that telecommuting may have helped to prompt long-distance residential moves for a minority of participants, but that based on comparison to a control group, most of those moves would likely have occurred anyway. In any case, the aggregate impact on VMT for telecommuters is still a large reduction. Lund and Mokhtarian (1993) present a simple theoretical model of the residential relocation impacts of telecommuting. They show that individual commute VMT is generally still reduced after a new (more distant) optimum residential location is found, although the reduction is of course smaller than would be the case without taking relocation effects into account.

Third, the contribution of IVHS technology to decentralization is likely to be much greater than that of telecommuting. On the one hand, there is an important discontinuity to consider: transportation improvements (even telecom-supported improvements such as IVHS) merely speed up travel, while telecommunications technology may obviate the need to travel altogether -- breaking the barrier requiring physical presence in order to communicate. This suggests that, *ceteris paribus*, a trip-substituting telecommunications application such as telecommuting will have a greater decentralizing effect on location decisions than IVHS. This may be true for those who telecommute frequently. But as indicated above, that will

probably apply to only a minority of the workforce. IVHS, on the other hand, will presumably ultimately be available to everyone (at least in metropolitan areas), for all trips, all the time. Thus, to the extent that it does succeed in speeding up travel, the effects of IVHS on urban form could be profound.

Fourth, it is important to distinguish micro-scale decentralization (relocation to the urban fringe) *from macro-scale decentralization* (relocation to a different region or country; Nijkamp and Salomon, 1989; Salomon and Schofer, 1991). Telecommunications can support both, but the impacts and issues can be quite different. For micro-scale dispersion, a major concern is increasing urban sprawl. Macro-scale dispersion, on the other hand, can be a positive force for economic development in currently under-developed areas (Parker, *et al.*, 1992). Over time, it may even serve to mitigate the growth of urban sprawl by reducing the necessity of migrating to (or remaining in) urban areas to find suitable work.

However, macro-scale decentralization raises some issues of its own. An important question is the extent to which new jobs in under-developed areas are truly new, home-grown positions (the "gardening" concept described by Niles, 1991) rather than existing jobs being shifted from elsewhere. Telecottages throughout Europe, and the rural telecommuting centers being planned in Kentucky and elsewhere (Bagley, *et al.*, 1993), attempt to emphasize new job creation, with varying degrees of success.

Job shifting can be the outcome of a process of destructive competition among regions for firm location (Niles' "hunting" concept; see, e.g., Schwartz, *et al.*, 1992). It can mean affluent professional workers moving to small resort communities in large enough numbers to drive

up land values and affect local culture (Clifford, 1989). And it can mean a loss to the U.S. economy of offshore data entry and professional jobs (see, e.g., Howland, 1993). However, even job shifting can also mean a welcome economic infusion to the receiving community, at little cost or even positive net benefit (of decreased congestion) to the donating community (see Gordon, 1993a; Spinks, 1991; and Ohnishi, 1992 for descriptions of an interesting small-scale approach in Kansas and large-scale strategies in Japan).

Finally and most importantly, telecommunications is only a facilitator; other factors actually drive and determine location decisions (Mandeville, 1983; Nijkamp and Salomon, 1989). People and firms do not move to the urban fringe, or out of the region entirely, just because telecommunications makes it possible to do so. They move because land is cheaper or labor is more plentiful or the area is scenically attractive or because of local financial incentives, or for a host of other reasons. It has been pointed out that telecommunications supports centralization as well as decentralization: modern skyscrapers would not be possible without the telephone (de Sola Pool, 1980). Pressman (1985) notes a number of forces supporting increased deconcentration, and a number of other forces supporting continued concentration. Gottman (1983) reminds us that:

> "The organization of space is man-made; it is a product of the collective will of the participants... Living and working together in compact settlements may seem unnecessary once the technology to overcome distance is well-developed. However, it does not necessarily follow that the compact city has been made obsolete and that settlements will disperse through-out the countryside. It all depends on what people decide to do."

Whyte (1976), in arguing for the continued viability of metropolitan downtowns, observes, "geometry is tough to repeal". That is, the center retains an intrinsic attraction simply because it *is* central -- closer, by definition, to more places than anywhere else. Telecom-

munications will never completely eliminate the need for face-to-face interaction or for goods movement; the agglomeration economies of urban centers will diminish but not disappear.

Thus, telecommunications will not eliminate locational advantage and completely homogenize settlement patterns. The massive already-built environment (Mandeville, 1983); the tendency of like or inter-related industries (or groups of people) to cluster together (Muth, 1985); distinctive geography, climate, and other amenities; differences in infrastructure capacity and topology; and the role of cities as cultural, political, and economic centers (Meier, 1962; Gottman, 1983) are only some of the reasons why not all locations are created equal.

Depending on how the decision variables are weighted in each instance, the optimal location for a particular individual or firm may be the urban center, the urban periphery, or an exurban or rural area. But *most* location choices are likely to be incremental accretions to where *most* activities are currently located. Thus, we are likely to see simultaneously, continued growth in metropolitan areas (though not necessarily in their centers), emergence of multiple nuclei in expanding metropolitan areas, growth of smaller cities into regional hubs and specialized centers, *and* some movement into currently rural areas. An important question for policymakers is whether these incremental accretions will propagate sprawl even more widely, or whether they will be channeled into more efficient higher-density, balanced land use, and infill development patterns.

Public policy decisions have historically had an important impact on the viability of central business districts (CBDs) in particular, and on urban form in general. Governments have wielded their zoning authority to block or downsize development in the face of favorable market forces. Conversely, they have also attracted development through tax breaks, provision of infrastructure, and other incentives (Giuliano, 1989). Today, policy choices can help determine the extent to which telecommunications technology will support increasiing decentralization, and decreasing density of development.

3. Research and Policy Issues

A number of research studies would be of value in increasing our understanding of the impacts of telecommunications technology on urban form. Space permits only a brief mention of the possibilities; each suggestion below carries within it numerous specific questions of interest.

In *urban areas,* we could

- track telecommuters longitudinally to assess long-term impacts on residential location, job choice, and travel;

- continue to study the role of telecommunications in business location and relocation decisions;

- analyze the short- and long-term transportation impacts of those business decisions; and

- explore ways to strengthen the role of telecommunications infrastructure in supporting the urban core.

In *exurban areas,* we could

- monitor telecommunications-facilitated residential and business relocation to high-amenity areas such as resort towns.

Regarding the use of telecommunications for *rural and small town economic development,* we could

- learn more about successful "gardening" (local job creation) projects;

- demonstrate and evaluate rural telecommuting centers as in Kentucky and elsewhere; and

- analyze the success of job shifting strategies such as those being followed in Kansas and Japan.

Internationally, we could

- monitor the location of firms and employees offshore, with distinctions between the situations for data entry workers and skilled professionals likely to be of interest.

Any number of policy issues are implicit in these studies. One such issue is the ability (and desirability) to provide infrastructure to support large shifts in population to the urban fringe or to exurban areas. There is also an equity issue: the greater ability of middle and upper class workers to live anywhere they choose will contribute to the ongoing sociodemographic fragmentation of American society. And, how to achieve or maintain economically viable CBDs will continue to be a concern.

Once again, telecommunications is only a supporting player in these policy discussions. The ability of the affluent to segregate themselves is not new to advanced technology, for example, but has been around since the first zoning laws and before. We need to address the deep-rooted causes of moribund central cities, not the symptoms. Our challenge, then, is to use technology as a tool to help achieve positive public goals. Unchecked urban sprawl is not the inevitable consequence of telecommunications technology. But it may well be the inevitable consequence of poor planning.

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