



DEPARTMENT OF COMMUNITY DEVELOPMENT SERVICES

Planning Division

m e m o r a n d u m

TO: Urbana Plan Commissioners

FROM: Robert Myers, AICP, Planning Manager

DATE: October 30, 2009

SUBJECT: Long Range Transportation Plan 2035 presentation

At the November 5, 2009 Plan Commission meeting, a presentation on the draft Long Range Transportation Plan 2035 will be made by Champaign-Urbana Urbanized Transportation Study (CUUATS) staff. A copy of the plan's Executive Summary is attached. To view a copy of the full draft document, please access the Long Range Transportation Plan's official web page at: <http://www.ccrpc.org/planning/transportation/lrtp2/documents.html> .

The Long Range Transportation Plan is our urbanized area's official plan for long-term, major investments in our transportation system. The planning area encompasses the Champaign-Urbana-Savoy-Bondville urbanized area as defined by the 2000 census. The plan's scope includes the movement of people and freight within and through the region, whether by automobiles and trucks, buses, trains, walking, or bicycling, over the next 25 years. Implementation of the plan is overseen by the CUUATS Policy Committee with Mayor Prussing serving as the City of Urbana's representative.

The plan is federally mandated for areas receiving federal transportation funds and must be revised every five years. The draft plan under consideration would update the existing Long Range Transportation Plan adopted in 2004.

CUUATS staff is will be asking member communities to officially endorse the Long Range Transportation Plan. At the November 19, 2009 Plan Commission meeting, City staff anticipates that the Commission will discuss and make a recommendation to the City Council. The City Council would then consider a resolution of support at their December 7, 2009 meeting. CUUATS staff is working to have the plan approved and endorsed by participating jurisdictions by the end of December 2009.

Attachments:

L RTP Executive Summary

cc: Eric Halvorsen, AICP, CUUATS staff

CHOICES



Champaign-Urbana Urbanized Area Transportation Study Long Range Transportation Plan



December 2009

Champaign Urbana Urbanized Area Transportation Study
Champaign County Regional Planning Commission
1776 East Washington Street
Urbana, IL 61802

Table of Contents

Executive Summary	10
1 Introduction	12
1.1 Purpose of the LRTP	12
1.2 MPO History	12
1.3 CUUATS Organizational Structure	13
1.4 CUUATS Funding	14
1.5 LRTP Planning Area	14
1.6 LRTP Process	16
2 C-U-S-B Urbanized Area	19
2.1 Land Use Overview	19
2.2 Geographic Location and Incorporated Units	22
2.3 General Population Characteristics	23
2.4 Population Trends	26
2.5 Employment	26
2.6 Traveling in the Urbanized Area	27
3 Existing Conditions - Land Use	29
Introduction	29
3.1 Land Use Overview	31
3.2 Planning Documents 2004-2009	32
3.3 Growth Patterns 2004-2009	35
3.4 Tracking Changes in Land Use 2004-2009	36
4 Existing Conditions - Environment	37
4.1 Air Quality	37
4.2 Water Resources	40
4.3 Wetlands	42
4.4 Floodplains	44
4.5 Wildlife and Habitat Resources	46
4.6 Cultural, Historic, and Archeological Resources	49
4.7 Review of Conservation Plans	50
5 Existing Conditions - Transportation	51
5.1 Personal Vehicles	51
5.2 Bicycles and Pedestrians	65
5.3 Local Public Transit	66
5.4 Intercity Public Transit	70
5.5 Commercial Trucks	71
5.6 Rail	71
5.7 Air Travel	72
5.8 Human Services Transportation Plan (HSTP)	74
5.9 Transportation System Security	75
5.10 Measures of Effectiveness - Summary	81

Table of Contents

6	Goals & Objectives	86
6.1	Purpose	86
6.2	Methodology	86
7	Future Conditions	99
7.1	Land Use and Development	99
7.2	Future Transportation Systems	101
8	Regional Vision: Transportation Network in 2035	108
8.1	Travel Demand Model Inputs	108
8.2	Developing the Vision for 2035	109
8.3	Modeling the Vision for 2035	122
9	Funding	126
9.1	Revenues	126
9.2	Methodology for Forecasting Revenues	127
10	Implementation	148
10.1	Upcoming Tasks	148
10.2	Successful Plan Implementation: Obstacles to Overcome	149

List of Figures

1.1 CUUATS Planning Area Boundary	15
1.2 Identifying Stakeholders	16
2.1 Population Age Pyramid	23
2.2 Median Household Income by Age	25
3.1 Existing Land Use Map	33
3.2 Population Density	36
4.1 1-Hour Ozone Trends	38
4.2 8-Hour Ozone Trends	38
4.3 Particulate Matter Trends	39
4.4 Water Resources	43
4.5 Wetland Locations	45
4.6 Floodplain Locations	47
4.7 Natural Areas	48
4.8 Archeological and Historical Sites	49
5.1 Movement and Access	52
5.2 Transportation Base Map	53
5.3 Functional Classification	55
5.4 2006 Average Daily Traffic	56
5.5 Travel Speeds	57
5.6 Pavement Analysis	58
5.7 Total Crashes	59
5.8 Total Injuries	59
5.9 Total Fatalities	60
5.10 Crashes per 100M VMT	60
5.11 Fatalities per 100M VMT	60
5.12 Total Injuries per Category	61
5.13 "A" Injuries per 100M VMT	61
5.14 2003-2007 SCIL Map	63
5.15 Pedestrian Crashes	65
5.16 Bicycle Crashes	65
5.17 2009 Greenways & Trails Map	67
5.18 Transit Boundary	69
5.19 CU-MTD Ridership	69
5.20 Amtrak Ridership	71
5.21 Annual Airport Enplanements	72
5.22 Truck ADT	73
5.23 Critical Transportation Infrastructure	76
5.24 CUUATS ITS Architecture	78
7.1 Nodal Development Pattern	99
7.2 Urban Nodal Development Pattern	100
7.3 Existing Staley/Bradley Intersection	102
7.4 Proposed Staley/Bradley Intersection	102
7.5 Existing Staley Road Section	103
7.6 Proposed Staley Road Section	103
7.7 Bicycle Facilities	104
7.8 HAWK Signal	105
7.9 CU-MTD Hybrid Bus	106
7.10 Illinois Terminal	106
7.11 Passenger Rail	107
8.1 2004 LRTP Preferred Project Status	111
8.2 Roadway Vision for the Future	115

8.3	Fiscally Constrained Projects	117
8.4	Bicycle and Pedestrian Vision for the Future	119
8.5	Public Transit, Rail and Air Vision	121
8.6	Congested and Nearly Congested Corridors	125
9.1	Transportation Projects in TIP and CIP	141
9.2	Fiscally Constrained Bicycle and Pedestrian Projects	147

List of Tables

2.1	Commuting to Work	22
2.2	Racial Groups as Percentage of Population	23
2.3	Poverty Status by Age	24
2.4	Population by Household Type	25
2.5	Rural-Urban Population	26
2.6	Champaign County Top Employers	26
2.7	Access to Vehicles	27
2.8	Travel Mode to Work	27
2.9	Travel Mode	27
2.10	Travel Time to Work	28
3.1	Land Uses	31
3.2	Land Uses	36
4.1	National Air Quality Standards	37
4.2	Illinois Air Quality Episode Levels	38
4.3 - 4.5	Water Quality	41
4.6	Acres of Wetlands	42
5.1	Functional Classification Mileage	52
5.2	10 Busiest Intersections	52
5.3	LOS for 10 Worst Segments	54
5.4	Signalized SCIL Locations	62
5.5	Unsignalized SCIL Locations	62
5.6	Personal Vehicle MOEs	64
5.7	Bicycle Facilities by Type	65
5.8	Accessible Pedestrian Signals	66
5.9	Bicycle and Pedestrian MOEs	66
5.10	CU-MTD Residential Coverage	68
5.11	Transit MOEs	68
5.12	Destinations in Illinois	70
5.13	Out of State Destinations	70
5.14	Willard Airport Flights	72
5.15	L RTP 2035 MOEs	82
8.1	Population Projections	108
8.2	Employment Projections	109
8.3	Model Results	123
9.1	Future Funding Projections	129
9.2 - 9.7	TIP Tables	131
9.8 - 9.9	CIP Tables	136
9.10	State Capital Bill	139
9.11	STP-U Local Funding	139
9.12	City of Champaign Bike/Ped Projects	142
9.13	Champaign Park District Bike/Ped Projects	142
9.14	University of Illinois Bike/Ped Projects	142
9.15	Urbana Park District Bike/Ped Projects	142
9.16	City of Urbana Bike/Ped Projects	143

Executive Summary

The Long Range Transportation Plan (LRTP) is a federally mandated document that details how the urbanized area's transportation system will evolve over the next 25 years. The LRTP covers the Champaign-Urbana-Savoy-Bondville urbanized area as determined by the 2000 Census boundaries and looks at the 25 year metropolitan planning area which encompasses areas outside the urbanized area that are likely to grow between the years 2009 and 2035. The LRTP looks at the projected evolution of automobile, bicycle, pedestrian, bus transit, rail, and air travel over the next 25 years. This plan has a regional scope and is not meant to take the place of local transportation plans and comprehensive land use plans. Its main purpose is to identify major regionally beneficial transportation projects which can be targeted for federal funding. While smaller localized transportation projects are reviewed and taken into consideration during the planning process, the LRTP lends itself to a broader regional focus, which attempts to bring multiple jurisdictions together under one common vision.



LRTP Mission

To provide a safe, efficient, and economical transportation system that makes the best use of existing infrastructure, optimizes mobility, promotes environmental sensitivity, sustainability, accessibility, economic development, and enhances quality of life for all users.

A detailed existing conditions analysis was completed for the urbanized area and metropolitan planning area during the winter and spring of 2009. The existing conditions analysis looked at current land use and development patterns, environmental conditions, and the current status of the transportation network as it relates to motorists, bicyclists, pedestrians, transit users, rail, and air travelers. Overall, the transportation network within the urbanized area is performing well in 2009, and has made positive progress since the last LRTP update in 2004.

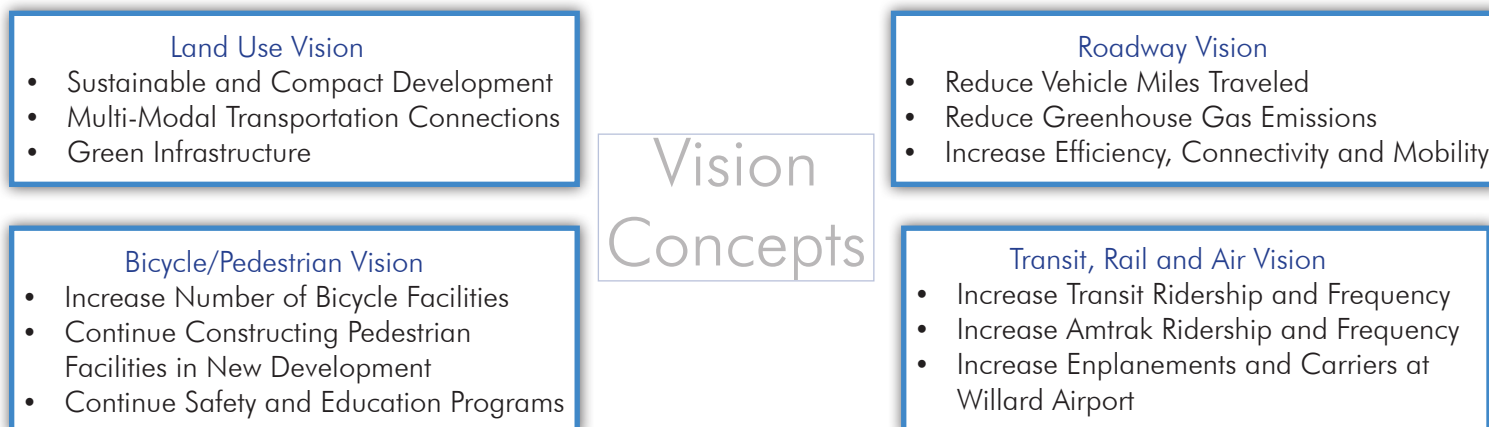
Existing Conditions Findings

- Land development patterns between 2004 and 2009 have shown lower densities and expanding land areas.
- The urbanized area continues to have good air quality.
- Water quality in rivers and streams has declined in the urbanized area.
- The total number of crashes in the urbanized area decreased between 2004 and 2007.
- The total mileage of bicycle facilities rose by over 40% in the urbanized area.
- CU-MTD operates over 48 weekday and weeknight routes in 2009 compared to only 27 in 2004.
- Amtrak ridership from Illinois Terminal rose by over 98% between 2004 and 2008.

Goals, objectives, strategies, and measures of effectiveness (MOEs) were created to direct the vision of the LRTP and the plan's implementation process. The goals provide a general statement about the end state of the LRTP. Objectives refer to sub-goals necessary for the completion of the broader goals. Strategies are specific action items that can be taken to complete each objective. Finally, measurements of effectiveness are data sets and tracking measures to see how the urbanized area performs over the five year periods between plan updates. The measurements are based on real data collected during the LRTP update process.

During this update of the LRTP, the vision for the urbanized area was reflected in three regional vision maps: one for roadway projects, one for bicycle and pedestrian projects, and one for transit, rail and air travel. The regional vision is meant to convey large over-arching ideas that will be complemented in more detail by local plans such as municipal comprehensive plans or municipal transportation plans. The vision looks at broad concepts such as compact and sustainable growth, multi-modal transportation facilities, increasing mode share in the urbanized area, expanding connectivity for all transportation

network users, and improving the efficiency of the current transportation network. A complementary future conditions chapter is included in this plan to discuss in more detail the projected evolution of the transportation network and how each mode may function in the year 2035. The future conditions chapter also touches on linking land use decisions to the transportation network, and analyzing multi-modal options for new development.



In order to comply with federal mandates for the LRTP, projects which are “fiscally constrained” have been noted separate from the overall vision for the future. The term fiscally constrained refers to regionally significant projects which are fully funded or have a reasonably guaranteed source of funding for future implementation. The projects considered fiscally constrained as part of this LRTP update are as follows:

- I-74 widening from IL-47 to Prospect Avenue
- Olympian Drive extension from Apollo Drive to US 45
- Olympian Drive extension from east of Duncan Road to I-74
- Olympian Drive grade separation over CN railroad tracks
- IL-130 widening with medians from University Avenue to Windsor Road
- Florida Avenue extension to IL-130
- Windsor Road reconstruction from Philo Road to IL-130
- Curtis Road improvements between Wesley Avenue and Wynstone Drive
- High Capacity Transit Network

Funding projections were completed for transportation projects using federal, state and local funding sources. Due to the expiration of the current federal transportation bill (SAFETEA-LU), future federal funding sources are difficult to predict. Therefore, an average was used to project federal and state funding based on the amount of transportation funding between fiscal years 2005 and 2009. Local funding projections were completed with help from local agencies including the City of Champaign, City of Urbana, Village of Savoy, and CU-MTD. Funding projections for Champaign County and the University of Illinois were completed using the current 2010-2013 Transportation Improvement Program for the urbanized area.

The regional vision and implementation of the LRTP is dependent on strong coordination between all local agencies in the urbanized area. The successful implementation of the LRTP will result in a well connected, efficient and safe transportation network for all users. The need for “Choices” in transportation is more important than ever with transportation costs increasing and the affordability of personal vehicles becoming out of reach for more and more urbanized area residents. This plan provides a regional vision for offering more travel choices to residents.