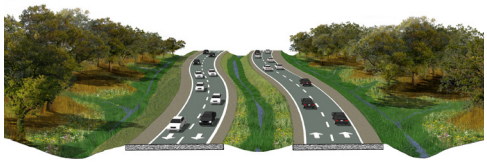
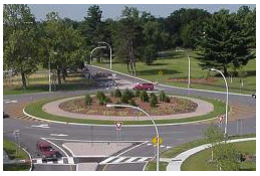
APPENDIX

Illinois Route 53/120 Project

Blue Ribbon Advisory Council
Draft Resolution and Summary Report

June 7, 2012





Appendix

The appendix for the Route 53/120 Project Resolution and Summary Report is available online as a PDF. To view and download these supplemental materials, as well as the Council's Resolution & Summary Report, please visit the Illinois Tollway's Community Outreach page (**http://www.illinoistollway.com/construction-and-planning/community-outreach/illinois-route-53-120-blue-ribbon-advisory-council**) or the Fregonese Associates project page (**www.frego.com/route53**).

Appendix A: Documents Prepared by Project Staff

1. Eco-Restoration Memo (Mike Sands/Steve Apfelbaum)
2. Future Land Use Change Analysis and Impacts Memo (CMAP)
3. Proposed Work Plan for Central Lake County Corridor Plan (CMAP/Fregonese Associates)
4. Value Capture Analysis Memo (CMAP)
5. Lake County Sales and Motor Fuel Tax Estimates Memo (CMAP)

Appendix B: Letters Received in Response to the Council's Work

6. CNT and ELPC, May 17, 2012
7. CISCO, May 16, 2012
8. Lake County Building and Construction Trades Council, May 16, 2012
9. Northwest Municipal Conference, May 16, 2012
10. Metropolitan Planning Council, May 15, 2012
11. WRD Environmental letter to Conserve Lake County, May 9, 2012
12. Village of Wauconda, May 9, 2012
13. Resolution of Support from Village of Libertyville, May 8, 2012
14. Openlands, Conserve Lake County, Lake County Audubon, May 8, 2012
15. Illinois Department of Transportation, May 7, 2012
16. Metropolitan Planning Council, April 20, 2012
17. League of Women Voters-Lake County, April 20, 2012
18. Sierra Club, NRDC and others, April 18, 2012
19. CNT and ELPC, April 18, 2012
20. David Stolman, Jeff Braiman, Maria Rodriguez, April 17, 2012
21. Village of Hainesville, April 17, 2012

MEMORANDUM

To:	**Route 53/120 Advisory Council**
From:	**Michael W. Sands, Ph.D., Chair, Environmental Working Group Chair** **Steve Apfelbaum, Consultant, Applied Ecological Services**
Date:	**May 22, 2012**
Re:	**Ecological Considerations for Avoidance, Protection, Restoration and Enhancement of Key Conservation Lands along the Proposed Route 53/120 Corridor**

Introduction

The following memo is submitted as a brief summary of the incredibly important natural resources present in and adjacent to the recorded Right of Way (ROW) for the extension of Route 53. These at risk resources were of critical concern as the Blue Ribbon Council evaluated the conceptual design and alignment components.

The Illinois Route 53/120 highway bypass scenario analysis has settled on a type and form of road with an alignment that includes two possible alternatives through the Squaw Creek area. The type and form of the roadway selected by the Blue Ribbon Council is a depressed 4 lane boulevard with a 45 mph speed limit. The impacts of this scenario on specific ecological resources found in and adjacent to the right-of-way (ROW) will be dramatically reduced in comparison to a 6 lane high speed expressway. Challenges remain to be addressed in the more detailed design of a hybrid that could minimize deleterious impacts and perhaps enhance environmental benefits across the impact area.

Previous analysis projected the natural resources at risk both in and outside the ROW under Scenarios B and C. See **Table 1** for a summary of the acreage for each type of resource that has been projected to be a risk under the B/C hybrid. See **Table 2** for a listing of the species at risk and critical habitats present within a two-mile distance of the roadway ROW margins. The numbers and species were evaluated by Applied Ecological Services (AES) using the Illinois Natural Heritage data base and new INIA data not yet entered in the data base. This should be considered a draft working list that needs additional confirmation as work continues in the future. Risk factors from water, salt, noise, hydrological changes and other potential impacts have been documented in the scientific literature. These are the results from studies of similar roadway construction, operations and road maintenance.

Table 1. At-risk acreages of primary natural resources in and outside the Right-of-Way of Route 53/120 under Scenarios B & C.

At risk natural resources in the ROW	**B**	**C**
Water Resources (hydric soils, open water, depressional storage) (acres)	66.0	87.0
Impacted flood zone (acres)	3.1	13.9
Impacted Rivers (acres)	0.3	0.3
Impacted Wetland Habitat (acres)	27.6	40.4
Impacted Upland Habitat (acres)	64.7	79.6
Ag land impacted (acres)	97.3	122.2
Protected Lands impacted (acres)	0.9	25.0
SUBTOTAL	259.9	373.4
At risk natural resources outside ROW		
Water Resources (hydric, wetland, open water, depressional storage) (acres)	9,663	11,160
Impacted flood zone (acres)	3,635	4,437
Impacted Rivers (acres)	108	122
Impacted Wetland Habitat (acres)	3,923	4,683
Impacted Upland Habitat (acres)	4,118	5,174
Ag land impacted (acres)	4,149	5,497
Protected Lands impacted (acres)	na	na
SUBTOTAL	25,646	31,134
Paved Acreage Computations		
Total Paved Area (acres)	180.7	306.0
Total Impacted depressional storage + hydric (acres) (relative to total of 376 acres in 300 ft ROW)	126.0	126.0

Table 2. Threatened, Endangered, and special species of concern at risk, and critical habitat in a zone of potential risk within a two miles from the center line of the ROW[1]

Common Name of Taxa

Alkaline Shrub/herb Fen, Midwest Type
Black-crowned Night Heron
Black Tern
Blacknose Shiner
Blanding's Turtle
Common Moorhen
Eastern Prairie Fringed Orchid
Golden Sedge
Grass-leaved Pondweed
Iowa Darter
Least Bittern
Little Green Sedge
Mountain Blue-eyed Grass
Pale Vetchling
Permanent Marsh
Pretty Sedge
Queen-of-the-prairie
Richardson's Rush
Colonial bird Rookery
Rooted aquatic bed
Sandhill Crane
Sedge
Slender Bog Arrow Grass
Small Bladderwort
Well Drained Forest
Wet Prairie
Yellow-headed Blackbird
Wet Meadow, Central Midwest Type
Tallgrass Prairie
Banded Killifish
Blackchin Shiner
Pugnose Shiner

[1] **Based on the Illinois Natural Heritage Data Base.**

Strategies considered with the B/C hybrid to avoid or minimize impacting resources and species at risk

Table 3 documents primary strategies that have been articulated to evaluate how to avoid and minimize impacts to natural resources and species at risk listed in Tables 1 and 2. It is anticipated in future phases of highway design that additional investigations and design solutions will explore new innovations. These will all be investigated as a part of due diligence to further avoid and minimize impacts of any specific highway design on at-risk species and other natural resources.

Table 3. Avoidance, minimization, mitigation and compensation strategies to address potential impacts to at-risk natural resources in and outside the ROW of Highways 53/120 within a two mile zone of potential risk, perpendicular to the centerline of the proposed highway.

Table 3. Environmental Enhancements Appendix

This matrix provides greater detail on industry standards and best practices in typical highway construction.

	STANDARD	BETTER	BEST PRACTICE
HYDROLOGY			
Create compensation landscapes to compensate for increased volumes of stormwater, direct ROW foot print impacts of road imperviousness, and loss of infiltration and replenishment of potable water supplies and baseflow to lakes, rivers, wetlands (etc) and to compensate for aerosol salt impacts that collapse soil structure and reduce imperviousness outside of the ROW	Detention ponds are installed to reduce the release rate, primarily focused on reducing downstream flooding	Naturally occurring depressional features and existing drained hydric soils are restored and connected in a stormwater treatment train to perform volume reduction, release rate, create and deliver biologically appropriate hydrographs, and water quality.	• View the ROW lands and reconnection of public and private restored conservation as a "system" and design hydrology for the highway within a restored system to "do no harm" to the system. • Restore soil carbon levels and capacity for water/contaminant cleansing and retention • Restore connections between public and private conservation lands • Restore public and private conservation lands to improve the "system" (see below).
Use alternative road surfacing to better control stormwater runoff and contamination mobility from the highway environment	Seldom considered	Reduce car tire interaction surface water on the pavement surface by prompt drainage to medians for pretreatment.	Use microgroove surfacing in the pavement to quickly remove surface water from interaction with tires, and direct microgrooves to median for pretreatment, storage of contaminated water.
Use post-construction soil management strategies to improve infiltration after contaminated water is pretreated	Seldom considered	• Road margin infiltration galleries • Pervious road surfaces • Road runoff detention with no surface outlets • Road runoff bioswales with no surface outlets • Capture and use naturally-filtered	• Integrate cleansing, infiltration, into a compensation landscape.

	STANDARD	BETTER	BEST PRACTICE
		runoff to irrigate adjacent farmlands Summer spray irrigation to evaporate	
Repair and restore existing destabilized stream channels	Rock rip rap is applied immediately up and downstream of new culverts, bridges, but no additional downstream treatments	Program for stabilizing with restoration techniques downstream stream reaches that will experience hydraulic geometry changes and channel/bed/bank instability	Formalize a long term stewardship program with secure funding to maintain and enhance stream environments downstream of highway.
Minimize or mitigate impacts to the water runoff volume and velocity and shear stress in downstream receiving water bodies	Volumes are typically not considered, velocity impacts to culverts/bridges is considered and immediately up and downstream to primarily to protect the infrastructure	Reduce volumes to pre-highway quantities, and reduce velocities to less then 4 ft per second and commensurate reduction of instream shear stresses.	Create release rates from Compensation landscapes that restore, enhance and preserve"nature's hydrograph" in all released water and receiving water bodies
Create water management reserves	Not considered	Restore all remaining depressions and hydric soils, and other uplands in the ROW and connect these to compensation restored landscapes beyond the ROW. Use landscape areas to compensate for groundwater infiltration losses from the roadway imperviousness	View the ROW lands and reconnection of public and private restored conservation as a "system" and design hydrology for the highway within a restored system to "do no harm" to the system.
WATER QUALITY			
Use alternative road surface finishes to remove or reduce ice risk	Seldom Considered	Use of crowned roadway to direct water and contaminants off roadway	Use micro-groove or equivalent surfacing to facilitate very efficient removal of water from road surface
Use alternative de-icing/anti-icing strategies to reduce salt impacts	Many equipment and operational variations on the same technology are used as standards for application around the USA. Anti-icing is being used more commonly to reduce salt quantities used per storm event.	Slow the average road speed down, and reduce surface acres of treated roadway and intersections to reduce overall salt use and to allow for lower volumes of contaminated runoff from highway environments. Create differential	• Capture contaminated runoff waters, use RO and diffusion technologies and extract salt for beneficial reuse de-icing materials at locations of greatest use (e.g. bridges)

	STANDARD	BETTER	BEST PRACTICE
		application rates with more focused intensified use of materials in intersections, off ramps, bridges, and not on straight aways	• Evaluate Chinese road surface heating methods in roadway or key areas • Prioritize methods that minimize road deterioration to minimize road resurfacing
Use alternative de-icing/anti-icing materials	In some non-highway streets near environmentally sensitive lands and waterbodies, alternative deicing materials have been used. But, other then anti-icing, few other alternatives have been used as standard practice on highways	Use low salt policy---- and modified deicing and anti-icing mixes with 80% sand 20% salt; and use alternatives to NaCl, and CaCl2 such as corn and beet starch (good above 0 deg F; calcium magnesium acetate, and other formulations as is currently being done in many areas of USA.	Use a no-salt policy (at least no Sodium or Calcium Chloride) and evaluate the Chinese technology whereby carbon fibers installed into the road surface transfer geothermal and solar heat to deice the road surface.
Localize, capture and cleanse roadway runoff prior to release	Only considered to meet NPDS or other stormwater management requirements typically for total suspended solids in release waters. Does not address soluble contaminants and also with re-suspension from sediment traps/detention basins, contaminants adsorbed to fine particles are released from the systems; some contaminants released under ice cover when detention ponds become anerobic.	Create Stormwater treatment trains with upland grassed landscapes to capture and securely hold suspended solids and adsorbed contaminants. Then run water through anaerobic below and above ground wetlands to de-nitrify and bio-metabolize large carbon chain molecules (oil, grease, etc), then hold water for release.	• Do all in the Better column but hold water to remove soluable flow through contaminants such as salts using RO or Soil Colloid filters, Solar salt ponds for thermal capture and intersection de-icing • Restore and create High levels of organic matter in roadside soils to sequester aerosol mobilized heavy metals and other contaminants.
Protect and improve soil health in adjacent ROW to maximize runoff infiltration	Not considered	Pre-treat water as above, then direct clean water to deep chisel plowed soils in ROW to allow for capture, cleansing and infiltration	• Do all in the Better column but hold water to remove soluable flow through contaminants such as salts using RO or Soil Colloid filters, Solar salt ponds for thermal capture and intersection de-icing Restore and create High levels of organic matter using compost in roadside soils to sequester aerosol

	STANDARD	BETTER	BEST PRACTICE
			mobilized heavy metals and other contaminants.
WILDLIFE, HABITAT CONNECTIVITY, INVASIVES			
Causeways for road and causeways for greenway	Seldom considered	Integrate modular wildlife crossings and underpass crossings separate from stormwater drains and bridges that carry people and cars.	• Direct key wildlife species toward under-crossings and overcrossings through the use of integrated design of the habitats to be restored as a system within the ROW and the abutting compensation landscape beyond the ROW.
Avoid wildlife mortality from ingestion of roadway contaminants and vehicle collisions (avoid human injury and fatality)	Avoidance and minimization of the few regulated resources/habitats (e.g. wetland, floodplains, T and E species, etc) occurs. Some highways have moderately successful wildlife barrier fencing for larger mammals—eg. Deer.	• Avoid and Minimize disruption of all core and linkage habitats and key interior habitats, and tree rows, stream corridors, and drainageways which are concentrated corridor.	• Avoid habitats and provide restored "attractant habitats on each side of highway as a part of a compensation landscape to draw wildlife away from the highway ROW. • Use FAA equivalent standard wildlife fencing to eliminate access of medium and large mammals from ROW. • Use FAA and US air force landscape plant-use and land management standards of 6-18 vegetation height to reduce avian use of ROW vegetation.
Improve habitat connectivity	Seldom considered	Identify mobility corridors and protect them insitu by integration into the design and add wildlife underpasses and overpasses during design process to augment for unavoidable wildlife mobility impacts.	Create a compensation land that links ROW restoration with public and private restoration in conservation lands to improve continuity of habitat across the landscape.
Design and install native ecosystem in adjacent ROW to minimize invasive	Seldom considered	Establish robust native plant community plantings that are dense and stable and	• Manage habitats in ROW corridor for ecological health

	STANDARD	BETTER	BEST PRACTICE
spread		that inherently restrict invasive plant collinization and spread	• Provide early detection and rapid response for invasive species
NOISE			
Noise barriers	Walls of wood, concrete panels, or textured surface poured in place concrete	• Living green technologies on structural barriers • A system of structural barriers and deflectors from horizon berming, to deciduous tree plantings along ROW margins, , Setback distances and horizon deflectors	• Integrating noise barriers, diffusion, and cancellation strategies into compensation landscape restoration plan, vegetated buffers, layout of buildings, berms, vegetation, and alignment and restoration of habitat features. • Making the barriers part of the habitat such as what the Tollway has done at The Grove National Historic Site, Glenview, IL
Noise diffusion and cancellation strategies	Seldom considered in midwest	• Noise source reduction strategies using surface pavement technologies that reduce road noise under dry and wet pavement conditions	• Integrating noise barriers, diffusion, and cancellation strategies into compensation landscape restoration plan, vegetated buffers, layout of buildings, berms, vegetation, and alignment and restoration of habitat features. • Making the barriers part of the habitat such as what the Tollway has done at The Grove National Historic Site, Glenview, IL
LIGHT			
Reduce lighting along highway	Standard spacing of Standard overhead highway lights occurs along entire highway, at ramps and at intersections	Discontinuous lighting along straight highway reaches and wayfinding lighting only at intersections and off ramps.	• Reduce elevated lighting to only intersections and off ramps. • Use embedded driver intensity controlled lighting in all other highway locations and all dark zones.

	STANDARD	BETTER	BEST PRACTICE
			• Eliminate high elevated lightening in “dark zones”.
Shield lighting impacts	Down or directional shielding has been implemented on some projects but not typically on Highways.	Focused downlighting lighting: downward facing, lane-oriented and, directional	• Reduce elevated lighting to only intersections and off ramps. • Use embedded driver intensity controlled lighting in all other highway locations and all dark zones. • Eliminate high elevated lightening in “dark zones”.
Embedded LED off ramp and directional lighting and lane placement and wayfinding lighting	Not considered on highway	Eliminate elevated surface lighting	• Reduce elevated lighting to only intersections and off ramps. • Use embedded driver intensity controlled lighting in all other highway locations and all dark zones. (see Chinese example and 70% reduction in highway electricity use costs. • Eliminate high elevated lightening in “dark zones”.
Driver-controlled intensity/ illumination zone	Not considered on highways	Eliminate elevated surface lighting	• Reduce elevated lighting to only intersections and off ramps. • Use embedded driver intensity controlled lighting in all other highway locations and all dark zones. • Eliminate high elevated lightening in “dark zones”.
Dark zones for conservation	Seldom considered	Eliminate elevated surface lighting	• Reduce elevated lighting to only intersections and off ramps. • Use embedded driver intensity controlled lighting in all other highway locations and all dark

	STANDARD	BETTER	BEST PRACTICE
			zones. • Eliminate high elevated lightening in “dark zones”.
Dark zones for neighborhoods	Seldom considered	Eliminate elevated surface lighting	• Reduce elevated lighting to only intersections and off ramps. • Use embedded driver intensity controlled lighting in all other highway locations and all dark zones. • Eliminate high elevated lightening in “dark zones”.
Design lighting to minimize impacts to migrating birds/reduced insect attractant, bats, etc	Seldom considered	Shield, down direct, replace elevated surface lightening with low profile and surface embedded lighting.	• Reduce elevated lighting to only intersections and off ramps. • Use embedded driver intensity controlled lighting in all other highway locations and all dark zones. • Eliminate high elevated lightening in “dark zones”. • Use Led and other lighting technologies that eliminate or reduce UV wavelengths that attract insects, bats, birds, and other wildlife. Consider lighting that is skewed toward red or green spectral bands.
VISUAL RESOURCES, VIEWSHEDS AND AESTHETICS, INCLUDING COUNTRY ROAD AND CONSERVATION ROAD IMPACTS			
Secondary impacts of highway to country road aesthetics and sensitive environmental corridors and lower service roadways.	Seldom considered		• Develop and adopt standards that prevent future improvements to country/conservation roads • Defend country/conservation roadways using legislative

	STANDARD	BETTER	BEST PRACTICE
			guarantees (e.g. Nature Preserve Dedication) and
Highway safety improvements by lowering traffic speed	Seldom considered over entire highway, typically only irregular terrain and ramping settings	Create traffic calming to discourage increased traffic speeds	• Create narrower roadways with curb and gutter and minimum or no clearance zones. • Change vertical and horizontal radius alignment of road • Create irregular vegetation landscape rooms with changing driver viewsheds and distances, through which the vehicles must travel to reduce travel speeds.
Driver viewshed and experience	Safety is usually the only consideration on highways. Aesthetics and view shed experience is typically only considered on secondary roadways	Alternative screening methods to shield neighborhoods and distractions while focusing drivers' attention for safety viewshed	• Provide angled views and varying viewing screens and distances. • Avoid solid sound wall approach • Consider slight curvilinear road corridor that allows changing view • Consider visual elements: art, sculpture, creatively designed overpasses, etc.
IMPACTS AND COSTS TO CONSERVATION LANDS			
External costs from Highway contamination short and long term to conservation lands	Seldom considered	• Create a defined highway environmental impact zone using the latest science to recognize that highway construction and operations have direct and indirect impacts to land and water resources (and people) that are not presently not required by Tollway or IDOT to be addressed	• Create regionally funded endowment using highway-generated revenues to cover stewardship costs • Create catastrophic fund for major impacts to conservation lands • Fund rapid response teams that can act across political boundaries • Create a bonded (or coverage by another type of surety) to

	STANDARD	BETTER	BEST PRACTICE
		through County, State or Federal regulations. • Create a funding program to repair, restore, maintain impacted environmental resources within the defined highway environmental impact zone.	pay for the restoration, maintenance and management of impacts within and the beyond the highway ROW within the defined Impact zone for the life of the highway. • Over the life of the highway, use Life Cycle and Natural resource Damage Assessment claim standard methods to standardize how restoration, management and maintenance dollars and on-going investments in the compensation landscapes are defined, acted upon and monitored for performance. •
AIR QUALITY AND GREENHOUSE GAS EMISSIONS(GHG)			
Eliminate and Minimize embodied GHG emissions from construction, materials, and operations and maintenance	Seldom considered; now being considered in Federal EIS and some state appropriation considerations (see CA, OR, etc) for highway funding.	Do a highway life cycle analysis as a part of the business plan for this highway and identify all strategies for eliminating and minimizing GHG emissions in all stages and operations of the highway	• Develop a program to use low GHG emission construction, low embodied emissions materials, and operations/maintenance programs that have reduced life-cycle GHG emissions • Use low electricity use road lighting (se LED lighting). • Use low/no salt deicing/anti-icing technologies and reduce highway maintenance truck vehicle hours of use annually • Explore use of Chinese carbon fiber

	STANDARD	BETTER	BEST PRACTICE
Mitigate embodied emissions and operational emissions	Seldom considered; now being considered in Federal EIS and some state appropriation considerations (see CA, OR, etc) for highway funding.	Do a highway life cycle analysis as a part of the business plan for this highway and identify all strategies for eliminating and minimizing GHG emissions in all stages and operations of the highway and evaluate alternative energy strategies that can be integrated with the highway design and compensation landscape to eliminate and minimize GHG emissions	Compensate and offset material embodied GHG emissions and operational GHG emissions using ecological sequestration strategies in the vicinity of the corridor
Explore opportunities for renewable energy along the corridor	Seldom considered; now being considered in Federal EIS and some state appropriation considerations (see CA, OR, etc) for highway funding.	Do a highway life cycle analysis as a part of the business plan for this highway and identify all strategies for eliminating and minimizing GHG emissions in all stages and operations of the highway and evaluate alternative energy strategies that can be integrated with the highway desing and compensation landscape to eliminate and minimize GHG emissions.	• Solar and wind power • Utilize heat from urban heat island effect • Grow biofuels along corridor • Consider rechargeable lane technologies under development for electric vehicles
ARCHAELOGICAL, HISTORIC AND CULTURAL RESOURCES			
Use findings from cultural/archaeological investigation when designing corridor alignment	Phase I surveys inform design and Phase II survey removes archeological resources from ROW as mitigation strategy	Protect and avoid such resources	• Combine important archeological areas with restoration or compensation areas as areas to avoid
Consider interpretive opportunities along corridor, integration with recreational trails, and adjacent natural resource areas	Seldom considered	Protect and avoid, and integrate such resources in the highway plan as a valuable asset	• Celebrate corridor history (Native American and recent immigrant/agricultural history) with interpretive signage and tours • Develop visual and audio interpretation of the corridor, available to recreational users and commuters via mobile technology (audio/visual in cars, QR codes, trail or rest stop signage, etc.)

	STANDARD	BETTER	BEST PRACTICE
Consider new stewardship culture in the region			• Tell the story of the 21st century highway through interpretive signs and interactive/mobile content

Specific treatments for several example key natural resources areas

Areas of important conservation and natural resources occur along the Route 53/120 ROW. Thousands of acres of important public and private conservation lands are found along the ROW route through central Lake County, IL. This section provides additional information about the conditions and conceptual ecological restoration benefits that must be further explored for key natural resources areas along the ROW. In particular, these include Surrey Marsh, Indian Creek Marsh, Almond Marsh, and the Squaw Creek landscape complex.

Please Note: All Figures have been developed only for purposes of helping all parties understand the potential ecological restoration opportunities in these key natural resources areas. The graphic concepts are not intended to provide precision on properties to address, specific locations of restoration treatments, or property protection needs. These necessities are left to the future planning, siting and design for the proposed route 53/120 corridor and roadway.

1.Surrey Marsh

Existing Conditions:

In the 1970s, Surrey Marsh had active springs and seeps emerging from upland slopes, which were located along the western margins of the wetland in the present location of Surrey Lane. These were also found along the eastern margins of the wetland. Lake sedge and tussock sedge plant communities dominated large areas of the wetland. The surrounding forested (savanna) uplands had a diverse and continuous grass, sedge and wildflower cover, which is now largely absent.

Since the late 1970s, Surrey Marsh's southern and western areas have become dominated by southeast Asian reed canary grass, especially during a period when the outlet to Surrey Marsh was plugged and the entire marsh became ponded with deeper water. After the outlet structure breached, most of the marsh, with exception of several areas along the eastern margins, became dominated by this invasive grass. During this period of inundation, high-water levels along some shorelines contributed to shoreline erosion, causing sediment to cover the springs and seeps, causing irregular or absent flow. These same sediment deposits and additional sediment contributions from the declining oak savanna ecosystems on the surrounding uplands have also contributed to the burial of these former diverse wetland margins and springs.

Since the late 1960s, localized private dredging in the middle and southern areas have created open pond areas that have contributed to the dewatering of former saturated wetland soils around the dredged open water areas. As a result of this, decomposing nutrient-rich muck soils are releasing nitrogen and phosphorus, contributing to degraded water quality in the remainder of the marsh and in the open pond areas.

Disposal of landscaping waste materials has filled the southern end of Surrey Marsh. On the west central areas of the marsh, additional fill comprised of junk and debris have been disposed in the marsh. This includes a vehicle, debris that appears to be plumbing supplies and wastes from plumbing contracting jobs and additional refuse.

Restoration Opportunities and Needs:

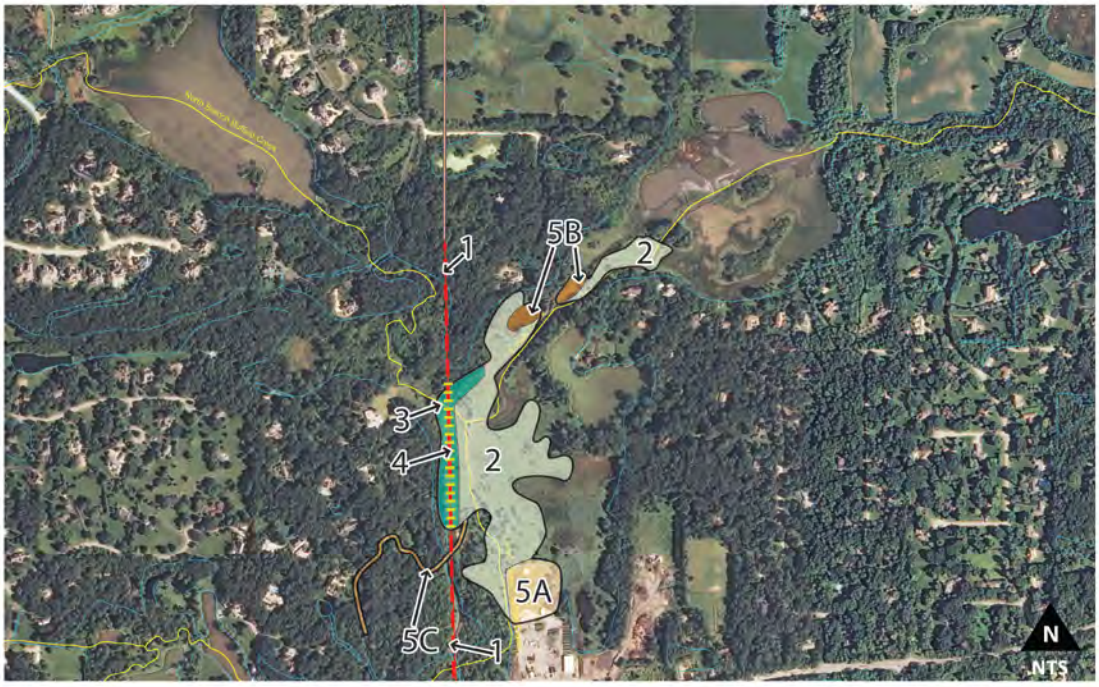
Surrey Marsh is in serious ecological decline. Restoration and enhancement needs for Surrey Marsh in conjunction with Route 53 (as shown in Figure 1) are summarized below:

1. If the roadway goes through or abuts Surrey Marsh, the roadway should incorporate the following ecological building features:
    a. Place the roadway on pylons to avoid damages to the uplands and the wetlands.
    b. Capture all storm water from the roadway and move it for cleansing north and south of Surrey Marsh, where it can be treated prior to release.
    c. Cover the roadway (using a canopy or covered bridge) to reduce the storm water quantities that need to be managed. Enclose the roadway to reduce noise impacts on homes to the east and north.

    d. Explore placing the roadway on the upland along the western margins of the wetland, where much of the fill, refuse, debris and and sediment removal are proposed to occur. This option reduces the impact of the road crossing the wetland.
2. Invasive plants should be replaced with native wetland vegetation.
3. Spring systems should be re-established by excavation of the sediments from areas of former springs.
5. Removal of fill in the marsh along the southern end and western margins of the wetland would be a benefit Re-grading the eroding shorelines of former dredged pond areas would create gentle shorelines that can be re-vegetated with native plantings, stabilized and protected against continued erosion. This would control nutrient enrichment in the pond areas and provide important overall benefits. Stabilization and restoration of the channel and banks of the stream entering the southwestern areas of the marsh would contribute to desirable improvements. Installation of a sediment trap where the stream meets Surrey Lane could help remove offsite sediments and nutrients now entering Surrey Marsh.
6. A commitment to a long-term marsh management and monitoring program to continually improve the health of the marsh should be pursued. Authorities should also work with neighboring land owners and Village of Long Grove to improve the ecological health of Surrey Marsh. Perpetual management, stewardship and monitoring funds and commitments to the land will be important and desirable to ensure ecological conditions are maintained.

Figure 1

Ecological restoration and enhancement strategies for Surrey Marsh, route 53/120 corridor, Lake County, IL



Delineated wetland

Stream

Existing road concept

4 — If the roadway goes through or abutting Surrey Marsh, the roadway characteristics are suggested to be as follows:

a. Place the roadway on pylons to avoid damages to the uplands or the wetlands
b. Capture all storm water from the roadway and move it for cleansing north and south of Surrey Marsh where it can be cleaned prior to release.
c. Covering the roadway to reduce storm water generation quantities that need to be managed.
d. Noise screening the roadway to reduce noise propagation from the roadway to the east and north.
e. Placing the roadway on the upland margins along the western margins, tucking the roadway onto the upland where much of the fill and refuse and debris removal, and sediment removal would be proposed to occur.

1 — Instead of a split couplet road design as shown on previous conceptual plans, both north and south bound lanes will be installed in one location along the western margins of the Marsh.

2 — Invasive plant reduction and replacement with native wetland vegetation

3 — Re-establishing the spring systems by excavation of the sediments from areas of former springs.

5A — Removal of fill in the marsh along the south end. And, removal of refuse and other materials in the marsh along the western margins.

5B — Regrading dredged areas to create gentle shorelines that can be stabilized and protected against continued erosion and nutrient enrichment.

5C — Stabilization and restoration of the channel and banks of the stream entering the Southwestern areas of the marsh.

2. Indian Creek Marsh

Existing Conditions:

During the 1960s through the early 1970s, this marsh included large areas of wet prairie, sedge meadows, cattail and hemi-marsh. Some forested wetlands that were dominated by sedges and native wetland grasses in the understory were also present, as well as seeps and springs along the southern wetland margin.

Starting in the late 1970s, additional farm drainage tiling was installed that discharged into several locations of Indian Creek Marsh. In addition, housing developments to the east damaged drain tiles that provided outlets to the marsh. The marsh system was deepened 2-3 feet by the additional water inputs from the tile system. Over a period of several years, a majority of sedge meadows and wet prairies became inundated. As a result, open water and cattails now dominate the marsh. Some forested and savanna margins and their trees have died. Former sedge meadow and wet prairie are no longer prevalent or even present in parts of the marsh. Shorelines of the marsh now are dominated by southeast Asian reed canary grass and low diversity mixes with cattails. Because of enhanced land drainage, agricultural activities have encroached into former wetlands.

Restoration Opportunities and Needs:

Restoration and enhancement needs for Indian Creek Marsh (as shown in Figure 2) are summarized below:

1. The siting and design of the roadway can be explored to reduce the crossing or bypass the wetland. Presently, the conceptual plan shows the roadway on a causeway rising over part of the marsh on pylons. Explore shifting the ROW and crossing of wetland by the roadway (See Figure 2) to reduce impacts.
2. To restore hydrology, tile drains can be intercepted and upland buffers around the wetland can be restored. Tile drain water can be intercepted and cleaned and then stored in uplands as a part of the stormwater management treatments associated with areas around of the marsh.
3. Vegetation management can occur around the shorelines of the marsh to reduce reed canary grass and re-establish native sedge and wet prairie communities.
4. Forested and savanna buffers with upland prairie can be planted within the ROW and within additional buffer protection lands to intercept stormwater and drainage from tiles for detention and for cleansing and slow release to Indian Creek Marsh.
5. Perpetual management, stewardship and monitoring funds and commitments to the land will be important for maintaining the marsh ecology.

Figure 2

Ecological restoration and enhancement strategies for Indian Creek Marsh, route 53/120 corridor, Lake County, IL

Delineated wetland

Stream

Existing road concept

1 — The design of the roadway will be explored to bypass the wetland. Presently, the conceptual plan shows the roadway on a causeway rising over part of the marsh on Pylons. We propose that both the ROW and roadway itself still will occur on pylons, but the system will be shifted to reduce the crossing of wetland by the roadway.

2 — To restore hydrology, tile drain waters will be intercepted and cleaned, and stored in uplands as a part of the storm water management treatments associated with areas west of the marsh.

3 — Vegetation management will occur around the shorelines of the marsh to reduce canary grass and re-establish native sedge and wet prairie communities.

4 — Forested and savanna buffers with upland prairie will be planted within the ROW to intercept storm water, tile water, and management and hold it for cleansing and slow release to Indian creek marsh.

5 — Perpetual management, stewardship and monitoring funds and commitments to the land will be provided.

3. Almond Marsh

Existing Conditions:

In the mid-1980s, large areas of the south unit of Almond Marsh were dominated by sedges and diverse emergent marsh. Many such areas remain today. Areas of the north unit of Almond Marsh included open farm fields, depressional wetlands and forested wetland areas. Diverse native vegetation dominated most if not all areas.

In the 1980s, changes in tile systems occurred as a result of utility trenching and road development along the northern edge of the north unit of the marsh. This resulted in deep water inundation of this north unit. Forested wetland and sedge meadows found in depressional wetlands have since become inundated, causing forested wetland trees to die. Large areas of open water now prevail over areas that were previously diverse, shallower wetlands.

The south unit of the marsh is largely intact, with some dewatering effects associated with former tiles and ditches still in place and partially functioning. Some invasive species, such as reed canary grass and phragmites, have invaded along the dewatering routes. In addition, degraded conditions of surrounding oak savannas have contributed to sedimentation in some margins of this unit. The oak savanna uplands are now overgrown with non-native, weedy plant species, including garlic mustard, European buckthorn and tartarian honeysuckle.

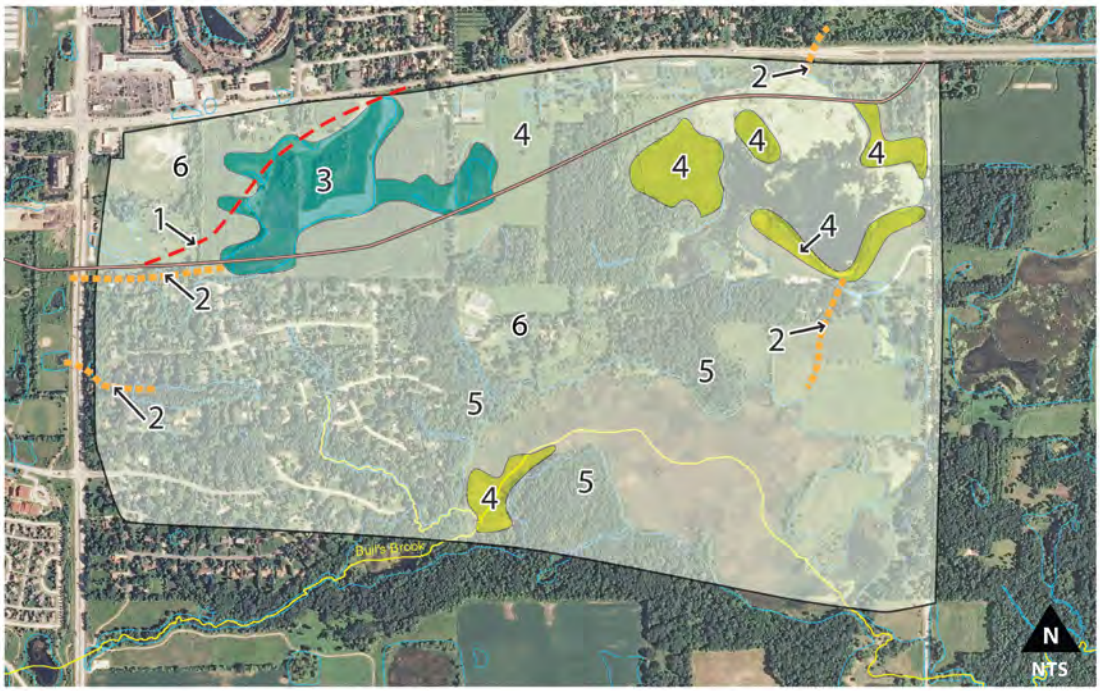
Restoration Opportunities and Needs:

Restoration and enhancement needs for Almond Marsh (as shown in Figure 3) are summarized below:

1. Construction of Highway 53/120 bypass connections must occur well west of the new Presbyterian church on Route 120 (in the location of the proposed Route 120 Unified Vision bypass 3E connection), beyond the direct watershed boundary for Almond Marsh. This would restrict the proximity of highway development and stormwater runoff from any roadway improvement into the north unit of the marsh.
2. A comprehensive study of tile and drainage alterations study must be conducted to relieve increasing flooding impacts. Plans should also be developed to restore the drainage outlets and hydrology of the north unit..
3. Stormwater management cleansing areas can be designed as restored wetlands to polish stormwater within and outside the ROW.
4. Invasive species reduction in the marsh units and on surrounding uplands will improve the marsh ecology.
5. Long-term marsh stewardship, monitoring and management must occur to ensure the ecological health of the system.

Figure 3

Ecological restoration and enhancement strategies for Almond Marsh, route 53/120 corridor, Lake County, IL



Delineated wetland

Stream

Existing road concept

1 — Construction of highway 53/120 bypass connections will occur well west (in the location of the proposed Grayslake bypass 6E connection) of the new Presbyterian church on Route 120, beyond the direct watershed boundary for Almond marsh, to restrict the proximity of highway development and use, and storm water runoff from any roadway improvement into Almond marsh North unit.

2 — The toll way will do the tile and drainage alterations study and develop plans to restore the drainage outlets and hydrology of the North Unit.

3 — Stormwater management cleansing areas shall be designed as restored wetlands to polish stormwater within and outside the ROW.

4 — Invasive species reduction in the marsh units and on surrounding uplands will occur.

5 — Restoration and enhancement of oak savanna uplands around marsh.

6 — Long term marsh stewardship and monitoring and management will occur. Perpetual management, stewardship and monitoring funds and commitments to the land will be provided.

4. Squaw Creek Landscape Complex

Existing Conditions:

Historically, this area was a complex landscape, with oak savanna on the northern border that transitioned into extensive sedge meadows and shallow depressional wetlands, with wet prairie and marsh systems in the floodplains of Squaw Creek. The entire area was part of this vast historic wetland complex, including all but a few elevated areas around the old farm house and fly-by-optics (FBOs) at Campbell Airport.

Squaw Creek was dredged and deepened in the early 1930s, with side-cast spoils deposited in adjoining wetlands. The lowering of the shallow groundwater table has dewatered extensive muck and peat depositions that formerly were the substrates beneath the wetlands. Internal ditches and numerous drain tiles were installed as recently as the late 1980s. This further dewatered large areas of the wetland to support agricultural uses of the land.

The Campbell Airport was constructed on the relatively level dewatered wetlands by excavating and building up the runway, taxi area and plane parking areas. As a result of the dewatering effects from channelization, dredging, ditching and tiling, parts of the airport are experiencing subsidence as the underlying organic muck soils have decomposed.

Since the late 1990s, various wetland mitigation program projects have been installed in locations of this landscape. All installations are located to the north and east of the Northbrook Sports Club's trap and skeet shooting areas and club buildings. Two private wetland mitigation banks – one in the property and a second bordering the southwestern corner of the property – must be protected.

Two alignment alternatives exist (Figure 4). The historical alignment bends north around a portion of the wetland (but still impacts significant wetland acreages) before moving west through a ROW reserved through newer residential neighborhoods. A second alternative is recommended for further study. This alignment would run further north minimizing the wetland impacts and rejoins Route 120 just west of the Route 120/134 "Y", across from Porter Drive.

Restoration Opportunities and Needs:

1. Regardless of the alignment, where the highway traverses existing poor soil areas, the floodplains, existing wetland mitigation banks and off-site wetland mitigation projects, the road would need to be constructed on pylons. Building the roadway on pylons would help avoid the wetland mitigation bank and other wetland mitigation areas, poor soils and floodplains. It can be constructed to avoid oak savanna remnants along Route 120 and elsewhere.
2. There are significant additional restoration treatments and stewardship and monitoring needs for the Squaw Creek landscape complex. Large areas of new wetland restoration and enhancement can be constructed by removal of ditching and tiles and by plantings and land management in the restoration zones.

3. A split couplet entrance/exit ramping system can route narrow, two-lane roadways through open areas of the existing oak savanna along Route 120. Then, the eventual merger with Route 120 can occur west of the wetland complex.
4. Existing areas with dewatered hydric soils beyond the boundary of the existing wetlands can be developed for cleansing and holding the storm water from the roadway.
5. Perpetual management, stewardship and monitoring of funds and commitments to the land will be important and desirable to maintain the ecological systems.

Figure 4

Ecological restoration and enhancement strategies for Northbrook Hunt Club, route 53/120 corridor, Lake County, IL

Delineated wetland

Stream

Existing road concept

New proposed road alignment

1 — Building the roadway on Pylons would avoid the wetland mitigation bank and other wetland mitigation areas, poor soils, and be constructed to avoid oak savanna remnants along Route 120 and found elsewhere.

2 — Large areas of new wetland restoration and enhancement will be constructed by removal of ditching, tiles and by planting and managing plantings in the restoration zones.

3 — A split couplet entrance/exit ramping system will route narrow two lane roadways through open areas of the existing oak savanna along route 120 or traverse the Northbrook sports club wetland on pylons and the eventual merger with Route 120 will occur west of the wetland complex.

4 — Areas of dewatered hydric soils beyond the boundary of the existing wetlands will be developed for cleansing and holding the storm water from the roadway.

5 — Perpetual management, stewardship and monitoring funds and commitments to the land will be provided.

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MEMORANDUM

To: **53/120 Core Team**

From: CMAP Staff

Date: February 10, 2012, Updated April 26, 2012

Re: Route 53/120 Future Land Use Change Analysis and Impacts

At the request of the Design and Land Use Working Group of the 53/120 Blue Ribbon Advisory Council, the Chicago Metropolitan Agency for Planning (CMAP) has generated a map of proposed future land use change in areas adjacent to the proposed 53/120 Corridor. This map was compiled from the Route 120 Unified Vision, municipal and Lake County comprehensive plans, and approved major developments. In addition, CMAP has estimated new housing units and development square footage generated by this Future Land Use Change if development occurs in the forms and densities outlined in local plans and zoning ordinances.

When the plans of individual communities are combined and analyzed, the potential for a significant shift in the character of central Lake County becomes apparent; estimated new square footages for retail, office, and industrial uses exceed or match those present on major corridors or within the entire county today, and potential employment substantially exceeds the employment in the GO TO 2040 socioeconomic forecasts. As a result of the proposed land use typologies and volumes, congestion levels on the proposed facility and within Lake County have the potential to be higher than those projected by the traffic model. While this memo advises some changes to the development patterns prevalent in central Lake County today, CMAP recommends that land use decisions continue to be a local prerogative. Strong local governments are an asset to our region and have helped to create many unique, livable places. The purpose of these recommendations is to help and encourage local governments to apply principles of livability when they make development decisions in their communities.

The first section of this memo provides a summary of proposed future land use change near the proposed 53/120 facility in central Lake County and the development square footage that these land uses could be expected to generate at typical densities. The second section discusses the potential impact of that future land use change on the proposed facility, the surrounding transportation network, and the goals of the 53/120 Blue Ribbon Advisory Council.

Future Land Use Analysis Summary and Results

The proposed Route 53 extension/Route 120 Bypass ("the Facility") has been under evaluation in Lake County since the 1960s. In recent years, many municipalities have planned for the proposed facility, particularly the Route 120 improvements and proposed bypass. In 2009, a Unified Vision was finalized for the proposed Route 120 facility, including proposed future land use change for areas adjacent to either the existing Route 120 or the proposed bypass. The Route 120 bypass traverses largely undeveloped areas, and proposed future land use change in these areas was significant, particularly west of Route 83. The Route 120 Unified Vision Future Land Use Change was developed in close collaboration with communities, involving several rounds of interviews and reviews. CMAP incorporated Unified Vision directly into our analysis of future land use change in the 53/120 Corridor without alteration of these proposed uses. Along the proposed Route 53 corridor and areas not immediately adjacent to the proposed Route 120 bypass, future land use change was developed from Lake County and municipal future land use /comprehensive plans as well as the site plans of approved major developments. Lake County's Regional Framework Plan (LCRFP) provides a guideline for future land use change in Lake County through 2020, and individual municipal comprehensive plans reflect future land use goals for 2020, 2030, or even longer terms.

The Future Land Use Change map at the end of this memo outlines planned-for future land use change within two miles of the corridor. This map represents a "maximum" scenario, and shows the most intensive planned future land use in unincorporated areas where municipal plans overlapped. These future land uses have not been adjusted to reflect market or other constraints, but instead reflect the sum total of the separate future development plans of individual municipalities. The majority of the area designated for future land use change is located in the Route 53 corridor north of Winchester Road and the Route 120 bypass corridor west of Route 45; together, these two areas contain slightly less than 40% of the total land area proposed for change but house a higher 55% to 70% of the total proposed non-residential development area. The remaining portions of the proposed corridor are already extensively developed or preserved as open space, and future land use plans generally indicate infill and/or redevelopment of remaining vacant or underutilized lots.

This municipally-generated proposed future land use change can also be used to estimate future development square footage and housing units at "full build-out" of the proposed change. These estimates were generated utilizing floor area ratio and units per acre guidelines from the municipal and county comprehensive plans as well as CMAP's internal Futureview metrics for converting general land uses to estimated development.[1] Figure 1 summarizes the estimated future development for the corridor by major land use. As noted above, municipal

[1] Floor Area Ratio (FAR) is a measure of the density of non-residential development. It is calculated by dividing the total area of a building by the total area of its site. For example, a one-story building with an FAR of 0.5 covers half of its site. Average FARs for the minimum and maximum scenarios were: 0.2 to 0.3 for Retail, 0.2 to 0.3 for industrial, and 0.3 to 0.4 for office.

plans overlapped in unincorporated areas; in these cases, both the most and least intensive land uses were utilized to create a range of potential development outcomes.

Figure 1. Future Land Use Change within 2 miles of the Proposed 53/120 Corridor

	Future Added Acres by Land Use		Estimated Development	
Future Land Use Change	**From****	**To****	**From****	**To****
Residential	5,200	6,110	8,220 Units	10,650 Units
Retail/Commercial	2,420	3,050	22,440,000 SF	38,300,000 SF
Open Space	1,710	1,420	1,710 Acres	1,420 Acres
Industrial	1,340	2,090	18,650,000 SF	19,360,000 SF
Office	900	1,200	12,890,000 SF	23,780,000 SF
Mixed Use *	120	120	1,190 Units	1,190 Units
			1,350,000 SF	1,350,000 SF
Government & Institutional	770	810	No Data	No Data
Utility/Waste Facilities	20	20	No Data	No Data
Agricultural Land***	2,200	N/A	N/A	N/A

* Mixed use refers to downtown or transit-oriented developments. Mixed Use Housing Unit and Retail/Commercial SF totals are not included in the Residential and Retail/Commercial SF totals in Figure 1. All areas proposed for future mixed use had no other proposed land uses, so there is no difference between the scenarios.
** The "From" and "To" scenarios represent the sum of acreage and estimated square footage when the least and most intensive proposed land uses are chosen for all areas. Multiple proposed land uses occurred only in unincorporated areas where the planning areas of two or more municipalities overlapped.
*** Agricultural land does not represent a new or added land use, but instead is a total of existing agricultural acres that are not converted to developed acres in the most intensive scenario.
Sources: CMAP analysis of CoStar Data, municipal and county Comprehensive Plans and approved major developments.

This estimated "full build-out" development from proposed future land use change would represent a significant shift in the land use pattern in central Lake County. While each new development will have to be specifically approved by municipalities, comprehensive plans represent an important communication of a municipality's intent for future land use change. Development of a given use is more likely to occur if a community includes that use in their comprehensive plan and/or zones for that use. Lake County staff has indicated that development in much of the unincorporated area is also either governed by settlement agreements between private and public sector actors or limited by water and sewer capacity and agreements about the potential expansion of those facilities.

Figure 2 provides a comparison of the existing development in all of Lake County and the I-94 corridor to the estimated development site capacity in future change areas within 2 miles of the proposed 53/120 corridor, if all areas designated for new development were built out. As noted, these numbers have not been adjusted to reflect any market constraints. The most predominant proposed future land use by square footage is retail, with lesser increases in all other property sectors:

- New retail square footage generated within the proposed future retail areas in the corridor has the potential to double the existing retail square footage in all of Lake County and significantly exceeds the retail developed near I-94. Given current development patterns and constraints, it is unlikely that all of the area designated for retail in the comprehensive plans will be developed.
- Proposed new office development within the corridor would increase office square footage in the entire county between 40 percent and 75 percent. The upper end of the estimated office development also exceeds the amount of office developed in the I-94 corridor.
- More acreage has been allocated to industrial than office, but the existing industrial base in Lake County and the low average density of industrial development means that proposed industrial land uses would only increase approximately 25 percent over existing industrial square footage.
- Housing units and population near the corridor would increase at a significantly lesser rate of 4 percent to 5 percent, in part due to the large-lot zoning in many communities near the corridor.

Figure 2. Existing Lake County Development and Estimated 53/120 Corridor Proposed Development

Land Use	Existing Development - All of Lake County	Existing Dev – I-94 Corridor in Lake County***	Estimated New Development within 2 Miles of the 53/120 Corridor, per Comp Plans****		Increase over Existing Dev in Lake County
			From	To	
Office (SF)	34,745,869	22,510,254	12,890,000	23,780,000	37% to 68%
Industrial/Flex (SF)	82,849,019	28,226,296	18,650,000	19,360,000	23% to 24%
Retail (SF)*	33,564,300	10,994,823	23,790,000	39,650,000	71% to 118%
Housing Units**	260,310	No Data	9,410	11,840	4% to 5%
Population**	703,462	No Data	29,060	35,930	4% to 5%

* Retail square footage includes first-floor retail in mixed use developments.
**Housing units and population in the "2011" column are 2010 US Decennial Census figures.
***The I-94 Corridor was roughly defined by Milwaukee Ave and Hunt Club Rd on the west and Skokie Blvd and Delaney Rd on the east.
****Future development has been estimated from the future land use change indicated in the Route 120 Unified Vision and comp plans via municipal/county density regulations and CMAP's Futureview metrics for FAR, jobs, population, and households by land use. Resulting FARs were checked against average new construction FARs in Lake County for non-residential buildings constructed since 2000, as derived from CoStar data. Depending on the corridor and the type of standalone retail, average FARs ranged from 0.18 to 0.25.
Sources: CMAP analysis of municipal and county comprehensive and strategic plans, site plans of recently approved major developments, CoStar Data and US Decennial Census data.

The Transportation Impacts of the Proposed Future Land Use Change

If constructed, the proposed 53/120 Facility will not only address transportation needs, but will also provide valuable access that will catalyze new development in central Lake County. The

Advisory Council has stated that the purpose of the proposed Facility is to address local and regional mobility needs, connect people and jobs, facilitate economic development, encourage multimodal access, and enhance the natural environment. Achieving these goals will require tradeoffs not only in decisions related to the design and function of the Facility, but also in long-term decisions about adjacent land uses.

As the analysis above indicates, municipalities in the northern and western portions of the corridor have actively planned for potential new development adjacent to the facility. Land use change at the scale proposed has significant implications for potential traffic levels on both the proposed facility and the existing transportation network. The following highlights the potential impact of the proposed land use change on the design of the facility, area traffic congestion, and the purpose of the road as defined by the council.

The GO TO 2040 Socioeconomic Forecasts

The traffic model projections for 2040 are based on the proposed transportation network for 2040 and CMAP's GO TO 2040 population, household and employment forecasts. CMAP's 2040 forecasts are scenario-driven rather than projections of market demand. This means that the 2040 forecasts of population, households, and employment assume that communities throughout the region are following the strategies outlined in the Preferred Regional Scenario ("the Preferred Scenario") and the GO TO 2040 Plan ("the Plan").[2] The preliminary recommendations of the preferred Regional Scenario are:

- Create more compact, mixed-use, livable communities to serve as the building blocks of our region's future development.
- Invest more effectively in education and workforce development, while fostering a business climate that encourages job growth and innovation by the private sector.
- Improve the region's high-quality system of parks and open space, while using conservation measures to reduce our consumption of energy and water.
- Plan multi-modally for transportation and target transportation investments to achieve outcomes such as economic growth, environmental protection, and congestion reduction, while finding more sustainable ways to finance infrastructure improvements.
- Track our performance to assess where to make improvements to reach the region's desired future.

With regard to land use and development, the Plan specifically states that "local land use decisions should focus on the interrelationship of transportation, land use, and housing, with an emphasis on development patterns that support the use of public transit." To achieve this, the Plan and Preferred Scenario recommend a focus on strengthening existing communities and finding opportunities to encourage new development and redevelopment within livable

[2] A more complete discussion of the process used to create the GO TO 2040 Socioeconomic Forecasts is available at http://www.cmap.illinois.gov/c/document_library/get_file?uuid=b2a80d82-248c-461c-9b20-e52b37f6b12e&groupId=20583

communities that are denser and designed for mixed uses. Both the Plan and Preferred Scenario recognize that definitions of acceptable density and mixed use development will vary widely across communities, noting that even small increases in density will further the goals of the plan. However, the GO TO 2040 forecasts assume that a substantial portion of the region's growth will take place via reinvestment and infill rather than through new development on open space or agricultural land.

The Route 53/120 Corridor Proposed Future Land Use Change represents a significant departure from GO TO 2040's focus on reinvestment and instead presents a continuation of the large-lot residential and low-density commercial development that is typical in central Lake County today. Additionally, potential employment significantly exceeds the employment in the GO TO 2040 forecasts.[3] As described below, the more dispersed land use patterns that are common in the county today often lead to increased traffic and congestion. As a result, congestion levels on the proposed facility and within Lake County have the potential to be higher than those projected by the traffic model.

Connecting Jobs and Housing

While Lake County has a lower proportion of workers leaving the county for work than most of the region, (see Figure 3), there is a mismatch within Lake County between the location of its jobs and housing.[4] In particular, the fastest-growing residential areas are located along Route 120, while the fastest growing employment areas are located in the eastern and southeastern portions of the county near Interstate 94 and the terminus of Interstate 294. In addition to this spatial mismatch, Lake County has a high rate of in-county workers driving to work alone, placing more traffic on the road network during peak hours. The 53/120 Facility has the potential to address this issue in two ways: first, the new facility can serve to ease congestion and reduce commute times by providing additional capacity; and, second, the facility provides access to new locations for employment centers that are close to growing residential areas. However, a new facility on its own will not address the problem - supportive land use planning is required to encourage better jobs/housing access and minimize peak-hour automobile trips.

[3] GO TO 2040 forecasts approximately 44,000 new jobs within the two-mile buffer surrounding the 53/120 facility and Route 120 Unified Vision study area. Utilizing Futureview square feet per employee metrics on the development generated in this analysis yields a significantly higher 100,000 to 150,000 new employees.

[4] According to the CMAP Jobs-Housing Balance Snapshot, the percentage of Lake County workers over the age of 16 who work outside of the county has been declining slightly – approximately 33% in 2000 and 32% in 2006. The Jobs-Housing Balance Snapshot can be accessed at http://www.cmap.illinois.gov/documents/20583/3096ede0-5e7a-4c31-82bb-fa4503c3e1d1

Figure 3: Means of transportation to work for workers working within their county of residence

Workers over the age of 16	Region	Cook County	DuPage County	Kane County	Kendall County	Lake County	McHenry County	Will County
Working Outside County of Residence	25%	13%	41%	48%	69%	31%	48%	55%
Working in County of Residence	75%	87%	59%	52%	31%	69%	52%	45%
Drove Alone	48%	52%	46%	42%	22%	53%	38%	36%
Carpool or Vanpool	7%	8%	5%	4%	2%	6%	6%	3%
Public Transportation	10%	17%	0%	0%	0%	1%	0%	0%
Walked	3%	4%	2%	1%	1%	2%	2%	1%
Taxicab, motorcycle, bicycle, or other	1%	2%	1%	1%	0%	1%	1%	1%
Worked at Home	5%	4%	5%	4%	6%	7%	6%	5%

Source: CMAP Analysis of US Census American Community Survey 2010 one-year estimates.

The proposed future land use analysis indicates that municipalities would like to encourage a significant amount of new retail, office, and industrial development within the 53/120 Corridor. Placing mixed-use and/or comparatively denser development directly adjacent to the Facility or in downtown, village center or employment center areas near the Facility could minimize vehicle trips in areas further from the corridor. Transit service could also access these expressway-adjacent areas and quickly return to the Facility, allowing for faster transit trips and easier connections to employment centers. However, the Future Land Use Change analysis indicates that areas near proposed interchanges are often proposed for lower densities and/or land uses that do not fully capitalize on the access provided by the new facility. For example, several potential interchange areas have been designated for single family residential development. These areas might be more appropriate for commercial nodes or for multifamily housing that provides more housing choices for Lake County workers in highly accessible areas.

Additionally, a very small amount of mixed-use development area has been proposed for the corridor, generally concentrated within existing downtowns or near Metra stations. However, mixed-use development offers an opportunity to provide employment and housing adjacent to services and transit. Mixed use development can come in a number of forms – ranging from "traditional" multistory buildings to a horizontal mix of uses within the same site to simply creating pedestrian and bike connections between formerly isolated land uses. An area that could particularly benefit from mixed-use development is the Prairie Crossing Metra Station area, which contains two Metra stations on separate lines and could have easy access to bus-based transit utilizing Route 53 or Route 120. While parcels between the two stations are designated for a mix of uses that could be transit-oriented, the remaining undeveloped land to the southeast is designated for Industrial land uses. A portion of this area is subject to the Heartland Settlement Agreement, which limits the number of new housing units and the amount of commercial and industrial square footage within its area. However, concentrations of

transit access like this one provide an opportunity to focus residential and/or commercial development around a significant transit node and facilitate jobs-housing connections within the county and region as a whole.

Economic Development

One of the major stated goals of the Advisory Council is encouraging economic development within the corridor. Promoting economic development can encompass a broad range of benefits, including attracting new businesses, boosting employment, and raising fiscal revenues through increased property or sales taxes. The new access afforded by the proposed facility provides substantial economic development potential to central Lake County. This has been reflected in the amount of planning completed for new, non-residential development and in private-sector acquisition of large parcels near the proposed Facility. Additionally, many unincorporated areas directly adjacent to the proposed facility were located within the planning areas of two or three municipalities, indicating municipal intent for economic development in these locations.

However, areas designated for retail, office and industrial development appear to exceed feasible development expectations. Estimated square footage from proposed retail areas in the 53/120 Corridor exceed the existing retail square footage in all of Lake County and are nearly triple the square footage found in the I-94 corridor. Similarly, the upper ranges of the estimated office and industrial square footages matches the total square footages of those land use types found on the I-94 corridor within Lake County. In short, planning for the Facility has generated potential development volumes more typically seen on high-traffic, high-speed, eight lane facilities.

The analysis above did not place any market limitations on proposed future land uses, but it is unlikely that new retail, office, or industrial development will be developed at the level estimated. Instead, some communities will attract less development than anticipated. Planning for the 53/120 Facility offers the opportunity to review land use plans across multiple municipalities and create a collaborative process where individual communities work together to direct development to some areas, preserve open space in other areas, and share potential fiscal and economic benefits. Without a coordinated approach, development will occur in a disjointed pattern across multiple communities on the corridor, presenting the potential to negatively impact the goals of preserving community character and conserving natural and agricultural areas. Additionally, this kind of scattered development can lead to increased automotive trips, vehicle miles travelled and congestion.

Transit-Supportive Land Use

One of the Council's goals for the Facility is to accommodate multimodal access. As shown in Figure 3 above, a significant proportion of Lake County workers are employed within the county, but less than 1% of those commuters utilize public transit. A dependence upon single-occupant vehicles for commute trips can increase peak-hour congestion and commute times,

while transit networks offer an opportunity to decrease congestion by moving more people in less space. The preferred 53/120 transit scenario at the recent Design Workshop was express-bus service in regular traffic lanes, with potential for rush-hour shoulder access for buses. While transit-oriented development is contemplated for a few select areas within the corridor, the proposed future land change and densities are generally not at a level that could support of frequent transit service. In addition to urban design features that encourage walkability and access to transit stations, transit systems require minimum housing unit and job densities to operate efficiently. The table below provides the average minimum dwelling units per acre to support various transit types.

Figure 4: Minimum densities required to support transit services

Mode	Frequency	Minimum Dwelling Units per Acre	Minimum Employees per Acre
Local Bus	1 bus/hour	3.5 to 6	50 to 80
Local Bus	1 bus/30 minutes	7	80 to 200
Local Bus	1 bus/10 minutes	15	200 to 500
Express Bus	1 bus/20 to 30 minutes	15	
Rapid Transit	Every 5 min. during peak periods*	12	
Light Rail	Every 5 min. during peak periods*	9	500+
Commuter Rail	20 trains/day	1 to 2	

Sources: Pushkarev and Zupan (1977). *Public Transportation and Land Use Policy*. Indiana University Press, Bloomington, IN. and Victoria Transport Policy Institute (2011), *Transit Oriented Development: Using Public Transit to Create More Accessible and Livable Neighborhoods,* accessed at http://www.vtpi.org/tdm/tdm45.htm

On average, the proposed density of new housing units near the Facility is slightly less than 2 units per acre. This is not sufficient to support transit beyond a park & ride-based system like the Metra stations already in place. In mixed-use areas, housing densities rise to 12 units per acre. However, areas with vertical mixed uses or multifamily residential development comprise a very small proportion of the proposed future land use change area. Similarly, employment densities in the corridor are generally below transit thresholds. Because FARs in nearby communities emphasize lower density commercial development, average employees per acre on the corridor are estimated to range from 10 to 15 for retail, 9 to 12 for industrial, and 45 to 60 for office land uses. These lower densities of employment and housing will make provision of high quality transit services within the proposed corridor difficult.

The GO TO 2040 plan recommends planning for land use near transit, and specifically identifies planning for land use along potential expressway BRT corridors like the 53/120 Facility as a priority. However, densities as proposed in the corridor are not transit-supportive, and new transit services in low density areas with limited walkability are unlikely to succeed. While not all development within the 53/120 Corridor should be compact, areas with access to existing and proposed transit facilities should be planned to capitalize on those assets if provision of BRT or other high-quality transit services is a goal for the corridor. Per the Plan, "Among the

many benefits of pursuing livable communities, compact development can significantly reduce the cost of local roads and other infrastructure. Growth that emphasizes access to transit and other transportation alternatives can reduce reliance on automobiles, helping to reduce congestion and household transportation costs." Without compact, transit-supportive development, provision of high-quality transit in the 53/120 Corridor will not be feasible.

Access Points

Retail, office and industrial developers will seek out areas with the most access to customers and employees. For the 53/120 Corridor, access to the facility will be a major driver of future commercial and industrial land uses. Interchanges can also produce additional traffic on local roads that access the expressway, and new development on those roads will generate more vehicle trips. Therefore, interchanges and intersections should be placed where access to existing and future development is desired and minimized in areas where preservation of open space and/or a predominantly residential character is a major concern. Additionally, development on major roads that access the Facility can be planned to complement existing commercial and industrial areas and lead traffic towards those established nodes.

The council has not chosen desired access points for the facility, but traffic modeling for this process has generally relied on those proposed by the Lake County Transportation Improvement Process (LCTIP) for Route 53/120 project. Municipal plans have also utilized these interchanges or have proposed alternative alignments and interchanges that provide better access to their community. The LCTIP Interchanges are marked with asterisks in the Future Land Use Change Map at the end of this memo.

As an example, the proposed development cluster on Peterson Road is located near the intersection of Route 53 and the Route 120 bypass, capitalizing on the access and visibility provided by this interchange. The proposed Cornerstone development alone contains 3.6 million square feet of office and light industrial, 500,000 square feet of retail, and 800 housing units. Planning for mixed-use concentrations of employment, services, and housing in areas with better access to the Facility allows the private market to take advantage of the Facility and concentrates automotive and transit trips in a single area. Similarly, while the proposed Route 120 bypass crosses Almond Road, an interchange at this road is not preferred due to the sensitive nature of the Almond Marsh and the desire to retain the agricultural and natural character of the surrounding area.

The Council has indicated that an interchange at Route 22 presents a challenge with regard to balancing environmental, access, and economic development needs. The Egret Marsh and Heron Creek Forest Preserves contain environmentally sensitive wetlands, and part of Heron Creek has been classified as an Illinois Nature Preserve. This designation is reserved for unique areas that "have rare plants, animals, or other unique natural features."[5] However, Route 22

[5] Illinois Department of Natural Resources. *Illinois Nature Preserves Commission.* Accessed on February 9, 2012 at http://dnr.state.il.us/inpc/

also provides access to well-established industrial and commercial areas to the west in Lake Zurich. Without an interchange on Route 22, visitors to some of these areas would need to travel several additional miles to reach the 53/120 Facility. This may increase traffic on local roads and decrease further economic development potential. Therefore, access options in this area will need to be carefully considered.

Traffic and Congestion

The development patterns prevalent in central Lake County today create low accessibility and can lead to significant traffic congestion. First, many adjacent residential and commercial developments lack connections between them, increasing reliance on arterial streets to travel short distances. While a network of cul-de-sacs and winding streets can serve to promote a rural or suburban character, it also provides minimal access to the larger road network. Instead, this pattern of minimal access points and connections produces a reliance on the arterial and collector road system for both short and long trips and can increase traffic congestion.[6]

Additionally, a predominance of single-use districts also can increase congestion. Mixing multiple land uses or business types in a single location minimizes automobile trips and allows for multiple tasks to be accomplished in a single trip. Placement of essential services like schools, parks, and grocery stores within a small radius can create a neighborhood node that decreases miles travelled and/or encourages pedestrian and bike trips.[7] However, recent development in the county has emphasized retail corridors, office or industrial parks, and similar homogenous districts.

Finally, density and compact development play a role in traffic congestion. While density alone does not drive congestion levels, it is part of a package of improvements that lead to "compact development" and can increase access to transit, encourage walking and biking, and contribute to fewer and shorter automobile trips.[8] Larger lot and setback requirements increase the distances between destinations and, as a result, vehicle miles travelled. These increased distances make biking, walking, riding transit to key destinations difficult, increasing dependence on automotive travel. Small increases in density in combination with pedestrian and bike improvements, particularly in areas that already serve as community centers, can help reduce reliance on automobile trips and foster more livable communities

Community Character

Many Lake County communities prefer a rural character, and the articulated goals in individual community plans reflect this preference. However, the scale of the land area that has been

[6] LeHigh Valley Planning Commission. Street Connectivity: Improving the Function and Performance of Your Local Streets. June 2011. http://www.lvpc.org/pdf/streetConnectivity.pdf
[7] The Victoria Transport Policy Institute. (2010). *Land Use Impacts on Transport: How Land Use Patterns Affect Travel Behavior.* Accessed on February 8, 2012 at http://www.vtpi.org/landtravel.pdf
[8] Ibid.

allocated for future development in the combined municipal plans is in direct conflict with this desire to preserve rural character. A new retail corridor would emerge on Route 120 and extend several miles beyond the western edge of the bypass; significant industrial, office, and retail development would occur near the intersection of Route 53 and the Route 120 bypass; and, low-density residential would fill out significant proportions of undeveloped agricultural and open space near the facility. The total square footage capacity of the planned development areas, even at the lower densities preferred in central Lake County, is on a level with that found in the I-94 corridor. While it is unlikely that all areas designated for future development will be built upon, current community plans create the potential for a substantial shift in the character of central Lake County.

Decisions about the type of Facility that 53/120 will be are important to the future character of central Lake County. However, decisions about future land use around the facility will have an equally strong impact on community character and on the functionality of the proposed Facility. Prior planning processes have evaluated potential land uses across the corridor, but communities have been unable to come to agreement regarding appropriate areas for development and preservation on a corridor-wide basis. As a result, this analysis and summary of individual community plans reflect overlarge areas of land available for future development.

While recognizing that land use decisions are localized, GO TO 2040 recommends that communities work collaboratively to address planning problems in housing, transit, economic development, and other areas. The Plan places a specific emphasis on planning for land use around major capital investments and potential transit corridors. In an area such as the 53/120 corridor, where the proposed facility has the potential to swiftly and wholly change the character of the surrounding area, it is critical to plan for future development in a manner that both supports the Facility and encourages growth patterns that sustain livable communities.

Initial Suggestions for Next Steps

While market constraints will determine how much of the proposed future land use change actually occurs, communities also have an opportunity to work across boundaries to better guide the future of central Lake County. Designating significantly more land for development than the market can bear can further sprawling development patterns and exacerbate inter-community competition for non-residential development. Instead, the GO TO 2040 Plan recommends several actions that communities can utilize to plan for the proposed Facility. All of these recommendations center on increased informal and formal collaboration between public and private stakeholders in central Lake County.

1) Increase intergovernmental coordination

   The proposed Facility touches seventeen municipalities, is adjacent to state and county natural areas, and overlaps many other types of jurisdictions. GO TO 2040 strongly supports intergovernmental coordination as one of the best ways to address planning

problems in housing, transit, economic development, and other areas. The Facility represents significant opportunities and challenges for central Lake County which might be best addressed on a corridor-wide basis. Multijurisdictional groups have formed around other transportation corridors in the region (such as the Cook-DuPage Corridor) and can help to consistently address a diverse range of potential issues including environmental concerns, land conservation, land use change, congestion on local roadways accessing the Facility, economic development planning, and noise mitigation. Lake County already has a strong tradition of interjurisdictional cooperation related to environmental issue and other partnerships have emerged around planning for local roads. For example, the Route 120 Unified Vision was created through the collaboration of many stakeholders, and this Blue Ribbon Advisory Council represents a distinct effort to bring together a diverse group of stakeholders to discuss the 53/120 facility. Partnerships like these can form a strong base for creating an organization for the 53/120 Corridor.

2) Plan collaboratively for land use and transportation in the 53/120 Corridor

   Just as the new access provided by the proposed Facility affects land use potential, future land use change will impact the success of the Facility and the surrounding transportation network. Lake County's Regional Framework Plan (LCRFP) provides a guideline for future land use change in Lake County through 2020, and individual municipal comprehensive plans reflect future land use goals for 2020, 2030, or even longer term guidelines. However, these documents do not all plan for the 53/120 Facility, and those that do utilize a multitude of potential alignments. Planning for land use across the corridor and incorporating that plan into comprehensive plans and zoning ordinances can assist communities in maintaining community character, preserving natural and agricultural areas, and furthering a development pattern that is in scale with the proposed Facility.

3) Promote boundary and revenue sharing agreements

   In tandem with boundary agreements, revenue sharing agreements can allow development to be directed toward locations where it is the best fit for the 53/120 Corridor while allowing for preservation of sensitive natural and agricultural areas. In the region, the desire to attract businesses that generate property and sales taxes leads to significant competition between municipalities, new development that does not take advantage of existing infrastructure and resources, or land use outcomes that conflict with environmental, recreational, and land conservation goals. Area comprehensive plans reflect a significant amount of overlap in the planning boundaries of municipalities within the 53/120 corridor. In a collaborative land use plan, some communities may contain open space or agricultural areas that are worthy of conservation but little land area that is targeted for development. Creation of boundary and tax sharing agreements can add weight to corridor land use plans, allow for

subregional sharing of both fiscal and land conservation benefits, and incent balanced growth that better reflects the desired character of central Lake County.

Taken together, these actions will allow for a coordinated approach to planning for both the proposed facility and future land use. Linking these planning processes will further land use outcomes that support the Facility and the local transportation system, lead to development that sustains high quality transit options, and advance environmental and livability goals.

FREGONESE ASSOCIATES

PROPOSED WORK PLAN FOR CENTRAL LAKE COUNTY CORRIDOR PLAN

CMAP recently conducted an analysis of future land use change in the 53/120 corridor, compiled from existing plans and approved major developments. This work was shared with the full council at their meeting on March 5, 2012. The analysis shows that an estimated "full build-out" development from proposed future land use change would represent a significant shift in the land use patterns in central Lake County. Specifically, CMAP's GO TO 2040 plan emphasizes the importance of planning for land use around major capital investments and potential transit corridors. As the CMAP memo (dated February 10, 2012) states: "In an area such as the 53/120 corridor, where the proposed facility has the potential to swiftly and wholly change the character of the surrounding area, it is critical to plan for future development in a manner that both supports the facility and encourages growth patterns that sustain livable communities."

The CMAP memo presents initial recommendations for next steps on planning for future land use in central Lake County. These recommendations include increasing intergovernmental coordination and planning collaboratively for land use and transportation in the 53/120 corridor. Following is a suggested approach for completing such a cooperative process utilizing "scenario planning." The proposed facility provides an opportunity to engage in a regional effort and establish common goals and strategies. Because much of the implementation will take place at the local level, involvement of local jurisdictions will be crucial. The result will be a cooperative plan document with local support and clear steps for implementation.

What is scenario planning?
Scenario planning is a method for envisioning possible futures (scenarios) based on community goals, policy and investment decisions, land use regulations or other criteria. It allows people to compare and evaluate these futures to current trends and existing plans and explore strategies to achieve desired outcomes.

Corridor Plan Outcomes & Products

- A framework for coordinated intergovernmental planning along the corridor
- Preferred scenario or preferred strategies
- A cooperative plan document with local community support, including a concept map and strategic plan.
- Recommended modifications to existing local plans
- Funding program for local government implementation
- Monitoring program

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Proposed Steps

1. Create a framework for the corridor planning process

Fundamentally, the scenario planning process is used to address issues that have not been traditionally addressed in the 53/120 corridor:

- *What would the corridor look like with a new road? How might land development be affected?*
- *Are there different ways we could better manage that change?*
- *How can we use land use and transportation strategies to increase the prosperity and well-being of our communities, the county, and the region without jeopardizing our environment?*
- *How can we use land use and transportation strategies to reduce the emissions that contribute to climate change?*
- *How can we be prepared to leverage forces such as the economy, funding, demographics, housing, energy costs, etc.*

Land use and transportation scenario planning specifically provides an opportunity to see how the quilt of Lake County's local land use and transportation plans, CMAP's regional plans, and other plans would fare in a variety of future scenarios. The key components of this step are to:

- Develop local support for a scenario planning process
- Identify key planning issues
- Refine the planning area boundary
- Determine an organizational structure for the scenario planning process (e.g. what organization(s) will lead the effort in terms of logistical and technical components)
- Establish a project Advisory Committee
- Develop a meaningful public involvement plan

2. Develop guiding principles and select evaluation criteria

One of the keys to this scenario planning effort is to clearly define the outcomes that will signify the success of the project. In order to do this, development of a series of guiding principles for the project is recommended. These can be adapted from guiding principles developed by the Blue Ribbon Advisory Council and assembled from goals identified in existing plans. Developing these guiding principles will help to establish priority evaluation criteria that will be used to assess and compare 53/120 scenarios. The most effective guiding principles can be measured objectively. Objective measures allow for inspection of scenario performance measures and bring policy tradeoffs to light.

3. Set up for scenario planning: evaluation tools, data and development types

Today, planning tools facilitate the development and evaluation of a variety of land use and transportation alternative scenarios. We propose using Envision Tomorrow, a GIS-based planning tool, to design alternatives and measure the land use, housing and environmental

impacts of alternative scenarios. This tool will be integrated with other regional land use and transportation models, as needed.

4. Develop and evaluate current base conditions and a reference scenario

A crucial element this scenario planning process will be digitally approximating Lake County's existing conditions, which provides a known reference point. Because of the Chicago region's rich data availability and use of a variety of state-of-the-art technical tools, we can visualize and evaluate existing conditions. Measuring what conditions are like today makes it possible to describe the future in comparative terms that make sense to citizens, stakeholders and decision-makers. CMAP has already analyzed the outcome of Lake County's current zoning; this step may be largely complete.

5. Develop and evaluate alternative scenarios

This proposed work plan incorporates public engagement efforts that build momentum and encourage input that feeds directly into the scenario-building process. Lake County's citizens and stakeholders should be given an opportunity to convey their visions for the 53/120 corridors, provide input on strategies that should be tested in the scenarios, and begin the conversation about what the county, and communities within it, could do to improve its future.

After designing four scenarios, we would evaluate and compare the scenarios, and draw connections to the characteristics of each scenario. This analysis should be accompanied by an interpretation of what is significant about the data. Specifically, differences in scenario performance will be analyzed through the lens of understanding why scenarios performed in certain ways.

6. Select the preferred alternative scenario

In this phase of the process, the stakeholders and the community will have an opportunity to review the results of evaluation of the alternative scenarios, share their feedback and preferences, and prioritize policies or actions that would be effective in achieving community goals. Public input will be used, along with the results of the alternative scenario evaluations, to inform the development of a preferred scenario.

7. Implementation

Implementing a preferred scenario or set of strategies will require major cooperation between Lake County, its cities, and CMAP. This work plan proposes a written implementation plan or strategy that identifies actions to implement the selected strategies, and the responsible parties within the Chicago region. Selecting the implementation strategies will involve negotiating with key parties and securing their agreement to participate. The writing and adoption of the implementation plan will be a critical step in securing action.

Chicago Metropolitan Agency for Planning

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MEMORANDUM

To: **53/120 Core Team**

From: CMAP Staff

Date: March 15, 2012

Re: Route 53/120 Value Capture Analysis

The 53/120 Blue Ribbon Advisory Council recently made several important decisions about the design of the proposed 53/120 facility at a design workshop held on February 9, 2012. However, significant analysis needs to be completed on the financing of the proposed facility. While the costs and revenues of the road are not fully fleshed out, it is likely that there will be a gap in between bondable revenues from tolls and the cost to construct the facility. Traditionally, transportation implementers, counties, and municipalities have looked to federal and state sources to fill these funding gaps. However, these sources are primarily driven by gasoline taxes and have lost considerable purchasing power over the last twenty years. Moreover, these scarce resources must be used to maintain the existing system rather than construct new roadways. In this environment, other more innovative sources of funding must be evaluated. This memo provides background information on and case studies regarding *value capture*, a mechanism to provide local contributions for funding transportation projects. An analysis of the value capture potential of the 53/120 Corridor is also provided. Finally, the second section of the memo describes the methodology for the value capture analysis and underlying analyses.

What is Value Capture?

In a limited transportation funding environment, value capture offers one option for providing local contributions toward the cost of a new facility. Value capture assumes that nearby property owners will benefit from the construction of a new road through increased rents, sales, and land values. Some portion of these benefits is utilized to pay for the cost of the road. Value capture mechanisms are varied and can include tax increment finance (TIF) districts, special assessment (SA) districts, impact fees, land value taxes, and special local taxes such as sales or hotel taxes.

In Illinois, value capture can be accomplished through several existing mechanisms: Special Service Areas (SSAs), TIF districts, and Business Districts (BDs). A Special Service Area is a type of special assessment district and allows for levying of an additional property tax on area to pay for added services and infrastructure. TIFs divert increases in property tax revenues above a defined base to pay for infrastructure or redevelopment. Business Districts offer the option of creating an additional sales or hotel tax to fund infrastructure improvements and tourism initiatives. All of these districts require that the funded services or infrastructure provide unique benefits to the district area and, therefore, would be used to pay for only a portion of the cost of a larger facility like a new roadway.

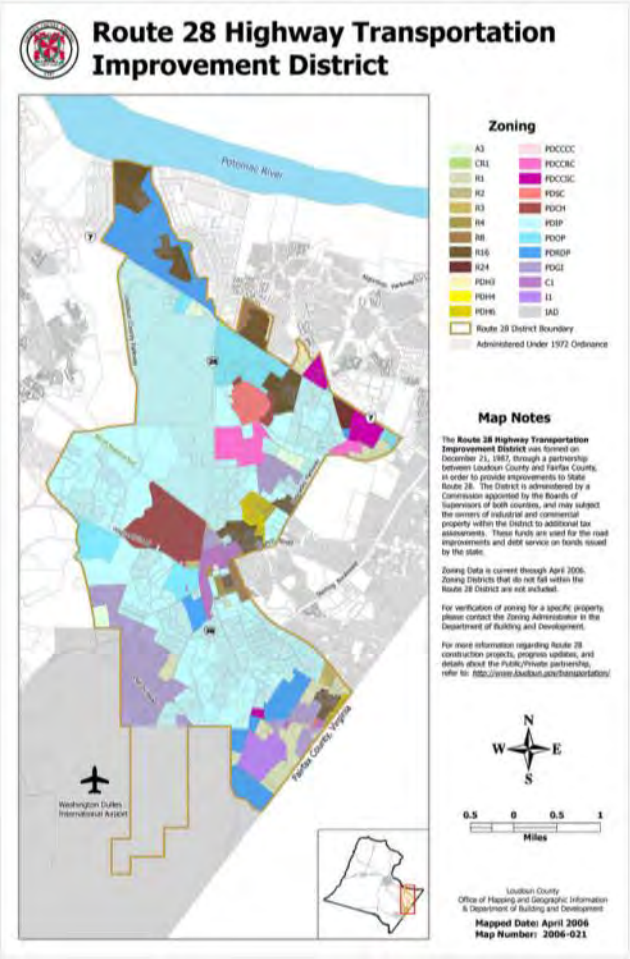
Value Capture in Other States

Several other states have established special districts to fund major transportation improvements. These include Virginia, which has used special assessment districts, and Georgia and Texas, which have utilized TIF districts. These states provide some insight into the advantages and pitfalls of value capture districts. A summary of each State's program and usage of value capture tools is provided below.

Transportation Improvement Districts in Virginia

Virginia allows for the creation of Transportation Improvement Districts to fund both roadway and transit facilities. Virginia TIDs use a Special Assessment, or added property tax, mechanism and may only include land zoned for industrial and commercial uses. The strongest example of a Virginia TID is focused on Route 28 in Virginia. This TID was created in 1987 to fund the conversion of Route 28 from a two-lane local road to a six-lane, limited-access facility. The TID was created jointly by Loudon and Fairfax Counties, after a required local taxpayer petition of at least 51% of property owners was successfully signed. The district was established with a maximum tax rate of $0.20 per $100 of assessed value, and the State of Virginia agreed to make up deficits in bond payments. General Obligation Bonds for $138.5 million, or 75% of the project cost, were issued by the state in 1988, and the initial project was completed in 1991. Due to the tax cap and countywide downzoning in Fairfax County, the Virginia State Highway Allocation had to pay for a portion of the debt service payments in the early years of the TID. In 2002, the district was restructured and extended to allow for construction of 10 additional interchanges and widening of a portion of the facility from six to eight lanes.

Figure 1. Route 28 Transportation Improvement District



The scale bar on the right reads 1 mile.
Source: Loudon County Office of Mapping, http://www.flickr.com/photos/omagi/4265877377/

Tax Allocation Districts in Georgia

A Tax Allocation District (TAD) acts similarly to an Illinois TIF district, where revenues are created not by an additional tax but by the incremental increase in property value and the resulting tax revenues. Georgia TADs may fund a broad array of redevelopment and infrastructure projects, and establishment areas must be found to be "economically and socially depressed" by meeting preset criteria and benchmarks. TADs may cross multiple jurisdictions, require the permission of any overlapping jurisdictions, and may not contain property that comprises more than ten percent of any single jurisdiction's assessed value.

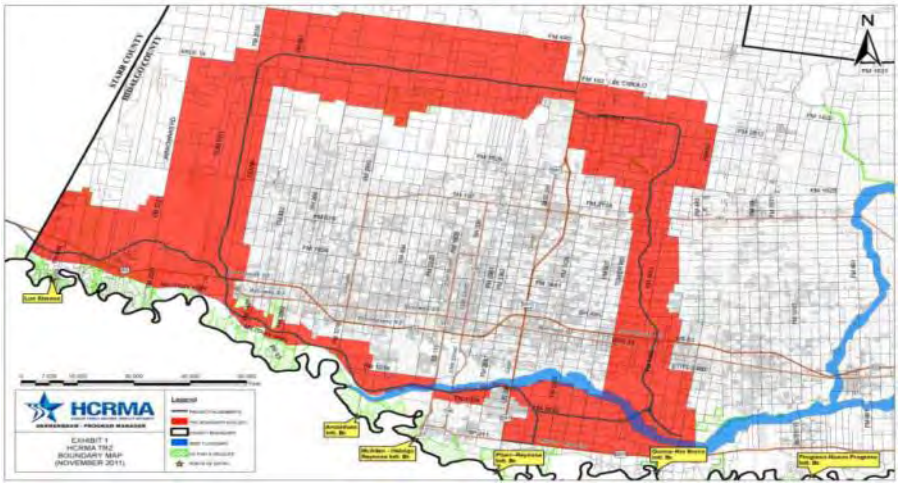
In 2006, Atlanta, Georgia established a TAD to fund the Atlanta Beltline, which is a repurposing of an existing 22-mile railroad right of way around Atlanta to a light rail line with transit-oriented development. TAD-eligible improvements include transit, pedestrian, and roadway improvements, school construction, affordable housing, greenways and development assistance. The total project cost is estimated at $2.9 billion, approximately $1.7 billion of which

is anticipated to be funded by the TAD. The TAD follows the railroad right of way, and its area extends to include non-residential development within walking distance that is likely to redevelop or require significant infrastructure upgrades to support redevelopment. The total land area is equivalent to approximately 8 percent of the City, and the assessed value is approximately 2.7 percent of the City's total assessed value. Only two other districts are overlapped by the Beltline TAD – Fulton County and Atlanta Public Schools. All three districts passed consent resolutions agreeing to participation in the TAD and limiting of their revenues from the TAD to 2005 levels over the 25-year lifespan of the district.

Transportation Reinvestment Zones in Texas

Texas statute has two types of TIF districts, one of which is focused specifically on funding roadway improvements. Transportation Reinvestment Zones (TRZs) may be created by counties or municipalities, although counties must create an additional taxing district called a Road Utility District (RUD) to pass the funds through due to limitations on County authority to utilize tax increment financing. As with Illinois and Georgia, a finding of district distress is required; as a whole the TRZ must be "unproductive and underdeveloped." Inclusion in the TRZ is limited to properties within 1 mile of the transportation improvement. TRZs can be established for 20 years or more, depending upon the length of time required for financing, and automatically expire at the end of the year in which the debt is completely repaid. TRZ funding is paired with the Texas Department of Transportation's pass-through tolling mechanism, which provides repayment on a per-vehicle basis to public and private entities that provide up-front funding for transportation improvement costs. Therefore, TRZ projects have two sources of revenues to issue bonds on – the TRZ increment and the pass-through tolling payments. Finally, TRZ establishment requires negotiation of increment sharing with underlying taxing districts and formal approval of those sharing agreements.

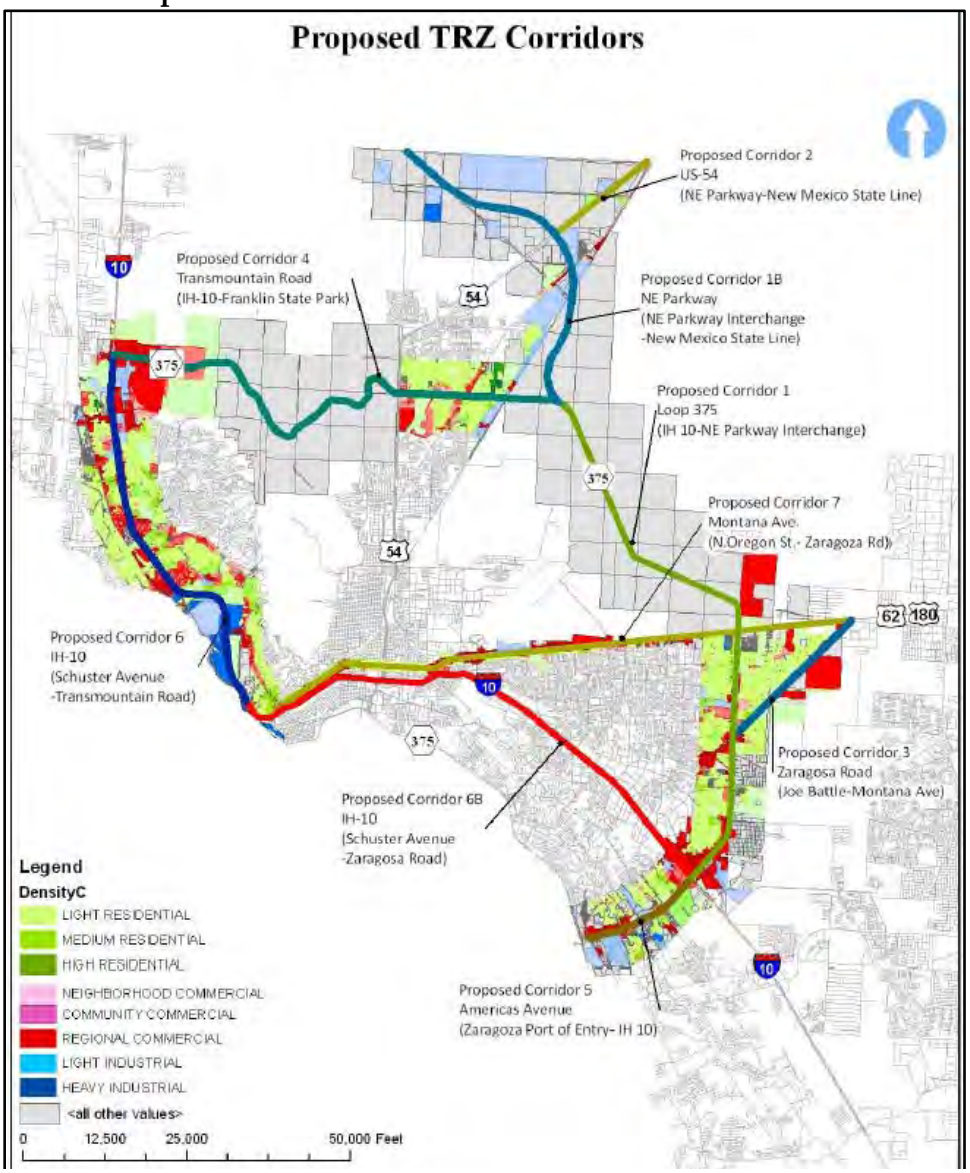
Figure 2. Hidalgo County Transportation Reinvestment Zone



The scale bar in the bottom-left reads 60,000 feet. The east-west distance is approximately 35 miles and the north-south distance approximately 20 miles.
Source: Hidalgo County, Google Earth

Since TRZs were authorized in 2007, TRZs have been created for major highway projects in the City of El Paso, Hidalgo County, and the City of Forney. El Paso has created two TRZs encompassing 10,000 acres to repay $70 million in debt related to improvements on five highway corridors. Hidalgo County created a 175,000 acre district to assist in funding a proposed $700 million loop road around the urbanized area of the county. The City of Forney created a smaller TRZ in 2008 to fund creation of a new interchange on the existing US-80. However, the City dissolved the district at its October 11, 2011 council meeting.

Figure 3. El Paso Transportation Reinvestment Corridors



The scale bar in the bottom-left reads 50,000 feet. The study area is roughly 20 by 20 miles.
Source: El Paso Mobility Program website at http://www.elpasomobility.org/pdf/trz-map.pdf

Route 53/120 Corridor Value Capture Potential

CMAP has constructed a planning-level analysis of the value capture potential of the proposed 53/120 corridor. This analysis is meant to provide an order of magnitude estimate of the amount that TIF and SSA value capture mechanisms could contribute to the cost of the project. Growth in property value is based on a conservative analysis of market potential for the Corridor, which estimated the potential for 4.2 million square feet of office development, 6.0 million square feet of industrial development, and 2.6 million square feet of retail development within the corridor through 2040. The market analysis included analysis of historical development trends and population and employment forecasts for Lake County. Please see the methodology section for more detail. A map of the value capture district is provided on the following page. The district includes all assessor blocks within 1 mile of the proposed ROW, and largely non-residential assessor blocks fronting major arterials within two miles of the interchanges proposed in the LCTIP process. It is assumed that, were a value capture district to be created for the corridor, a more precise boundary would be defined to reflect significant community input, assessments of which areas experience a higher magnitude of future benefits, and other policy considerations. Significant discussions will likely take place regarding which areas are most likely to benefit from the road and how they should contribute to its cost.

Figure 5 provides SSA and TIF-based bonding capacity estimates for a 53/120 Value Capture district with and without utilization of existing residential property value. These estimates were created using several key assumptions:

- Increased property value is derived from:
    - Inflation of existing equalized assessed property value (EAV) at 2% and 3%. These bracket a normal range of property value inflation over long periods of time.
    - EAV from new development square footage within the Corridor as determined by a Corridor-wide market analysis
- TIF bonding capacity estimates include an automatic set-aside of 50% of increment to underlying districts. In an actual value capture bonding scenario, the set-aside would be determined annually based on the bonding amount required to finance the road, the debt service payments required to repay that amount, and actual available increment. Therefore, the funds available to underlying jurisdictions would vary substantially through the life of the TIF and may be more or less than the 50% set-aside.
- An SSA tax rate of 0.50% is assumed. This is the current average SSA tax rate in the County, is equivalent to a rate of $0.21 per $100 of market value, and represents a 6% increase over the existing average property tax rate in the Corridor of 8.39%.
- The standard bonding interest rates, debt coverage, and bonding term assumptions for the Illinois State Toll Authority have been used. Significantly, a bond repayment period of 25 years is assumed, which extends beyond the standard 23-year life of a TIF district

but is within the extension period allowed by statute. The Tollway also utilizes high debt coverage ratios, which reduces bonding capacity but minimizes risk.

Figure 4: Potential 53/120 Value Capture District

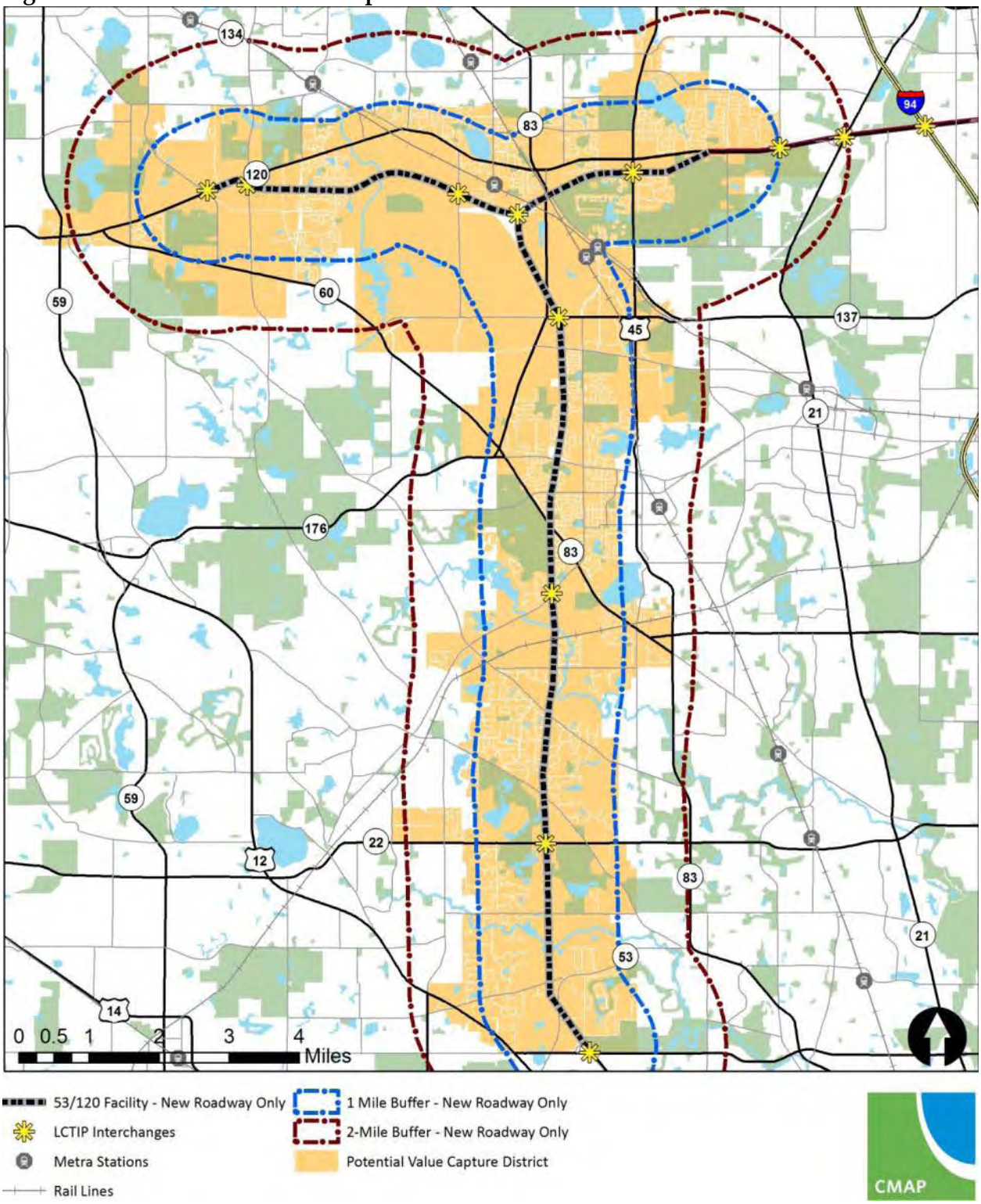


Figure 5: Estimated Value Capture Bonding Capacity for SSA and TIF-based Value Capture Districts on the 53/120 Corridor

Bonding Scenario	SSA***	TIF***
Excludes existing residential EAV		
Existing EAV Only*	$20 MM to $21 MM	$35 MM to $71 MM
New Development EAV + Existing EAV**	$37 MM to $46 MM	$131 MM to $179 MM
Includes existing residential EAV		
Existing EAV Only*	$109 MM to $118 MM	$196 MM to $391 MM
New Development EAV + Existing EAV**	$148 MM to $179 MM	$291 MM to $458 MM

*Existing EAV projections for an SSA assumed no EAV growth. Because a TIF requires EAV growth, a 2.0% to 3.0% annual growth rate of existing EAV was assumed.
** Growth Scenario projections assumed development of approximately 4.2 million square feet of Office, 6.0 million square feet of Industrial, and 2.6 million SF of Retail within the Corridor by 2040.
*** An SSA tax rate of 0.50% has been assumed. TIF bonding estimates assume a diversion of 50% of TIF revenues to underlying jurisdictions. All districts are established in 2018. Bonding term is 25 years.
Sources: CMAP analysis of Lake County Assessor data

As with prior value capture analyses for the Route 120 Corridor, an SSA district produces significantly less bonding capacity than a TIF district. This is due to the nature of TIF, which applies the area's existing property tax rate to growth in EAV. The average Corridor property tax rate is currently 8.39%, more than 15 times the proposed SSA tax rate. Even with minimal inflation and significant diversion of revenue to underlying districts, the incremental TIF EAV produces more annual revenues than an SSA within five to ten years of district establishment. However, as described below, a TIF district encompassing an area as large as the value capture district described above faces significant statutory and political limitations.

The inclusion of residential property also has a significant impact on the value generation potential of the Value Capture District. Nationally, value capture districts focused on roadway improvements either wholly exclude residential property or exclude it wherever feasible within statutory limitations. This is not the case with value capture districts created to fund transit improvements, since transit provides well-documented property value increases to residential property. However, residential property comprises more than 80% of the Corridor's current EAV and represents a significant potential source of value capture revenue.

Finally, the "Existing EAV Only" and "New Development EAV + Existing EAV" scenarios generate a broad range of value capture potential and a broad range of risk for the Tollway or other bonding authority. The existing EAV scenario represents standard bonding practices wherein SSA and TIF revenues are generated based on the existing property value base with zero or minimal inflation assumptions. This minimizes risk to the bonding authority but also does not recognize the development potential generated by the facility. The development scenario reflects an assumption of significant growth and, therefore, presents more risk that the value capture district will not generate revenues sufficient to cover debt service. Therefore,

understanding the value capture potential of the Corridor will also require understanding the risk level that the Tollway, state, or other bonding authority is willing to take on.

Statutory Limitations in Illinois

Value capture in Illinois faces two significant statutory obstacles. The first involves the local nature of the special districts used to generate value capture revenues. TIF and SSA districts may only be created by individual municipalities (counties may create SSAs, but must obtain the consent of underlying municipalities). However, transportation improvements like the proposed Route 53 extension and Route 120 bypass cross multiple communities. For example, twelve municipalities touch the proposed Facility, and twenty are located within two miles of the Facility. Under current statute, each of these individual municipalities and Lake County would have to create and manage a district of its choosing to provide funding for the proposed Facility. Alternatively, Lake County could create an SSA with the consent of underlying municipalities. While this has the benefit of allowing local choice in the type of district and funding source used for a local contribution, it creates a cumbersome structure that may be difficult to issue bonds for. Furthermore, this piecemeal district establishment may require a larger entity such as the Tollway or IDOT to issue bonds and take on the risk and task of repayment from individual municipalities. Other states allow the establishment of multi-jurisdictional districts to fund transportation improvements, with the requirement that underlying jurisdictions and/or affected taxpayers formally consent to the creation of the district. A similar district type focused on transportation improvements may be desirable in Illinois.

Additionally, both TIF and Business districts require a finding of blight as a condition of establishment. While some areas of the corridor are likely to meet some of the blight criteria, most are not. These areas will only be able to utilize an SSA mechanism or a community-wide revenue source such as sales tax. In 2011, an amendment was proposed to the Illinois TIF statute that would have allowed TIFs to be established in areas where transit-oriented development is needed and to fund TOD improvement costs. However, the initiative stalled due to concerns about broadening the scope of TIF. As described in the case studies, other states have created TIF-like mechanisms to fund transportation improvements, with limitations on funding uses and/or amounts that address concerns about the scope of TIF.

Political and Equity Considerations

Potential value capture funds are likely to be limited by several equity and policy considerations. First, jurisdictions that utilize property tax as a major revenue source often have concerns about the amount of property taxes that are diverted to TIF districts over their lifespan. To address this, many municipalities in the region create increment sharing agreements with school, park, fire and other districts when a TIF is established to ensure that all

parties receive a set additional share of TIF revenues. To utilize TIF as a value capture mechanism, these issues will have to be addressed. Some states require set-asides to underlying districts or limit tax increment to that produced by the establishing district. If a Transportation TIF mechanism is created, it is likely that local jurisdictions would need some statutory assurance that they will receive a portion of the revenue from the district.

Additionally, the impact of expressways on residential property value is unclear. Unlike commercial and industrial properties that directly benefit from the visibility, access, and reduced travel times provided by a new expressway, residential property can both benefit from and be harmed by expressway adjacency. Some analyses have shown that the value of residential properties directly adjacent to the expressway is lower than homes further from the expressway but with similar access. While the design recommendations of the BRAC thus far have sought to minimize the noise, light, and visual impacts of the expressway, the impacts of these decisions on residential property values are not definitive. For this reason, other expressway projects that have utilized value capture funding from an added tax such as a special assessment have excluded residential property from that tax. Residential property cannot be excluded wholly from a TIF district, but examples in Texas and Georgia indicate that boundaries have been set to exclude residential properties wherever feasible.

Conclusions

Value capture has the potential to generate significant revenue to assist in paying for the proposed 53/120 Facility. However, statutory changes are required to make value capture work in Illinois and policy decisions are required to better define the scope of the value capture district revenue base. Most significantly, the ability to create multijurisdictional districts focused on providing funding for transportation improvements does not exist in Illinois today. Current special districts can be adapted to provide funding in some situations, but are not likely to provide a strong option for a facility like the proposed 53/120 extension and bypass. Additionally, policy considerations remain about the inclusion of residential property in the proposed value capture districts and the sharing of tax increment revenues with underlying jurisdictions. If the Council decides that local contributions via value capture are a desirable funding mechanism for the 53/120 facility, the following next steps are recommended:

1) Further research into statutory solutions for a value capture districts in Illinois
2) Assessment of policies in other states and regions regarding increment sharing and the property tax base for value capture districts
3) Analysis of the impact of value capture tools on development economics

Methodology

This section of the memo provides a summary of the methods and assumptions used to structure the value capture analysis. Creation of a value capture analysis requires three distinct steps: compilation of the future land use plans of local communities, analysis of market potential for the major real estate development types, and projection of growth in property values as a result of potential development. The analysis of future land use plans and the market analysis provide a picture of future development in the corridor, feeding into the projection of property value growth and value capture revenues. This section provides a high-level summary of the methodology used for each.

Analysis of Community Plans

The compilation of community comprehensive plans was completed and summarized in a memo titled "Route 53/120 Future Land Use Change Analysis and Impacts" and distributed to the BRAC on February 27, 2012. The proposed future land use change derived from this analysis indicated that communities are actively planning for the future of the Route 53/120 Corridor. Figure 6 below summarizes the total new development by land use for the corridor.

Figure 6. Future Land Use Change within 2 miles of the Proposed 53/120 Corridor

	Future Added Acres by Land Use		Estimated Development	
Future Land Use Change	**From****	**To****	**From****	**To****
Residential	5,200	6,510	8,220 Units	12,450 Units
Retail/Commercial	2,420	3,050	31,210,000 SF	38,300,000 SF
Open Space	1,720	1,420	1,720 Acres	1,420 Acres
Industrial	1,670	2,360	19,700,000 SF	21,920,000 SF
Office	840	1,350	14,510,000 SF	26,340,000 SF
Mixed Use *	120	120	1,190 Units	1,190 Units
			1,350,000 SF	1,350,000 SF
Government & Institutional	90	130	No Data	No Data
Utility/Waste Facilities	20	20	No Data	No Data
Agricultural Land***	2,890	N/A	N/A	N/A

* Mixed use refers to downtown or transit-oriented developments. Mixed Use Housing Unit and Retail/Commercial SF totals are not included in the Residential and Retail/Commercial SF totals in Figure 1. All areas proposed for future mixed use had no other proposed land uses, so there is no difference between the scenarios.
** The "From" and "To" scenarios represent the sum of acreage and estimated square footage when the least and most intensive proposed land uses are chosen for all areas. Multiple proposed land uses occurred only in unincorporated areas where the planning areas of two or more municipalities overlapped.
*** Agricultural land does not represent a new or added land use, but instead is a total of existing agricultural acres that are not converted to developed acres in the most intensive scenario.
Sources: CMAP analysis of CoStar Data, municipal and county Comprehensive Plans and approved major developments.

The figures above represent a "full buildout" of all land within two miles of the corridor that municipalities have designated for future development. It has not been constrained by market potential, but is instead a reflection of the sum total of the separate future development plans of individual municipalities. Municipalities proposed development near the 53/120 interchange areas from the LCTIP process and in areas with significant existing undeveloped land. Depending upon the scenario, 55% to 70% of the proposed non-residential land use change is found in the area adjacent to the proposed Route 53 ROW north of Winchester and on the proposed Route 120 bypass and improvements from Route 83 on the east to the McHenry County line on the west. The amount of land designated for future development is substantial and, if developed at the densities prevalent indicated in comprehensive plans, would substantially change the character of central Lake County. Furthermore, the scale of proposed development is on par with that found on Interstate 94 through Lake County. Figure 7 compares the developable SF derived from the future land use change analysis to the existing square footage today within all of Lake County and in the I-94 corridor.

Figure 7. Existing Lake County Development and Estimated 53/120 Corridor Proposed Development

Land Use	Existing Development - All of Lake County	Existing Dev – I-94 Corridor in Lake County***	Estimated New Development within 2 Miles of the 53/120 Corridor, per Comp Plans****		Increase over Existing Dev in Lake County
			From	To	
Office (SF)	34,745,869	22,510,254	12,890,000	26,260,000	37% to 76%
Industrial/Flex (SF)	82,849,019	28,226,296	18,650,000	21,840,000	23% to 26%
Retail (SF)*	33,564,300	10,994,823	32,560,000	39,650,000	97% to 118%
Housing Units**	260,310	No Data	9,410	13,640	4% to 5%
Population**	703,462	No Data	29,060	41,200	4% to 6%

* Retail square footage includes first-floor retail in mixed use developments.
**Housing units and population in the "2011" column are 2010 US Decennial Census figures.
***The I-94 Corridor was roughly defined by Milwaukee Ave and Hunt Club Rd on the west and Skokie Blvd and Delaney Rd on the east.
****Future development has been estimated from the future land use change indicated in the Route 120 Unified Vision and comp plans via municipal/county density regulations and CMAP's Futureview metrics for FAR, jobs, population, and households by land use. Resulting FARs were checked against average new construction FARs in Lake County for non-residential buildings constructed since 2000.
Sources: CMAP analysis of municipal and county comprehensive and strategic plans, site plans of recently approved major developments, CoStar Data and US Decennial Census data.

Market Analysis

CMAP performed a high-level analysis of the market potential for office, industrial, and retail space within the Lake County corridor. The Corridor was defined as the area generally within 2 miles of the proposed right of way and overlaps portions of existing office and industrial centers in Lake Zurich and on Lake Street in Libertyville and Mundelein. Office and industrial

market potential were projected from regional and county economic forecasts and historic office and industrial development capture rates. Retail market potential was projected based on forecasted new households, existing retail leakage rates, and new worker spending. The following provides a brief overview of the process.

Office and Industrial Market Analysis

Office and Industrial market potential were derived from analysis of office and industrial development trends within the County and its major corridors and from future employment forecasts provided by Woods & Poole (W&P) and Economic Modeling Specialists, Inc (EMSI). Employment and the resulting square footage projections were reduced to reflect returns to pre-recession employment and occupancy levels. Projected new development square footage for the 53/120 corridor through 2040 was approximately 4.2 million square feet of office and 6.0 million square feet of industrial square footage. This development is expected to concentrate in the area north of Winchester Road at Route 53 and west of Route 83 at the Route 120 bypass, with some infill of existing business and office parks in other areas and development of commercial nodes near interchanges. Figure 8 below outlines the net new office and industrial employment and square footage for the Corridor.

Figure 8. New Industrial and Office Employment in the 53/120 Corridor and Resulting Development Square Footage

	Net New Employment	New Square Footage
Office	10,400	4,170,000
Industrial and Flex	5,900	6,000,000

Source: CMAP Analysis of Woods & Poole, EMSI, and CoStar data

To construct this analysis, data on office and industrial development within the County were analyzed to assess development trends. Figure 9 provides the countywide office and industrial square footage developed over time as well as current vacancy rates. The data indicates that development of office and industrial space has slowed over the last decade, with a halving of office space development and a significant reduction of industrial development. Vacancy rates are comparable to regional averages. According to CoStar data, office and industrial vacancy rates in Lake County have generally been at or below regional averages since recordkeeping began in 1997.

Figure 9: Lake County Office and Industrial Square Footage Development Over Time

Year Constructed	Office	Industrial
Before 1950	610,000	4,500,000
1950 to 1980	7,970,000	30,000,000
1980 to 1990	7,130,000	16,790,000
1990 to 2000	10,690,000	16,350,000

2000 to present	5,470,000	9,930,000
Current Vacancy Rate		
Lake County	14.4%	10.9%
7-County CMAP Region	14.9%	11.0%

Source: CMAP analysis of CoStar Data

To estimate a reasonable rate of capture of countywide office and industrial employment growth within the 53/120 corridor through 2040, CoStar data on office and industrial square footage in Lake County and on key corridors was collected and analyzed. Figure 10 provides a breakdown of office and industrial square footage constructed within the county and on major corridors since 1980. The last entry provides square footage developed within the 53/120 corridor since 1980, but has been treated separately because it overlaps the Route 83/45/Lake Street corridor.

Figure 10. Office and Industrial Square Footage Constructed in Lake County since 1980

	Office**	**Industrial****
Lake County	31,266,000	38,346,000
Milwaukee Corridor (Lake-Cook Road to Route 137)		
SF	6,144,000	11,829,000
Capture Rate	20%	31%
Route 83/45 Corridor (Lake Street cluster to Washington Street)		
SF	858,000	6,548,000
Capture Rate	3%	17%
I-94 Corridor (Lake-Cook Road to Wadsworth, Skokie Blvd to Milwaukee Ave*)		
SF	12,313,000	13,478,000
Capture Rate	39%	35%
Total % of Lake County SF	**62%**	**83%**
Route 53/120 Corridor (overlaps significant portions of the Route 83/45 Corridor)***		
SF	2,552,000	7,317,000
Capture Rate	8%	19%

* To avoid overlap in this table, properties in both the Milwaukee Corridor and the I-94 Corridor were excluded from the I-94 totals. Without this exclusion, total Office SF in the I-94 Corridor constructed since 1980 is approximately 16.4 M SF and total Industrial SF is approximately 15.4 M SF.

**Not all CoStar records include a year constructed. To minimize this loss, decade of construction was researched via aerials for the largest properties in each analysis area, to reach a maximum of 10% of total SF missing a year built.

*** The Route 53/120 Corridor includes a 2-mile buffer on either side of the proposed Route 53 extension and Route 120 bypass. Existing portions of Route 120 east of Hunt Club Road have been excluded.

Source: CMAP Analysis of CoStar data

As shown above, the study area has attracted a significant percentage of the industrial development in the county since 1980. This development has been located in Lake Zurich near Quentin Road, within the Lake Street industrial area in Libertyville, and in several nodes along the existing Route 120. The proposed facility is likely to increase the potential of the study area

to attract new industrial development, possibly to the level of the Milwaukee Avenue Corridor. To remain conservative and reflect lower preferred development densities in the Corridor, an average 24% capture rate has been chosen for the Corridor.

In contrast to industrial capture rates, the study area has attracted a lesser percentage of the county's office development. Vacancy rates are also significantly higher than regional and county averages, generally due to high vacancy rates at Kemper Lakes in Long Grove and Pine Meadows in Libertyville. The new facility will substantially improve the ability of the study area to attract office development and maintain normal vacancy rates, since most large new office development in the region locates on or near to expressways for the accessibility and visibility they provide. While the proposed facility is not an expressway, it will still be a limited-access roadway with comparatively higher traffic volumes and visibility than arterial roads. Therefore, it possesses many of the locational advantages of higher-volume expressways and can be expected to attract office development. Additionally, proposed office areas near Peterson and Alleghany Roads are located near to three existing Metra stations on two separate Metra lines, adding to the accessibility of these areas.

The most available land in the Corridor is located on the western portion of Route 120, which is somewhat distant from existing office and employment centers. However, the Cornerstone development, which has received key approvals from the Village of Grayslake and includes plans for up to 3.6 million square feet of office and industrial space, may spur interest in the Route 120 area as an office center. Build-out of this type of park will take some time and may extend beyond the 2040 planning horizon. For example, the Conway Parks development in Lake Forest has been open since 1991, still has several development sites available, and total office square footage today is approximately 2 million square feet. Given the significant new accessibility provided by the proposed facility, the large areas of developable land along Route 120, and the pre-existing development proposals, a 20% capture rate of countywide office development has been chosen the Corridor. This is equivalent to the capture rate that the Milwaukee Avenue corridor achieved over the last 30 years, but well below that of the I-94 Corridor.

Once analysis of existing square footage and trends was complete, EMSI and W&P projections of future employment in Lake County were analyzed. EMSI projections are only provided through 2021, and were projected out to 2040 using compound annual growth rates from 2015 through 2021. Only sectors that typically occupy office or industrial space were utilized for this analysis, with partial assignment of some sectors (for-profit education, for-profit healthcare, and admin/waste mgmt) based on current business and employment data by NAICS sector from InfoUSA. Future employment for public sector or institutional workers in healthcare, education, the military and general government was not analyzed because these sectors less frequently occupy office or industrial space.

While EMSI and W&P both project a return to pre-recession employment levels in both the region and Lake County by 2015, they provide divergent future scenarios for Lake County

through 2040. W&P forecasts significant growth in the County and a capture of new regional employment that increases its share of regional employment from 7.5% to 9.5%. Employment in sectors that occupy office and industrial space is projected to increase considerably; there is a doubling of employment in office worker sectors and an increase in transportation, warehouse and wholesale employees that eclipses a projected decline in manufacturing workers. Utilizing current worker per square foot metrics and reducing growth for backfill of existing vacant square footage, the W&P employment projection would generate more new office square footage than has been developed in the county over the past 30 years. Given the decreasing availability of vacant land and the height and density restrictions in the remaining undeveloped portions of the County, this seems unlikely. However, new industrial and flex square footage is projected to be generated at significantly slower rate than the past 30 years.

In contrast, EMSI forecasts slower rates of growth for the region and an employment capture for Lake County that maintains its current share of regional employment. Like W&P, EMSI forecasts the highest growth in office-related sectors, but at a lesser 50% increase from the current levels. Manufacturing employment is expected to maintain its current levels and transportation, warehousing, and wholesale employment is expected to grow. EMSI employment projections would lead to new office square footage generation within the County that is in line with averages over the last several decades. As with W&P, industrial square footage development is projected to increase at a lesser rate than in prior decades. For this analysis, the EMSI office employment projections have been utilized rather than the W&P projections in order to provide a more conservative estimate of future development for the value capture projections. For industrial employment, EMSI and W&P projections projected similar, slower rates of new development and were averaged.

Retail Market Analysis

The retail market analysis was based on three key variables: Future office employment as projected above, capture of leakage of retail sales from the Route 53/120 Corridor, and the spending potential of new households. It is assumed that Gurnee Mills to the northeast and the Woodfield cluster to the south will continue to provide major regional retail and entertainment destinations, and that new retail within the corridor will primarily serve the day-to-day demand generated by households and workers. Overall, the analysis projected capacity for approximately 2.6 million square feet of new retail development within the Corridor. As with office and industrial, much of this development is expected to concentrate in the northwestern portions of the Corridor, with some infill in existing areas and new development near interchanges. Figure 11 summarizes the major drivers of new retail demand in the corridor.

Figure 11. New Retail Demand and Square Footage by Demand Source

	Net New Demand	Retail SF
Worker Spending	$ 29,300,000	110,000
Capture of Existing Retail Leakage	$ 133,200,000	480,000

New Household Spending	$ 545,400,000	1,980,000
Total	**$ 841,100,000**	**2,570,000**

Source: CMAP analysis of Urban Land Institute, Woods & Poole and ESRI Business Analyst data

New employment generates the smallest amount of demand for new retail square footage, and that demand is likely to be concentrated in the Food Services and Drinking Places category. The employment analysis above indicated that the Corridor will house approximately 8,900 new office workers by 2040. Office workers spend near their place of work in several ways – buying lunch, eating out after work, and shopping. An Urban Land Institute metric of $3,300 in retail spending near to their place of work per office worker per year was utilized in this analysis to estimate demand for new retail square footage.[1] This metric implies a capture rate of approximately 50% of office worker spending.

Attraction of current retail sales leakage, based on data provided by ESRI Business Analyst, also provides a smaller contribution to the projected new retail square footage for the corridor. Initial analyses of the Corridor as a whole indicate that the corridor is balanced in terms of retail sales, drawing slightly more sales than demand within the Corridor should generate. However, there is sales leakage of 40% in the Food Services and Drinking Places spending category. A different picture emerges when the Route 120 portion of the facility is analyzed separately from Route 53 section. In this case, Route 53 captures 25% more sales than it generates demand for, and Route 120 makes 65% of its purchases, or $266 million in sales, to other areas of the County and region. This points to a significant spatial mismatch in the location of retail and housing in the Corridor, indicating a market opportunity for some new retail in the Route 120 portion of the corridor. Also, all areas have a significant leakage in the Food Services and Drinking Places category, indicating a need for dining and entertainment options in the Corridor. It was assumed that, with the development of the new facility, retail would develop along Route 120 to serve new workers and households and capitalize on the new access. At the same time, it is likely that some of the Route 53 retail will transition to other uses or draw customers from new housing to the west. Overall, it was estimated that the Study Area as a whole could capture 50% of the retail leakage from Route 120 area, with most new retail square footage being built in the Route 120 portion of the Corridor.

Finally, the largest demand for new retail sales is projected to come from new households in the corridor. The Future Land Use analysis projected some capacity for few new households within the corridor – 8,200 to 12,450 units. However, the CMAP GO TO 2040 scenario-based forecasts and the Woods & Poole population forecasts indicate significantly higher new households for the Corridor, or 18,000 and 25,000 new households, respectively. However, the Future Land Use analysis only utilized the most and least intensive development densities for a given area. In many cases, residential development was proposed for areas that also had more and less intensive future uses proposed (a less intensive use would be agriculture or open space), and that proposed development was therefore not included in the analysis. For the purposes of this

[1] Urban Land Institute, cited in: University of Wisconsin Extension, "Downtown Economics" Issue 25, January 2007. Accessed on February 27, 2012 at http://www.uwex.edu/ces/cced/downtowns/ltb/documents/DE0107.pdf

analysis, it was assumed that some of the land designated for non-residential development in the FLU Change analysis would be developed with residential as the market demanded. To provide a new estimate and reflect the lower densities preferred in current community plans, an average of the Woods & Poole and the minimum Future Land Use projections was created to estimate new households. This produced an estimate of approximately 19,400 new households in the Corridor by 2040. Average household spending on local retail goods was derived from ESRI Business Analyst reports on local spending patterns, and a capture of 75% of demand was assumed.

Taken together, these three factors produce approximately $700 million in net new retail sales for the Corridor by 2040. Industry average sales per square foot and normal vacancy rates were applied to this sales estimate, generating net new retail square footage within the corridor of approximately 2.6 million square feet.

Value Capture Projections

Value capture projections for the corridor were structured using standard TIF and SSA revenue projection methodologies. This section provides a high-level summary of the steps involved and the key assumptions driving the analysis results. Figure 12 summarizes the results of the value capture analysis for the Corridor.

Figure 12. Estimated Value Capture Bonding Capacity for SSA and TIF-based Value Capture Districts on the 53/120 Corridor

Bonding Scenario	SSA***	TIF***
Excludes existing residential EAV		
Existing EAV Only*	$20 MM to $21 MM	$35 MM to $71 MM
New Development EAV + Existing EAV**	$37 MM to $46 MM	$131 MM to $179 MM
Includes existing residential EAV		
Existing EAV Only*	$109 MM to $118 MM	$196 MM to $391 MM
New Development EAV + Existing EAV**	$148 MM to $179 MM	$291 MM to $458 MM

*Existing EAV projections for an SSA assumed no EAV growth. Because a TIF requires EAV growth, a 2.0% to 3.0% annual growth rate of existing EAV was assumed.
** Growth Scenario projections assumed development of approximately 4.2 million square feet of Office, 6.0 million square feet of Industrial, and 2.6 million SF of Retail within the Corridor by 2040.
*** An SSA tax rate of 0.50% has been assumed. TIF bonding estimates assume a diversion of 50% of TIF revenues to underlying jurisdictions. All districts are established in 2018. Bonding term is 25 years.
Sources: CMAP analysis of Lake County Assessor data

EAV Growth and Inflation

The major driver of the bonding capacity of SSA and TIF revenues over time is growth in Equalized Assessed Value (EAV), or the assessor's measure of a property's value. In Illinois, EAV should equal approximately one third of a property's market value. To estimate EAV growth from new development, this analysis utilized the projected square footage by development type from the market analysis. The EAV and square footage of comparable recently constructed, well-occupied office, industrial, and retail buildings within Lake County was compiled to provide an estimated EAV per square foot for new development. This EAV per square foot was then applied to the new development square footage projections to reach a "new development" EAV for the corridor. This new development EAV was then phased in over the next thirty years, with the highest growth rates between 2025 and 2030 to reflect immediate development spurred by construction of the Facility. New development EAV was not assigned to specific parcels or future land use change areas, but was instead analyzed on a Corridor-wide basis.

EAV growth also occurs from inflation of the value of existing EAV over time. For this analysis, an industry standard low growth rate of 2% and a high growth rate of 3% were applied to create a range of EAV growth from inflation. For comparison, the compound annual growth rate in EAV for all of Lake County has been 5.5% since 1999. This reflects both high-development and recessionary periods. For all TIF scenarios and for the "New Development +Existing EAV" SSA scenarios, these inflation rates were applied throughout the life of the taxing district. However, the SSA "Existing EAV" scenarios utilize these inflation rates only up to 2018, or the year of district establishment. The 2018 EAV is then held flat through the life of the district. This is consistent with current industry practice regarding SSA-based bonding issuances.

SSA Assumptions

While Lake County has a strong tradition of utilizing SSAs to fund infrastructure improvements, these districts are generally limited to improvements that benefit a single development. There are approximately 75 special service areas in Lake County today, 42 of which have an "Ad-Valorem," or EAV-based, tax rate. In these ad-valorem districts, the weighted average tax rate is 0.48%. Therefore, a rate of 0.50% reflects the current SSA trends within the County. Further analysis is needed to calibrate this rate and determine its impact on businesses.

TIF Assumptions

TIF districts generate revenue from an increase in property value above a defined base. This analysis assumes that the "base EAV" year for a TIF district would be 2017, based on a district establishment year of 2018 and standard property assessment timelines. As with an SSA, the current district EAV was inflated from 2011 through 2017 using the 2% and 3% annual inflation rates.

Additionally, the TIF district bonding revenues assume a 50% diversion of funds to underlying districts. Given the size of the value capture area, it is unlikely that the district will receive 100% of its increment. Instead, a TIF would be utilized to make a debt service payment that targets a specific bond amount. The 50% set-aside provides a rough allocation of what might be available to underlying districts in a given year. In reality, remaining increment to share with underlying jurisdictions will vary considerably based on the targeted bond amount, the annual debt service payments required to meet that amount, and the total increment in a given year.

Finally, TIF revenues have been assumed to be captured for 25 years, which is the standard bonding term for the Tollway. This is two years beyond the lifetime of a normal TIF district, and requires statutory approval. The General Assembly has authorized a number of TIF districts to extend their lifespan up to 35 years. However, to make these value capture TIF revenues bondable, it is likely that statutory confirmation of the district's longer time period would need to be obtained before the district is created rather than near the end of the standard 23 years.

Bonding Assumptions

Bonds for major roadway projects are generally issued by a state, toll authority, or, in some cases, individual cases. Since this analysis assumes that the Tollway would construct this Facility, the Tollway's bonding assumptions have been utilized. These include a 6.0% interest rate, a 1.5 debt coverage ratio (DCR), and 25-year term. Additionally, it is assumed that the districts would be created in 2018, with initial revenues available by 2020. It may be beneficial to create a TIF prior to 2018 to capture increases in property values after construction of the facility is officially announced but before construction begins. However, this would prevent additional issues with the statutory lifespan of TIF districts.

Finally, the Tollway or other entity issuing the bonds will need to consider what level of risk they are willing to assume. The "Existing EAV Only" projections of bonding capacity represent conservative scenarios that meet standard binding guidelines. However, these projections do not recognize the significant development potential generated by a new facility and therefore provide a limited bonding capacity. The "New Development EAV + Existing EAV" projections represent an assumption of significant growth within the value capture district and, therefore, present more risk that the value capture revenues may not be sufficient to meet debt service payments. Therefore, assessing the final contribution that value capture can provide will involve negotiating the level of risk that is acceptable to the Tollway or other bonding authority.

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MEMORANDUM

To: 53/120 Core Team

From: CMAP staff

Date: March 8, 2012

Re: Lake County Sales and Motor Fuel Tax Estimates

Financial analysis on the proposed 53/120 facility is likely to show a gap between projected bondable revenues from tolls and the cost to construct the facility. This memorandum reviews current county imposed sales and motor fuel taxes in northeastern Illinois, and estimates potential revenues from the imposition of these taxes at varying rates in Lake County.

County Option Sales Tax

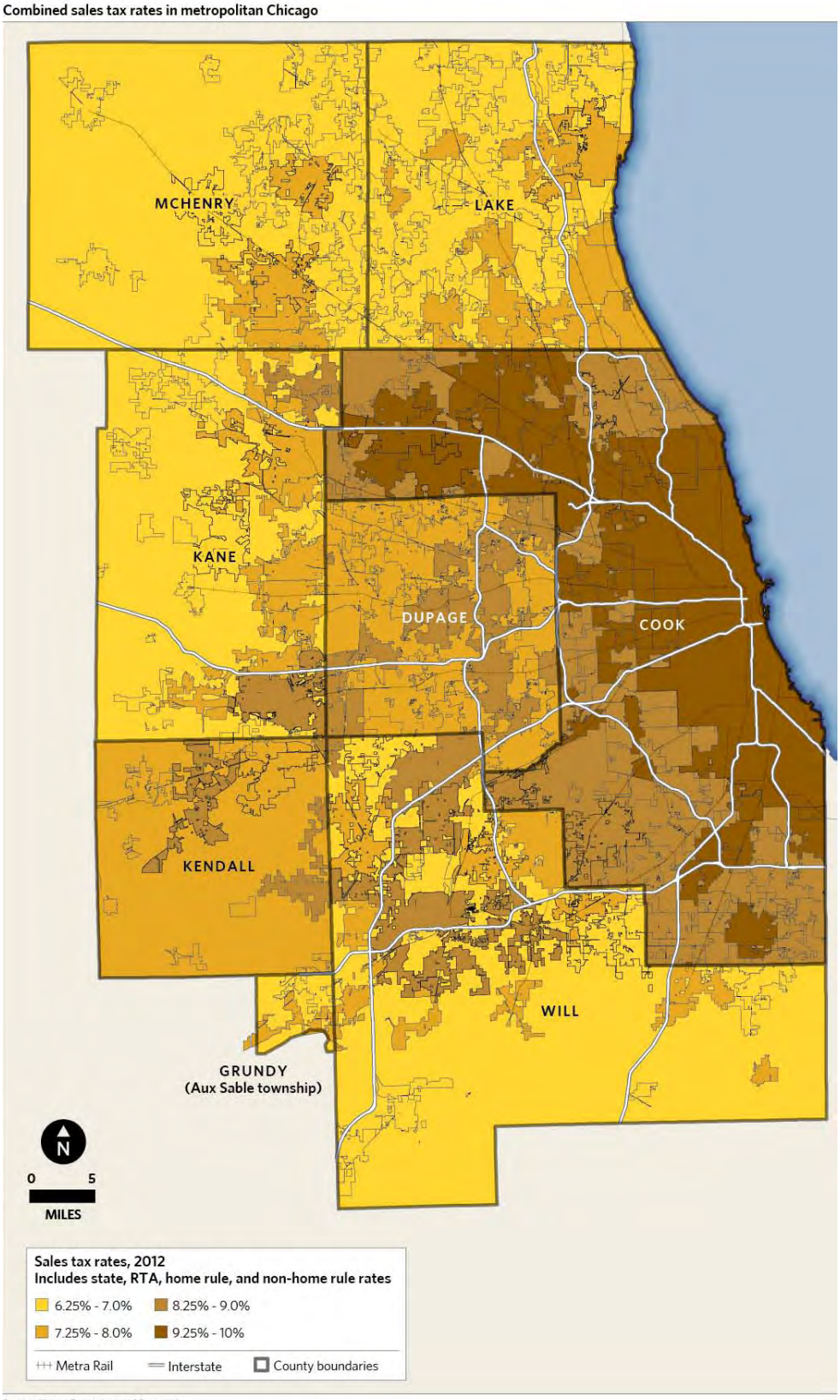
This scenario assumes the imposition of a new sales tax in Lake County to fund transportation improvements. The current base sales tax rate in Lake County is 7%. This includes the 6.25% state rate and a 0.75% RTA sales tax rate for general merchandise. Some municipalities in Lake County impose their own local option sales taxes above and beyond the 7% rate. These rates typically range between 0.25% and 1%, with the exception of Highwood, which imposes a local option sales tax rate of 1.5%, bringing its total rate to 8.5%. All in all, Lake County's base sales tax rates are lower than those in Cook, DuPage, and Kendall, and the same as those in Kane, McHenry, and Will County.

County	Base Sales Tax Rate
Cook County	8.25%
DuPage County	7.25%
Kane County	7.00%
Kendall County	7.25%
Lake County	7.00%
McHenry County	7.00%
Will County	7.00%

Source: Illinois Department of Revenue, Tax Rate Finder

The following map, from the recently released report of the CMAP Regional Tax Policy Task Force, shows combined sales tax rates across the seven-county region as of 2012.

Combined sales tax rates in metropolitan Chicago



Source: Illinois Department of Revenue

Current state law does not permit non-home rule counties or municipalities to impose sales taxes without a referendum. In 2006, voters of Kendall County approved a 0.50% additional sales tax for transportation purposes.[1] In Lake County, referenda to impose county sales taxes have been attempted as recently as 2004 (for transportation) and 2008 (for schools). Neither measure was approved by voters.

Based on observed general merchandise sales between 2000 and 2010, a local option sales tax for county transportation could have raised some $20 million to $40 million annually at relatively modest rates (0.25% and 0.50%, respectively). These estimates include revenues on general merchandise only, and assume no sensitivity to higher sales taxes by consumers. The table below shows estimated annual Lake County revenues for the years 2000-2010 assuming the hypothetical imposition of four different tax rates.

	Proposed 0.25% Sales Tax Rate	Proposed 0.50% Sales Tax Rate	Proposed 0.75% Sales Tax Rate	Proposed 1.00% Sales Tax Rate
2000	$ 19,468,483	$ 38,936,966	$ 58,405,450	$ 77,873,933
2001	$ 20,190,409	$ 40,380,817	$ 60,571,226	$ 80,761,634
2002	$ 21,039,973	$ 42,079,946	$ 63,119,920	$ 84,159,893
2003	$ 20,392,766	$ 40,785,532	$ 61,178,298	$ 81,571,064
2004	$ 21,463,859	$ 42,927,718	$ 64,391,578	$ 85,855,437
2005	$ 22,398,395	$ 44,796,790	$ 67,195,184	$ 89,593,579
2006	$ 23,626,111	$ 47,252,223	$ 70,878,334	$ 94,504,445
2007	$ 23,600,169	$ 47,200,338	$ 70,800,508	$ 94,400,677
2008	$ 23,273,768	$ 46,547,537	$ 69,821,305	$ 93,095,073
2009	$ 19,994,753	$ 39,989,505	$ 59,984,258	$ 79,979,010
2010	$ 20,396,635	$ 40,793,270	$ 61,189,904	$ 81,586,539

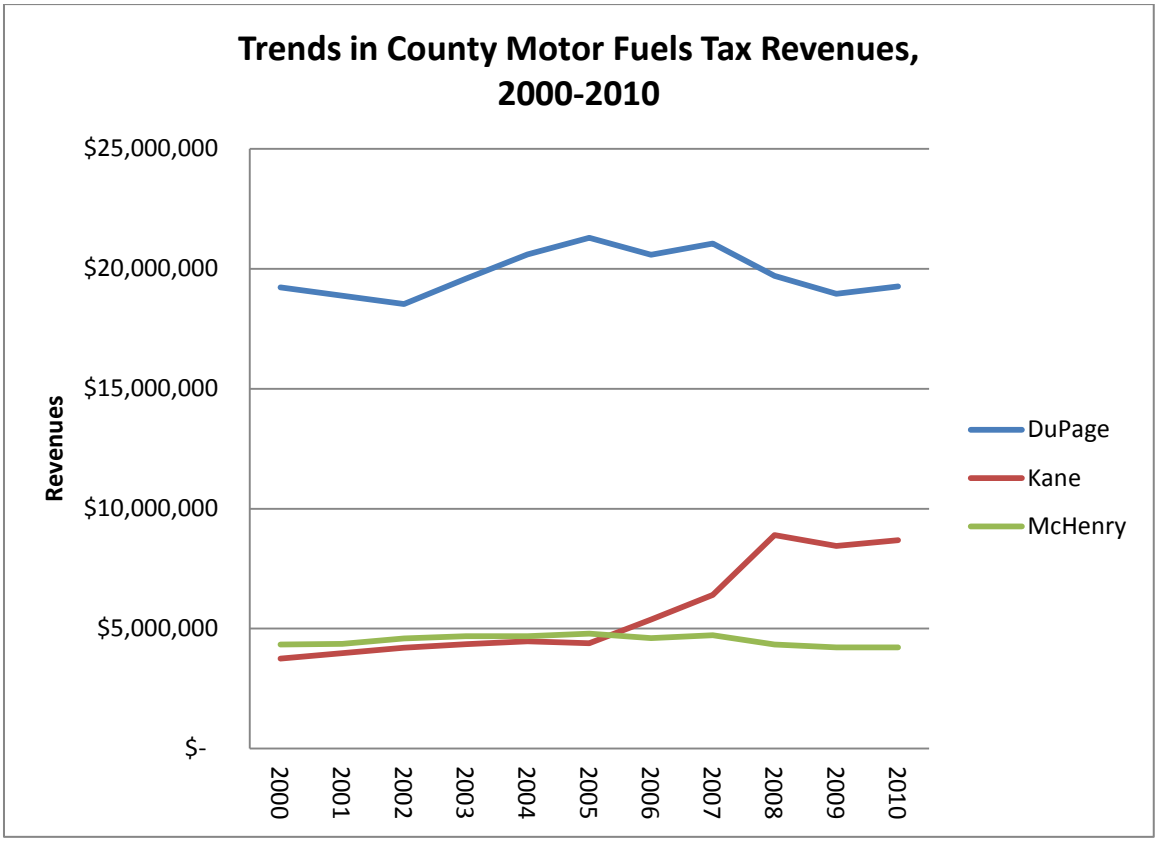
Source: Illinois Department of Revenue sales tax disbursements to local government. Using this data, CMAP staff estimated total general merchandise sales in the county, and applied various sales tax rates to that base.

[1] Kendall County also imposes an additional 0.50% sales tax for public safety.

County Option Motor Fuel Tax

This scenario assumes the imposition of a county option motor fuel tax (MFT). Four other counties in northeastern Illinois currently levy local motor fuel taxes: Cook, DuPage, Kane, and McHenry Counties. Cook County levies its motor fuel tax under its home rule powers, while the other three counties are authorized to levy motor fuels taxes under 55 ILCS 5/5-1035.1, the County Motor Fuel Tax Law. Cook County levies $0.06 per gallon while the other three levy $0.04 per gallon, the maximum rate allowed in the enabling legislation. Extending this authority to Lake County would require a change in the statute.[2]

DuPage County consistently generated more county motor fuel tax revenues than Kane and McHenry Counties between 2000 and 2010, reflecting its larger population and vehicle-miles traveled (VMT). Since 2000, DuPage County has generated roughly $20 million annually. McHenry County annually generated some $4.5 million in county motor fuel tax revenues. Kane County generated similar revenues during the first half of the decade, but increased its revenue to nearly $9 million annually after it increased its rate from $0.02 to $0.04 per gallon in 2007. Kane County's population is about two-thirds larger than McHenry's, and their current motor fuel revenues generally reflect this difference.



Source: Illinois Department of Revenue county motor fuels tax disbursements.

[2] Note that several municipalities in Illinois levy local motor fuels taxes, including Chicago. None of these municipalities is located in Lake, Kane, or McHenry Counties. These levies range from $0.01 to $0.05 per gallon.

A county motor fuel tax in Lake County could generate some $3 million to $12.2 million annually, across a four-cent range of tax levies. More conservative assumptions about average fuel economy (denoted in the following tables in the "estimated MPG" columns) reduce these estimates to $2.7 million to $11 million, while more generous assumptions increase these estimates to $3.4 million to $13.8 million. These estimates assume no sensitivity to higher gas taxes by consumers, given the relatively small increase in per-gallon fuel costs.

Tax Rates	Annual VMT (2010)	Estimated MPG	Estimated Gallons	Estimated Annual Revenues
0.01	5,523,208,138	18	306,844,897	$3,068,449
0.02	5,523,208,138	18	306,844,897	$6,136,898
0.03	5,523,208,138	18	306,844,897	$9,205,347
0.04	5,523,208,138	18	306,844,897	$12,273,796

Sensitivity Analysis- Higher Fuel Economy

Tax Rates	Annual VMT (2010)	Estimated MPG	Estimated Gallons	Estimated Annual Revenues
0.01	5,523,208,138	20	276,160,407	$2,761,604
0.02	5,523,208,138	20	276,160,407	$5,523,208
0.03	5,523,208,138	20	276,160,407	$8,284,812
0.04	5,523,208,138	20	276,160,407	$11,046,416

Sensitivity Analysis- Lower Fuel Economy

Tax Rates	Annual VMT (2010)	Estimated MPG	Estimated Gallons	Estimated Annual Revenues
0.01	5,523,208,138	16	345,200,509	$3,452,005
0.02	5,523,208,138	16	345,200,509	$6,904,010
0.03	5,523,208,138	16	345,200,509	$10,356,015
0.04	5,523,208,138	16	345,200,509	$13,808,020

Source: Illinois Department of Transportation, Illinois Travel Statistics 2010 for VMT data. CMAP staff divided the observed VMT data by an estimated average fuel efficiency to determine total fuel consumption. Estimated revenues were determined by applying the assumed motor fuels tax rate to the estimated number of gallons consumed in the county.

ENVIRONMENTAL LAW & POLICY CENTER
Protecting the Midwest's Environment and Natural Heritage

MEMORANDUM

TO: **Route 53/120 Lake County Extension**
Blue Ribbon Advisory Council Members

FROM: **Council Member Jacky Grimshaw, Center for Neighborhood Technology**
Council Member Howard A. Learner, Environmental Law & Policy Center

RE: **Comments on Proposed Final Draft Resolution and Summary Report**

DATE: **May 17, 2012**

We appreciate the opportunity to provide comments on the Illinois Route 53/120 proposed final Draft Resolution and Summary Report, dated May 9, 2012. We respect the hard and thoughtful work of both Co-Chairs of the Blue Ribbon Advisory Council and their commitment to attempting to design an environmentally-sensitive road. We also appreciate the work of the Toll Highway Authority staff. However, there is not a consensus at this time among the Blue Ribbon Advisory Council members and among many key outside parties.

1. Guiding Principle #3 states: "Analyze potential funding options and pursue corridor concepts to the extent that they are financially viable, fiscally sustainable and equitable." Unless and until there is a realistic, reasonable and responsible plan for financing this proposed new tollway, this Advisory Council, the Illinois State Toll Highway Authority and the Illinois public are not well-served by moving forward with the proposed next steps.

The draft report does not provide a reasonable and realistic financing plan for the proposed new Route 53/120 Tollway. Guiding Principle #3 tasks the Advisory Council with analyzing and pursuing "corridor concepts to the extent that they are financially viable, fiscally sustainable and equitable." We do not believe this goal has been met and cannot at this time support the funding and financing recommendations and proposed consensus statements at pages 7, 10, 12, 51-65 and 71 of the draft report and resolution.

According to the Toll Highway Authority's baseline IL Route 53/120 Funding and Financing Information, **the projected toll revenues from this proposed new tollway extension cover only 17% of the costs. The $2 billion funding gap is a huge 83% of the costs.** ($2.243 B funding gap as a percentage of $2.706 B cost.) When the Funding and Financing Information is corrected and adjusted for the reasons explained below, the funding gap is even larger and the projected toll revenues cover an even smaller percentage (10% - 15%) of the tollway costs.

The proposed plan has about a $2 billion funding gap shown by the Tollway's calculations on pages 54-55 of the draft report. However, even that funding gap is understated. The financial shortfall is even more than $2 billion funding gap because of the multiple reasons explained below and in ELPC/CNT's Comments submitted on April 18, 2012 and incorporated herein.

A. The baseline cost estimates for the Route 53/120 project at pages 54-55 have not been fully analyzed and may well be significantly higher as implicitly recognized at page 12 of the draft report ("a revised cost estimate will need to be determined . . ."). There has not been an independent review of the construction cost calculations. The Toll Highway Authority staff has worked hard in rushing to assemble the baseline funding cost calculations and the funding scenarios. This multi-billion dollar proposed project, however, requires more careful and thorough analysis, and prudence warrants an independent, outside review.

B. The cost estimates assume very low right-of-way (ROW) acquisition costs, and that the Illinois Department of Transportation's previous ROW costs will be paid by state taxpayers and "donated" to the Route 53 tollway project. As explained in our April 18, 2012 Comments, that is not legal nor equitable. Why should the Illinois Department of Transportation – in these tight transportation project funding times – use public taxpayers' money to acquire ROW land in Lake County for the proposed new Route 53 tollroad extension and then give away that land for free to the Toll Highway Authority? That suggested Illinois taxpayer subsidy to bondholders is wrong, unfair and potentially illegal.

As recognized at Pages 8 and 16 of the draft report, a more refined right-of-way evaluation should be conducted in future phases to define needs, identify ownership and parcel information, and refine cost estimates. The ROW cost estimate may well be understated. The ROW costs are at least $200 million and, perhaps, as high as $500 million. Let's get the real cost figures and include them in the financial modeling as the real costs of this proposed new tollway extension. That widens the funding gap.

C. The toll revenues stated at page 54 are based on 20 cents per mile tolls, which is a huge increment over current tolls and is likely to lead to reduced use as previously explained. The congestion pricing and indexing recommendation at pages 7, 12, 19 and 58-59 will bring tolls to 40 – 50 cents per mile (as has been presented by Tollway staff at Advisory Council meeting), or about $12 per day for commuting trips on the proposed Route 53 from Buffalo Grove to the Route 120 junction. For this $60 per week, or more than $3,000 per year, some or many commuters may attempt to bypass the proposed new tollway and, instead, use other local roads or the existing Lake County Tri-State tollway. Accordingly, overall, those revenues may be overstated if this traffic attrition has not been taken fully into account.

D. Moreover, the traffic demand projections and modeling apparently used for the proposed baseline assessment of need and funding scenarios are based on CMAP's 2007 Lake County and McHenry County population forecasts, which are outdated and overstated; they do not reflect the "burst of the housing bubble" and Great Recession. These wrenching economic changes occurred in 2008 – 2010 and fundamentally affected the housing and development market in the CMAP region, including Lake and McHenry Counties, as well as the overall economy. In short, the population forecasts relied upon for the traffic demand projections exceed reality as explained in the memo provided with our April 18, 2012 Comments. Therefore, the projected traffic demand is overstated and the toll revenues are correspondingly overstated. That, too, widens the overall funding gap.

E. The draft funding scenarios for Alignment 2 at pages 64-65 rely on the "low end of the range" cost estimates (page 55), rather than the mid-range or high-end of the range estimates (see page 54). Using the mid-range – let alone the high-end – will widen the funding gap. For purposes of funding scenarios in this report, that would show a $2.55 billion cost (instead of $2.39 billion) and would indicate a funding gap of $2.06 billion. However, for reasons described in our April 18, 2012 Comments and herein, even those costs are understated and the funding gap is significantly higher.

F. The bonding capacity and funding scenarios at pages 54 and 64-65 rely on a 1.5X debt coverage ratio, which is much lower than the more normal 2.0X debt coverage ratio or higher that we understand the Illinois State Toll Highway Authority has previously used (see comparisons at pages 56-57). There is no reasonably explained financial basis for dropping below the 2.0X debt coverage ratio here. In any event, the lower proposed 1.5X debt coverage ratio will tend to drive up financing costs. That will increase the financing costs because the bonds will be viewed as being more risky by investors. On the other hand, using the 2.0X debt coverage ratio will reduce the bonding capacity stated in the report. Either way, this, too, widens the overall funding gap.

G. With regard to the six revenue options identified in Figure 13 at page 65:

- Tolling New Facility (53/120): The toll revenue is based on "super-high" (compared to current and 2011 tolls on the Tri-State Tollway in Lake County) 20 cents per mile tolls. Moreover, combined with the congestion pricing and indexing recommendation, that will result in even higher 40 – 50 cents per mile tolls. That is a huge increment over current and recent nearby toll levels and is likely to lead to reduced tollway use as previously explained. Moreover, the traffic forecast is based on CMAP's outdated population forecasts as explained in our April 18, 2012 Comments, which also will likely lead to less traffic. Overall, the projected toll revenues and related bonding capacity of $360 million are overstated.

- Other Lake County Tolls: We understand and respect the willingness of Lake County officials to consider the additional Lake County tolls included in Figure 13 at page 65 and discussed at page 58 and mentioned elsewhere in the draft report.

- Tolling for Existing 53 in Cook County: We disagree with the statement in the report (at pages 7 and 71) that: "The Council supports tolling existing Route 53 from Lake Cook Road to I-90." As explained in ELPC/CNT's April 18, 2012 Comments, this Lake County-focused Advisory Council should not recommend imposing tolls in Cook County and other counties that have not been specifically consulted and are not significantly participating in the process. We note that some key Northern Cook County Mayors are reported by the press to have already stated their opposition. Moreover, at present, this tolling of an existing federally-funded highway would require new federal legislation in order to achieve. That could well be controversial and difficult. In short, the $191 million of additional bonding capacity for this supposed new tolling revenue cannot reasonably be assumed in Figure 13 at page 65.

- Indexing and Congestion Pricing: Congestion pricing is a promising traffic management tool in which base-level tolls are raised or lowered at different times of the day in order to promote smoother traffic management flow. Here, however, the report seems to be recommending only raising the tolls – up to 40 cents per mile at peak traffic times – in order to raise more revenues. Combined with the suggested indexing, that would mean tolls moving up to 50 cents per mile (and more) during peak travel times.

  First of all, these super-high tolls create disturbing social equity problems of potentially pricing lower- and fixed-income drivers off of the proposed new Route 53/120 at times during which they may need to be driving to work or meeting other responsibilities. The report suggests that this adverse equity impact could be somehow mitigated by some sort of state-approved gas tax credit, but that would involve much broader Illinois state-level action to address this particular Lake County problem.

  Second, raising tolls to the high levels suggested by the congestion pricing recommendation would logically reduce overall traffic by diverting drivers to untolled arterials and other tollways and highways. As noted above, the congestion pricing and indexing recommendation at pages 7, 12, 19 and 58-59 will bring tolls to 40 – 50 cents per mile (as stated by Tollway staff as Council meetings), or about $12 per day for commuting trips on the proposed Route 53 from Buffalo Grove up to the Route 120 junction. For $60 per week to drive on just that 12-mile section, or more than $3,000 per year, some or many commuters may attempt to bypass the proposed new tollway and, instead, use other roads. That expected loss of revenue should also be factored into the financial modeling here.

- Revenue Earlier: There is no reasonable basis for assuming that the Route 53/120 tollway will be built earlier and receive revenue earlier, enabling an additional $60 million in bonding capacity (at the 1.5X debt coverage ratio). In fact, history shows that it is more likely that the Route 53/120 tollway will be built later (if at all) and thus generate revenues later.

- New County and Local Sources: We understand and respect the willingness of Lake County officials to consider the additional Lake County taxes included in Figure 13 at page 65 and discussed at page 60 and mentioned in other places of the draft report. However, the stated interest in "explor[ing]" (page 60) these potential local revenue sources is quite different than committing to support. At present – until there are further commitments – it is premature to assume and rely upon these potential new tax revenues, which are stated on page 65 as enabling an additional $286 million in bonding capacity (at the 1.5X debt coverage ratio).

This proposed new Lake County Route 53/120 tollway extension is not financially justified at this time and the presently proposed funding plan and funding scenarios are neither realistic, nor reasonable. Unless and until there is a realistic, reasonable and responsible plan for financing this proposed new tollway, this Advisory Council, the Illinois State Toll Highway Authority and the Illinois public are not well-served by moving forward with the draft report's proposed next steps. Nor, we emphasize again, is there any meaningful consensus.

2. Each of the elements in the "Secure Local, State and Federal Authorization" section of the Summary Report (pages 12-13 and 73) might be reasonable to discuss, but we do not support recommending them at this point. Many of the proposed federal and state legislative recommendations have widespread implications beyond Lake County and involve transfers of taxpayers' funds from outside of Lake County to subsidize tollway bondholders.

3. The focus on pages 1-3 of the draft report should be on assessing the robust, most cost-effective and best solutions for managing traffic, transportation and land use challenges in Central Lake County, rather than the single outcome of building a new Route 53/120 tollway. We view the history of the proposed project, the purpose and goals, and the path for "moving the project forward" differently than as stated in the draft report. There is a "need" for better transportation management and land use solutions to reduce traffic congestion in the immediate Buffalo Grove area where Route 53 going north through Cook County ends at Lake Cook Road. There may also be other particular places in Central Lake County where there need to be solutions to traffic congestion problems.

The preferred approach for the Blue Ribbon Advisory Council is to scale and right-size the solutions to the particular problems and to fully and fairly consider and evaluate a range of transportation and land use alternatives to address the particular problems. That evaluation should consider cost, congestion relief, environmental impacts and mobility pros and cons of reasonable alternative approaches available to solve the more focused problems. The Blue Ribbon Advisory Council should fully and fairly examine alternative ways of addressing particular problems with right-sized solutions that may be less expensive, better, faster and cheaper, and more environmentally sensible than building the proposed new tollway. Accordingly, the corridor planning and implementation steps are premature.

Conclusion

The text stating a "consensus" in the Executive Summary at page 7 and in all other places of the draft report and resolution should be deleted. It is not the case that "[t]he Blue Ribbon Advisory Council has successfully reached a consensus view that a right-sized Illinois 53/120 project has sufficient merit and regional benefit to warrant further development." There is not consensus for the "Tollway to move forward." There is not consensus that "[t]he Council agrees that a new Route 53/120 project, built according to the requirements set forth in this resolution, should be constructed …."

At present, this proposed new Route 53/120 tollway extension is "not financially viable, fiscally sustainable and equitable." (Guiding Principle #3). It is also unjustified for "need," as explained in ELPC/CNT's April 18, 2012 Comments and MPC's April 20, 2012 Comments. The Blue Ribbon Advisory Council should not commit and spend the taxpayers' money in financially irresponsible ways and kick the can down the proverbial road. We have seen that on state governmental finances and on pension funds messes around the state. Those mistakes should not be repeated here.

The Blue Ribbon Advisory Council should get more accurate cost data, traffic demand estimates and financial projections on which to base its important, practical and thoughtful decisions. What is the real funding gap, and are there financially and politically realistic, practical and reasonable ways of addressing that gap? Unless and until there is a realistic, reasonable and responsible plan for financing the proposed new tollway, there is no purpose served by moving forward with the other proposed next steps.

We began this process with open minds, but: (1) the overall need for this road is unproven and alternatives were not fully and fairly explored, (2) the funding gap is very large, and (3) the financing approaches raised thus far do not achieve the Guiding Principal #3 standard of financial viability and responsibility. The commitment of the Co-Chairs and many others to environmental sensitivity and sustainability are sincere, but the adverse impacts of the proposed new Route 53/120 tollroad extension through high-quality natural areas in Central Lake County have not yet been avoided. Accordingly, we cannot support the Draft Resolution and Summary Report. We look forward to working with other members of the Blue Ribbon Advisory Council to constructively address the opportunities and challenges explained above.

CISCO
STRENGTHEN YOUR FOUNDATION
CONSTRUCTION INDUSTRY SERVICE CORPORATION

May 16, 2012

Mr. David Stolman
Lake County Board Chairman
18 N. County Street, 10th Floor
Waukegan, IL 60085-4351

CISCO Supports Illinois Route 53/120 Project

The Construction Industry Service Corporation **strongly endorses** the Draft Resolution and Summary Report commissioned by the project's Blue Ribbon Advisory Council. CISCO agrees with the recommendations to construct roughly a $2.5 billion roadway through central Lake County as outlined within the Route 53 study.

Our reasons to support this proposed new highway are virtually the same as our reasons to support the Tollway's 15-year, $12 billion capital plan, which included this priority planning study.

Although this plan will provide Lake County and regional users with relief from rising congestion and the benefits that result from a more efficient highway, this plan is more than just a transportation and transit issue, it's an economic issue.

Some of the critical benefits of this proposal include:

- Immediate regional job creation both direct jobs created and thousands of construction jobs through the duration of the project;
- Billions of dollars added to the regional economy;
- Reduced congestion and improved mobility for the traveling public; and
- Improved commuter times that will save drivers millions a year in fuel costs.

As a key stakeholder, the Construction Industry Service Corporation (CISCO) is a non-profit labor management association that represents 140,000 union construction workers and 8,000 contractors in Cook, DuPage, Kane, Kendall, Lake and McHenry Counties.

-more-

The economic downturn has had a devastating effect on the construction industry as unemployment is currently running at 17% for workers in the building trades.

We at CISCO feel that the long-term economic impact will have a positive impact on the Lake County community, strengthening the state's quality of life, bolstering our economy, and providing opportunity and hope to unemployed and underemployed workers.

On behalf of CISCO and its Board of Directors, we thank the Advisory Council for its commitment and attention to a plan that will impact the future of so many others.

Sincerely,

John Brining

Executive Director

LAKE COUNTY BUILDING & CONSTRUCTION TRADES COUNCIL

Affiliated with

Building and Construction Trades Department, AFL-CIO

31855 North U. S. Hwy. 12, Volo, IL 60073 • Telephone: 847-549-7705

May 16, 2012

Mr. David Stolman, Co-Chair, Route 53 Blue Ribbon Advisory Council
Mr. George Ranney, Co-Chair, Route 53 Blue Ribbon Advisory Council
Ms. Kristi Lafleur, Executive Director, Illinois Tollway

Dear Mr. Stolman, Mr. Ranney and Ms. Lafleur,

On behalf of the Lake County Building & Construction Trades Council representing 27 affiliated Union organizations, we would like to extend our support to build the Route 53 Extension.

Our members and the companies they are employed by need new transportation options as we live and work in Lake County. The Route 53 Extension as proposed enhances both the quality of life and commerce in Lake County.

We thank the Blue Ribbon Council for their work on preserving the environment. This commitment sets an example for future transportation projects in our county, state and nation.

Sincerely,

Lynn P. Karner
President

LPK:csw

NORTHWEST MUNICIPAL CONFERENCE
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Des Plaines, Illinois 60016
(847) 296-9200 • Fax (847) 296-9207
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A Regional Association of Illinois Municipalities and Townships Representing a Population of Over One Million

May 16, 2012

Mr. David Stolman and Mr. George Ranney
Illinois Route 53/120 Blue Ribbon Advisory Council Co-chairs
c/o Illinois State Toll Highway Authority
2700 Ogden Avenue
Downers Grove, IL 60515

Dear Co-chairs Stolman and Ranney:

Thank you for the opportunity to comment on the draft Illinois Route 53/120 Resolution and Summary Report. The Northwest Municipal Conference (NWMC), which has a membership of 41 municipalities and one township with a combined population of over 1.3 million Illinois residents, appreciates the value that the Advisory Council and the Tollway place on municipal input.

The extension of Route 53 into Lake County has long been an NWMC priority, enjoying high levels of support from elected officials and citizens throughout both Lake and northern Cook Counties, including the overwhelming support shown in the 2009 Lake County referendum. Year after year, traffic congestion in central Lake County and northwest Cook County grows, underscoring the need for the construction of this critical facility which showed the highest congestion relief benefit of any road project in the Chicago Metropolitan Agency for Planning's Go To 2040 Regional Comprehensive Plan.

The following section highlights areas of concern arising from the draft report.

Tolling of existing Route 53 south of Lake-Cook Road
The draft report includes support for tolling of the existing Route 53 from Lake-Cook Road to I-90. The NWMC has serious concerns about the potential changes to traffic patterns in northwest Cook County based on this proposal. The Council has not reviewed or discussed any traffic modeling regarding impacts to local roadways if this freeway segment is converted into a tollway.

Additionally, there has been very little discussion about the improvements that would be required by the Federal Highway Administration (FHWA). FHWA requirements could quickly turn this marginal revenue enhancement revenue negative. Given the limited modeling and unclear requirements, it is premature and ill-advised for the Council to endorse the tolling of Route 53 south of Lake-Cook Road.

Value capture
While value capture may be a viable option as a local funding source, much more analysis is needed to ensure equitable application. The NWMC agrees that "continued discussion is necessary" regarding implementation of value capture.

System-wide toll increase
The NWMC is encouraged that the latest draft report "supports the use of Tollway system generated revenues to enable this project." Nonetheless, the draft report does

not include an analysis of the revenue potential from system-wide revenues or potential toll increases. All previous Tollway projects have relied largely on system-wide revenues. Given that the Chicago Metropolitan Agency for Planning's (CMAP) Go To 2040 Regional Comprehensive Plan identifies the project as a regional priority, the NWMC believes the Advisory Council should analyze and consider a system-wide toll increase in the menu of funding options.

Design of Route 120 Bypass
Of the three alignments proposed in the first draft report for connecting the new Route 53 with I-94, only one provides a continuous access-controlled roadway. The latest draft eliminates the alignment option that creates a continuous access-controlled roadway connecting to I-94. The remaining two alternatives retain some at-grade intersections. NWMC urges the Advisory Council to fully consider potential traffic delays and safety concerns in the alignment options recommended.

Review Period
The review time for the draft Report has been very quick, leaving little time to adequately review and comment. Since the Council is operating under a self-imposed deadline, the NWMC encourages the Advisory Council to take the full time necessary to produce a thorough document. There is no reason to rush a final report.

The Advisory Council has worked diligently throughout this planning process to address transportation and environmental concerns. The Council report should respect regional consensus to move this project towards construction.

Thank you again for your consideration of our comments as the Advisory Council develops its final report. If you have any questions, please do not hesitate to contact Mark Fowler, NWMC Executive Director at 847-296-9200, ext. 25.

Sincerely,

Christopher S. Canning
President, Northwest Municipal Conference and
President, Village of Wilmette

Cc: Kristi LaFleur, Executive Director, Illinois Tollway

MetropolitanPlanningCouncil

May 15, 2012

Thank you for the opportunity to participate in the Illinois Route 53/120 Advisory Council. The Metropolitan Planning Council (MPC) is grateful for the dedication of the Advisory Council co-chairs and commends them and the leadership of the Illinois Tollway for designing a thorough, open and participatory process to determine whether to continue planning for this new road through an environmentally sensitive and economically vital corridor.

Throughout these deliberations, MPC has conditioned its potential support for the construction of Illinois Route 53/120 on the presence of three factors. If any of these elements are compromised we would urge the Tollway to reconsider. With these elements secured, this region is poised to break the mold on coordinated land use and transportation, and on innovative finance.

1. **Illinois Route 53/120 was selected as one of five fiscally constrained major capital projects of the Chicago Metropolitan Agency for Planning's (CMAP's) GO TO 2040 comprehensive regional plan.** Following extensive public input, GO TO 2040's fiscally constrained major transportation capital projects – including Route 53/120 – were prioritized based on their consistency with the Preferred Regional Scenario (one of balanced growth), the results of individual evaluations, and information derived from project analyses. The five projects selected were those that yielded the highest rankings on measures such as economic growth, reduced congestion, shorter commutes, and improved job accessibility.

2. **A cutting edge context sensitive environmental design.** MPC commends the Advisory Council for remaining staunchly committed to an environmentally sensitive design. As a policy change organization dedicated to helping shape a more competitive *and* sustainable Chicago region, MPC actively promotes context-sensitive transportation planning. Rte. 53/120, envisioned as a four-lane, 45 mph parkway, could "blaze a new trail" by coordinating transportation investments with complementary land uses, stewardship of sensitive natural areas, and appropriately-sited mixed-use economic development. No doubt, this region has the resources, talent and expertise to make this roadway an exemplary, multimodal, limited-access thoroughfare that drives coordinated economic investment, instead of just hurtling people from one uncoordinated destination to another. Rather than build a sprawling highway that ignores and even diminishes local environmental assets and new interchanges that primarily support auto-centric big-box development, we have the opportunity to develop a winding parkway designed to enhance the natural environment and incorporate sensible features – such as interchanges that promote "town center," mixed-use developments, and long-term economic growth for local communities.

3. **A balanced financial plan that includes local sources.** The proposed plan to finance Illinois Route 53/120 takes an innovative approach, combining toll revenues with congestion pricing, local investments from value capture of nearby real estate, and projected savings from acceleration and refinement of cost escalation. The vision for Illinois

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Route 53/120 embraces the values of local residents and merits local investment because doing so will increase the value of property in Lake County. Value capture or value sharing financing mechanisms have been used successfully throughout the country to finance new or existing transportation infrastructure. It is sound policy precisely because it connects the benefit (and benefactors) of the investment with its cost. This fact, plus the reality of inadequate federal and state transportation funds, is among the reasons why MPC believes all major capital projects, including Route 53/120, must consider a broader menu of financing options, from congestion pricing to value capture. We note that none of these mechanisms have been authorized, nor have projection models been refined. And even with these innovative tools contributing to covering the cost, there remains a substantial gap that would necessitate a substantial Tollway contribution.

MPC's support is predicated on these three points. Should changes be made to CMAP's capital priorities or to the design or the financial plan for Illinois Route 53/120, MPC will reevaluate our position. We strongly urge the Advisory Council to not lower its design standards and continue to pursue an exemplary, environmentally sensitive project and keep local funding options on the table, including value capture financing.

Sincerely,

MarySue Barrett

President

OFFICE MEMORANDUM

TO: STEVE BARG, EXECUTIVE DIRECTOR (CONSERVE LAKE COUNTY)

FROM: GEOFF DEIGAN, PRESIDENT (WRD ENVIRONMENTAL)

SUBJECT: RECCOMENDATION FOR THE ADVISORY COUNCIL'S FINAL RECOMMENDATION

DATE: MAY 09, 2012

CC: MIKE ELLIS VILLAGE OF GRAYLAKE, MIKE SANDS CHAIR OF ROUTE 53 ENVIRONMENTAL COMMITTEE

Dear Mr. Barg,

Within the Grayslake Vision for a Low Profile Route 53/120, bicycle trails are an important aspect of the planning process and have been shown to be beneficial for both commuter and recreational trips within and around Grayslake. The vision states that the "*Route 53/120 project must maintain connections between Village's existing comprehensive trail network, provide connections to Alleghany Park, the Central Range Economic District, and existing local and regional path systems.*" In Exhibit E of the Vision Report – *Greenways/Bikeways Plan* illustrates a proposed bicycle path network following the construction of the new roadway.

In addition to maintaining the Village's network and proposed trails shown in the Vision report, a group associated with various stakeholders - Conserve Lake County (formerly Liberty Prairie Conservancy), the Village of Grayslake, the Grayslake Park District, Waste Management, the Alter Group and Prairie Crossing, were consulted with to determine additional points of interest and connections, including the Regional Trail, that are important links of connectivity to the community. Engaging WRD Environmental to assist in the effort of codifying the opportunities for community connection has resulted in the attached graphic representation for this initiative.

As a result of these discussions, in the attached, please note where the opportunities exist for the expansion and/or enhanced connection of three major components: the Regional Trail, Grayslake & Mundelein Communities and potential for future expansion with future and existing developments along with other established institutions in the local community.

- Beginning with existing conditions, overlaid with proposed conditions gathered from various sources, the Southern Grayslake Community Connections Plan provides connections that are mostly oriented in an east-west orientation, whereas much of the existing Regional Trail is oriented in a north-south

orientation. These small arterial paths, when complete, will connect major points of interest in this developing part of the County.

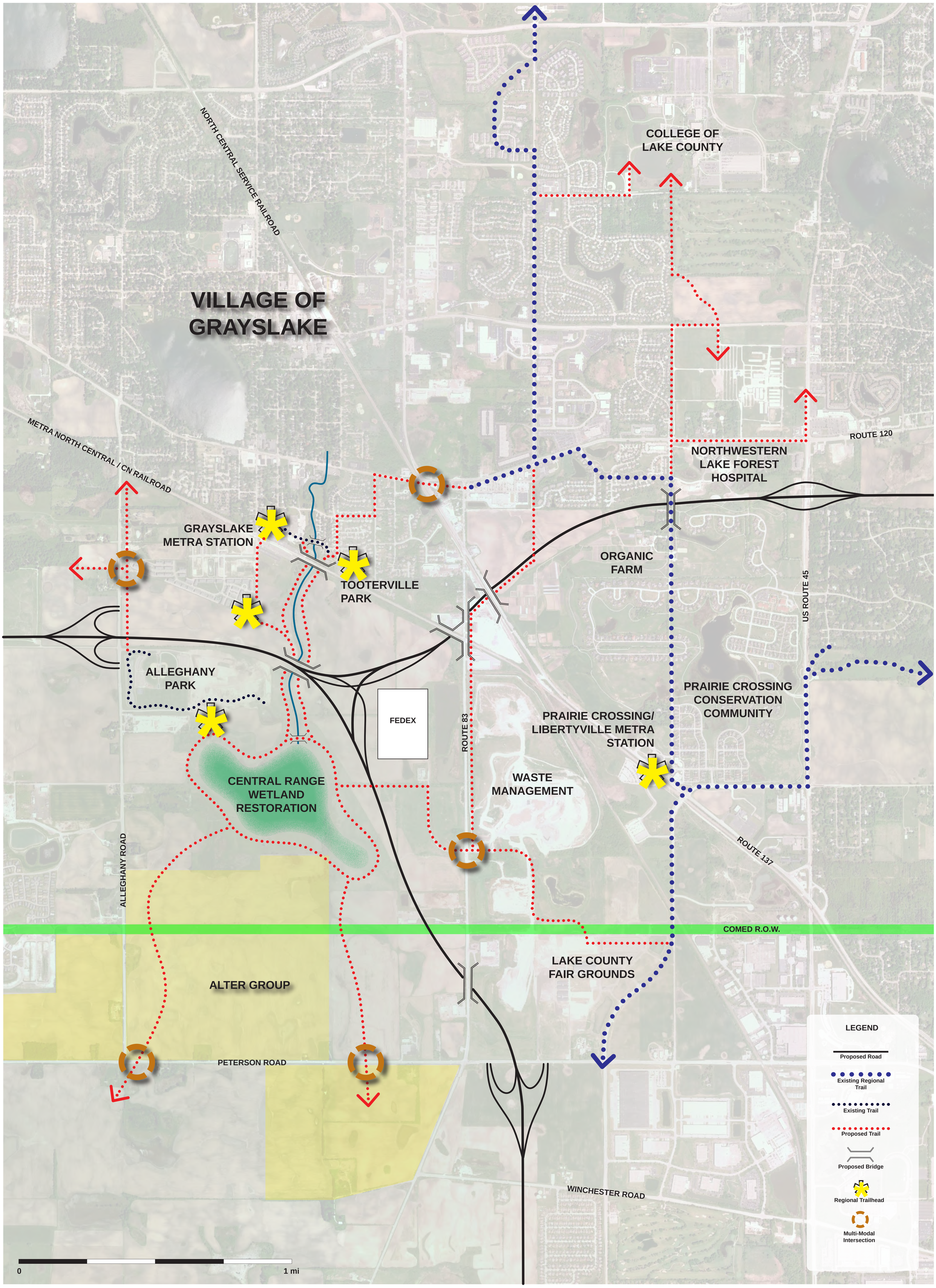
- Using Grayslake Metra Station and Tooterville Park as the nexus of the multi-modal trail, an on-street path through the neighborhood to the north or east quickly joins to the Regional Trail at the intersection of Route 120, Route 137, and the North Central Service Railroad. Creating a safe link at this intersection will allow pedestrians to safely make their way onto the endpoint of the Regional Trail. From here, pedestrians have access to Northwestern Lake Hospital, Prairie Crossing, College of Lake County, and numerous forest preserve holdings.

- Traveling south from the nexus, new trails will pass below the existing train trestle following the creek to connect with a loop trail around the Central Range Wetland Restoration area. From here, pedestrians can choose to visit Allegheny Park or continue south through the proposed Alter Group development to future connections.

Many opportunities exist within this area of central Lake County to connect residential communities, parks, natural resources, schools, and other community amenities through greenway corridors and trails. Recognizing and documenting these opportunities now will ensure that residents of Grayslake, Round Lake and Mundelein are not disconnected from these parks, natural resources and community amenities. We offer these opportunities as public comment for inclusion in the Advisory Council's final recommendation.

Sincerely,
WRD Environmental

Geoff Deigan
President/CEO



SOUTHERN GRAYSLAKE COMMUNITY CONNECTIONS

ROUTE 53 EXTENSION

From: Mark F. Knigge [mailto:mknigge@Wauconda-il.gov]
Sent: Wednesday, May 09, 2012 12:46 PM
To: Graham, Michelle; granney@cm2020.org; christi.regnery@cm2020.org; dstolman@lakecountyil.gov; tkuss@lakecountyil.gov; jadelmann@openlands.org; msbarrett@metroplanning.org; ehudson@metroplanning.org; rblankenhorn@cmap.illinois.gov; skane@cmap.illinois.gov; jbraiman@vbg.org; cduque@manoamanofamilyresourcecenter.org; hechmann@sbcglobal.net; audbirds@aol.com; jacky@cnt.org; lkarner@plumberslu93.org; acecdave@acec-il.org; acec-il@acec-il.org; Mark F. Knigge; mayor@vah.com; dstaggs@vah.com; jramirez@cflonline.org; cmccarthy@chicagolabor.org; reddenl@rtachicago.org; thurmonk@rtachicago.org; leoroc@northchicago.org; tingre@northchicago.org; mr4159@gmail.com; kryg@voices4kids.org; mikesands@prairiecrossing.com; ann.schneider@illinois.gov; lisa.kavanagh@illinois.gov; MSturino@irtba.org; annette@irtba.org; president@clcillinois.edu; mbmason@clcillinois.edu; lchandy@clcillinois.edu; dwhitley@ilchamber.org; cgerritsen@ilchamber.org; mgormaly@ilchamber.org; suzanne@campanellaandsons.com; rlumadue@lakecountypartners.com; anderslaw@earthlink.net; jejohnson@ci.schaumburg.il.us; senator@link30.org; Bfourez@senatedem.ilga.gov; repmathias@hotmail.com; ritawiley@hotmail.com; 60thdistrict@gmail.com; statesenatorschmidt@gmail.com; tweppler@wepplerlaw.com; wilsondonaldm@gmail.com; HLearner@ELPC.org; lcml@sbcglobal.net; Dave Geary; David Lawry; dlarsson@waucondapolice.com
Subject: Blue Ribbon Council letter

Mr. George Ranney, Mr. David Stolman, Co-Chairmen
and Blue Ribbon Council Members - Illinois Route 53/Route 120 Project
and Kristi Lafleur, Executive Director - Illinois State Toll Highway Authority

Dear George, David, Kristi and Members of the Blue Ribbon Council,

On Sunday, May 6th, I received a copy of the April 18th letter signed by several Environmental Groups about the Route 53/120 Project. The letter appears to underscore the Blue Ribbon Council Member Environmental Representatives position opposing the project as witnessed at the April 20th Blue Ribbon Council Meeting.

Eliminating or applying the divided highway concept for only limited areas of the project could go a long way to reducing the "footprint" that the highway extension may cause. A "functional" highway may be more important than an "aesthetical" highway.

When Route 53 was extended south to Joliet, similar concerns were raised about environmental impact. Now, years later, some exceptional wetlands exist along the corridor where aquatic and flora environments exist.

Today's ecologists, biologists and other environmentally conscious individuals and companies are doing fantastic work with the creation and restoration of wetlands. Time and nature also seem to do a great job of adapting and finding new opportunities to flourish. One need only look at decades-old Lake County aerial photos to see that in 1939 and 1946 the corridor was largely being farmed and the existence of the wetland areas we know today were not existent.

The Village of Wauconda Trustees join me in the continued belief that the project should move forward as we work together and continue the search for alternative solutions along the way.

Sincerely,
Mark F. Knigge
President, Lake County Municipal League
Mayor, Village of Wauconda

VILLAGE OF LIBERTYVILLE

RESOLUTION 12-R-10

A RESOLUTION SUPPORTING A POSITIVE RECOMMENDATION
BY THE ISTHA IL ROUTE 53/120 BLUE RIBBON ADVISORY COUNCIL

WHEREAS, the Illinois Toll Highway Authority has created a Blue Ribbon Council to assist in the planning and potential building of the IL-53/120 North Extension in Lake County by developing regional consensus on whether the Tollway should build the extension, recommending design elements for the route, and determining how to finance the project; and is further tasked with making its official recommendation this May, 2012; and

WHEREAS, the Village Board has previously indicated its support for the extension; and

WHEREAS, the majority of Lake County residents support the extension as demonstrated by a referendum of residents of Lake County in 2009 which resulted in a 75% favorable vote; and

WHEREAS, numerous respected planning agencies have indicated that the extension is a crucial piece of infrastructure in the role of "Maintaining Greater Chicago's Competitive Edge" by adding jobs and significantly reducing travel times throughout the region (Urban Land Institute of Chicago, 2011), and the project "has the greatest potential to relieve congestion among proposed major transportation projects in the region" (Chicago Metropolitan Agency for Planning, 2010); and

WHEREAS, the Libertyville Economic Development Commission has reviewed the proposal and believes the extension will bring greater productivity, efficiency and cost savings to area businesses in the form of the following economic benefits:

- Allow Libertyville employers access to a larger employment base in which to find qualified staff; and

- Employees of Libertyville businesses will be able to avoid congestion on their commutes, thus arriving to work in a more productive mindset; and
- Distribution of goods to and from Libertyville businesses will be more efficient and potentially less costly; and
- Sales forces of Libertyville businesses will have greater access to their market; and
- Libertyville residents will have greater access to the western and southwestern portions of the Chicagoland area for employment, commerce and travel; and

WHEREAS, long-term transportation needs should be considered in the design allowing for future alterations; and

WHEREAS, current transportation design and engineering techniques allow for numerous methods of protecting and mitigating environmental features; and

WHEREAS, the Libertyville Plan Commission is currently reviewing appropriate long range land uses for land adjoining the proposed extension and would be interested in coordinating its efforts with other adjacent municipalities.

NOW, THEREFORE, BE IT RESOLVED BY THE BOARD OF TRUSTEES OF THE VILLAGE OF LIBERTYVILLE, LAKE COUNTY, ILLINOIS, that the Route 53/120 Blue Ribbon Council's positive recommendation for construction of the extension would be in the best interest of the Village of Libertyville, Lake County and the larger Chicagoland area.

PASSED this 8th day of May, 2012.

AYES: Moras, Cullum, Johnson, Moran, Justice, Gaines

NAYS: None

ABSENT: None

APPROVED this _8th_ day of __May_____, 2012.

Terry L. Weppler, Village President

ATTEST:

Sally Kowal, Village Clerk

Lake County Audubon

May 8, 2012

Mr. David Stolman, Co-Chair, Route 53 Blue Ribbon Advisory Council
Mr. George Ranney, Co-Chair, Route 53 Blue Ribbon Advisory Council
Ms. Kristi Lafleur, Executive Director, Illinois Tollway

Dear Mr. Stolman, Mr. Ranney, and Ms. Lafleur,

A road is one of the most permanent of human edifices on the land. So putting a new road system through a significant portion of Lake County, which is home to more high quality natural resources than any place in the state of Illinois, is of great concern for those dedicated to protecting and maintaining the health of these natural resources.

Our organizations – Openlands, Conserve Lake County, and Lake County Audubon – are dedicated to those resources and represent thousands of people and organizations who cherish those resources. We write this letter detailing our united position on the proposed Illinois Route 53/120 Blue Ribbon Advisory Council Resolution and Report from that perspective.

Lake County Audubon and Openlands have participated as Blue Ribbon Advisory Council members throughout the process. Conserve Lake County, (formerly the Liberty Prairie Conservancy) while not on the council, has taken an active role in working with the council and residents of Lake County to define what is at stake for our natural resources should a road be built. This included co-leading two public hikes along the most environmentally sensitive areas of the proposed road corridor and creating a document for the council members in defense of the Liberty Prairie Reserve and Almond Marsh.

Historically our organizations have been opposed to a Route 53 extension as it had been envisioned – a massive, high-speed, elevated, six-lane highway. Over the past nine months, however, we have seen tremendous progress in the design and character of the road that addresses many of the environmental concerns that previous Route 53 efforts have not. Lake County Audubon, Openlands and Conserve Lake County commend co-chairs David Stolman and George Ranney, along with all the members of the Route 53/120 Blue Ribbon Advisory Council, for the tremendous effort, intellectual rigor, and innovation that you have brought to this public process.

In light of the progress we have seen in the draft of the Advisory Council's resolution and report of April 20, 2012, we remain engaged in the process. This is because the principles outlined in the draft offer the potential for the road's design and implementation to have substantially less negative impacts on the land, water, and communities through which the extension would run.

However, in order for us to collectively support this proposal, there are a number of outstanding conservation and environmental issues that must be addressed. After careful review of the Council's resolution on the extension, we have identified a number of elements that are necessary to fully live up to the principles of Council Resolution. We also need tangible assurance that there would be a robust mechanism to guarantee that there is no discrepancy between the Council resolution's principles and final recommendation and what is actually built in terms of the impact on the land and water of Lake County.

Building the Route 53 Extension and Route 120 Bypass, even under the best environmental design and implementation measures, will certainly impact existing plant, animal, and human communities that lie within the two-mile impact zone of the proposed road corridor. Given this reality, and in order to prevent as much harm as possible to these communities Conserve Lake County, Lake County Audubon, and Openlands have identified the following issues that need addressing. These issues fall into five categories:

A. Critical natural resource protection and enhanced trail connections

B. Significant funding commitment for open land acquisition and ecological restoration in resource-rich areas of corridor.

C. Establishment of a perpetual funding source for ongoing stewardship needs and stormwater management.

D. Development and adoption of comprehensive land use plan for the transportation corridor by all of the government entities in the area

E. Guarantee the natural resource protection elements of the plan through legislative authorization, deed restrictions and conservation easements.

More specific stormwater technical concerns are addressed in the attached appendix.

A. CRITICAL NATURAL RESOURCE PROTECTION AND ENHANCED TRAIL CONNECTIONS

#1. Almond Marsh must be protected.

This will require the Council to choose the shortened version of the eastern leg of the Route 120 bypass following the alignment originally proposed as 3E in the Route 120 work. This will reconnect the bypass to the current Route 120 approximately one half of a mile west of the current IDOT right of way. Some have argued that because the Almond Marsh heron rookery is declining and the northern

half of the marsh is not dedicated as Illinois Nature Preserve that the current road alignment would do minimal damage to this resource. This is incorrect. Currently 21 species of birds that are listed by the State DNR as species in greatest need of conservation, including 11 state endangered species, occur regularly in the northern section of Almond Marsh. This issue is not a "herons vs. the road" scenario as some have argued. Rather Almond Marsh is a wetland complex of statewide significance for the conservation of rare bird species. It must be protected. Further, once the Advisory Council's recommendation is received by the Tollway Board, the Forest Preserve District and Illinois Nature Preserves Commission should be encouraged to designate the northern portion of Almond Marsh as an addition to the current Illinois nature preserve to the south. This will guarantee to the residents of Lake County once and for all that Almond Marsh will be protected.

#2. Connect the community of Wildwood to the Liberty Prairie Reserve (LPR) via a pedestrian and bike trail.

Currently, the residents of Wildwood who live just north of Route 120 do not have bike or walking access to the 3,383-acres of protected open land in Liberty Prairie Reserve just south of Route 120. If thoughtful attention is paid, the new road system would enable Wildwood residents to safely access and enjoy the many amenities of the LPR trail system. A pedestrian and bike trail tunnel should be built under the new road and a trail link built from Twin Lakes Park in Wildwood south along Almond Road to the current LPR trail south of Casey Road.

#3. Close Almond Road at Route 120.

Almond Road to the north of Route 120 is currently not connected to Route 120, which appropriately prevents cut-through traffic into residential neighborhoods of Wildwood and Gurnee. Almond Road is connected to the south of 120 which encourages thousands of vehicles daily to cut through the heart of the Liberty Prairie Reserve, which is defined by its rural, quiet character. In 2000 the Liberty Prairie Reserve was dedicated as one of our Nation's Last Chance Landscape by Scenic America, in part because of its unusual rural character of Almond and Casey Roads. We recommend that Almond Road south of Route 120 be closed, like it is north of Route 120, to prevent thousands of additional vehicles from using this rural road as an arterial.

#4. The woodlands, prairie, wetland complex and underlying natural hydrology in significant natural areas, such as Heron Creek, Egret Marsh, Reed Turner Woodland, Indian Creek and Surrey Marsh, must be protected and connected rather than divided and diminished.

This will require:

1) A design solution for the Route 53 and 22 intersection that ensures no direct or indirect impact to Heron Creek Preserve and Egret Marsh Preserve.
2) A series of trails and greenway connections under or over Route 53 connecting these preserves through pedestrian and bike trails.

3) A resolution of how the road will be located and designed so as to minimize the impact to the above natural resources in the vicinity of the project corridor. Specifically for Surrey Marsh, we favor a road designed on pylons hugging the western edge of the wooded ridge where storm water is captured from the road and piped to isolated wetlands for storage and filtering prior to release into the marsh or Indian creek. Methods will ensure that the underlying hydrology is not disrupted so as to deprive vital water to these and other wetland complexes. Water quality performance standards for release of captured storm water must exceed current standards. Thresholds such as detention release rates and chloride levels must adequately protect the flora and fauna in the natural areas. The stormwater management systems should promote innovative design that promotes reconnection of hydrological systems and prevents the negative impact of deicing salt and in runoff, splash and spray.

B. SIGNIFICANT FUNDING COMMITMENT FOR OPEN LAND ACQUISITION AND ECOLOGICAL RESTORATION IN RESOURCE-RICH AREAS OF THE CORRIDOR

Several natural areas of statewide significance are found within and along the proposed corridor (see map on page 9 of the Council's current draft recommendation). These areas include some of the finest remaining endemic habitats in Illinois and harbor numerous state endangered or threatened plant and animal species. The ecological health of these areas must not be diminished by the impacts of a new road. To protect and enhance these Illinois natural treasures, additional land acquisition and ecological restoration should be carried out in the following places as part of the Route 53/120 project: Liberty Prairie Reserve, Surrey Marsh area, Indian Creek Marsh, and Squaw Creek Complex. To fund the additional acquisitions, enhancements, and improvements to the health of these natural resource areas, **four percent** of the total project cost must be dedicated to the additional acquisitions, enhancements, and improvements to the health of these natural resource areas. This funding commitment must be guaranteed.

C. ESTABLISH A PERPETUAL FUNDING SOURCE FOR ONGOING STEWARDSHIP OF LAND AND WATER RESOURCES ALONG CORRIDOR NEEDS, INCLUDING UNINTENDED CONSEQUENCES OF CONSTRUCTION

After this road is built the stewardship needs of the natural resources within the two-mile corridor will continue in perpetuity, and there is the potential for unintended and damaging consequences to emerge from construction as well. A perpetual stewardship fund must be established as a percent of collected tolls to provide for addressing these ongoing needs. We believe a good model for this is the Northeast Illinois Wetland Conservation Account that was administered by the Conservation Fund. This fund was a partnership between the U.S. Army Corps of Engineers, the US Fish and Wildlife service, and the non-profit Conservation Fund.

D. DEVELOPMENT AND ADOPTION OF A COMPREHENSIVE AND COORDINATED LAND USE PLAN FOR THE TRANSPORTATION CORRIDOR BY ALL OF THE GOVERNMENT ENTITIES IN THE AREA.

Openlands, Conserve Lake County, and Lake County Audubon also believe that the recommendation detailed in Chapter 5 of the Council Resolution -- Create a Corridor Plan -- is absolutely essential to assure that both the direct impacts of road development as well as the secondary effects of additional development do not harm the natural resources of the area. While the road will spur economic and residential development, it can also stimulate unplanned development that will severely impact sensitive ecological assets. Without coordinated and innovative planning, all of the other environmental protections in the road corridor may pale in comparison to the long-term damage done to human and natural communities.

The Route 53 plan and affiliated push for innovation also provide the opportunity to conduct an integrated planning effort between the multiple units of government, local stakeholders, and the public that is not only coordinated but also binding. This opportunity should be seized. Integrated planning by the government entities in the area should address the issues of economic development, land use, transportation, and open space and should do so in innovative ways that are complementary to all the needs and desires of the residents of Lake County. To address all of these needs now and in the future, the plan should be adopted by each unit of government through binding resolutions and memoranda of understanding and should be funded in part by the Tollway project and facilitated by a regional planning entity (CMAP).

This land use plan should be more than a vision. It must be a blue print guaranteeing that from month to month and year to year all of the many decisions that are made by local governments will adhere to the guiding principles agreed upon at the outset. This sort of binding planning is unprecedented in Illinois, but the Route 53 Corridor Plan offers the opportunity to implement the best practices of modern land use planning that would make the communities along the corridor livable and beautiful places in the 21st century and beyond.

E. GUARANTEE THE NATURAL RESOURCE PROTECTION ELEMENTS OF THE PLAN THROUGH LEGISLATIVE AUTHORIZATION

The Route 53 Extension corridor was established over 40 years ago without regard for or understanding of the significant resource rich areas that it would travel through. Now we have more information about the real environmental costs associated with protecting and maintaining these resources. If we are going to build a four-lane highway through resource rich areas of statewide

significance, we must be willing to pay the premium of doing so. Lake County Audubon, Conserve Lake County, and Openlands will not support a concept or recommendation that does not provide guarantees that all of the good environmental design work and resource protection efforts contained in the Council's draft recommendation and our conditions stated above will be realized in the finished project. The only way we know of securing this certainty is through new legislative authorization for this road that specifically spells out the protections and enhancements, to the greatest degree possible, of the natural resources we have all worked so hard to develop and articulate herein.

Conserve Lake County, Lake County Audubon and Openlands appreciate the opportunity to address the specific concerns we have regarding the environmental impacts of the proposed Route 53/120 Council Resolution. We believe that the unprecedented energy, cooperation, and diversity of partners involved in the process not only allows for but compels us all to be committed to innovative and cutting edge solutions to assure that critical natural features are protected as much as possible from the impact of the road infrastructure and the secondary effects of future development. Future generations of Lake County residents should look back on our work on this complex and ambitious transportation project and be grateful that the leaders of our time not only recognized all that it takes to have a livable, sustainable community but acted on that knowledge.

Thank you for your consideration.

Sincerely

Gerald Adelmann
President & CEO
Openlands

Steve Barg
Executive Director
Conserve Lake County

Chris Geiselhart
President
Lake County Audubon

Appendix A to the Route 53 Comment Letter by Conserve Lake County, Lake County Audubon and Openlands to Route 53 Blue Ribbon Advisory Council (May 8, 2012)

Natural resources within the two mile impact corridor, such as woodlands, prairie and wetland complexes within areas such as Almond Marsh, Heron Creek, Egret Marsh, Reed Turner Woodland, Indian Creek and Surrey Marsh, **must be protected and connected** rather than divided and diminished.

- Hydrological Connectivity: Stormwater solutions cannot sever natural hydrological connections or degrade groundwater resources that "feed" (support) natural resources in the two mile impact corridor.

    - "Hard" detention systems (grey infrastructure) should not funnel groundwater away from and starve out these resources.
    - The project will not utilize detention ponds.
    - In all cases the stormwater management infrastructure will be required to be designed to restore the wetland within the ROW and abutting the ROW rather than negatively impacting any indirectly with undesirable hydrological changes.

- System Capacity: Stormwater treatment systems should be designed to handle the intensity of at least a 100-year storm event, if not a 500-year storm event. The treatment systems should not allow stormwater to overflow into surrounding natural areas. (The only standard currently mentioned in the report is that treatment trains will be built to handle a 10-year storm event, which may be fine for polishing but not for detention.)

- Salt : The Tollway should utilize an alternative to road salt so that chlorides are not released into the environment via runoff, splash and spray. Road salt should not be used at any time within the vicinity of the sensitive environmental hot spot areas, or in places where treatment trains will infiltrate salt into those systems. Any salt and other high risk environmental contaminant use, should be phased out within 10 years of signing the resolution.

- Other pollutants:
    - Stormwater controls should prevent both soluble and insoluble pollutants from contaminating natural resources and important natural areas. Stormwater treatment trains must meet their goal of preventing the entry of all pollutants into the surrounding environment, including excessive water quantities. (Water delivery designs must meet nature hydrograph—see graphic in resolution.)

    - Vegetation used in the treatment train must be compatible with all road pollutants and be able to function as needed in the area's weather conditions. To preserve the integrity of the surrounding biota, stormwater treatment systems should not utilize or tolerate invasive plant species in the plant mix. Native species composed plant communities should be used and maintained in all stormwater treatment trains, restoration, stormwater polishing areas, etc.

- Water quality performance standards for release of captured stormwater must exceed current standards. The resolution currently calls for using the Lake County health department data sets for existing lake, stream and pond water quality as the basis for selecting the upper 10 percentile levels for achievement, for all chemical and physical constituents and measurements in the release waters from the stormwater treatment trains. The threshold was chosen to ensure that all current standards in Lake County, State of Illinois, and the United States, are exceeded. In addition to using the upper 10 percentile levels, the project should ensure that thresholds, such as detention release rates and chloride levels, adequately protect the flora and fauna in the above natural areas. (For example, some plants are harmed by chloride levels at 250 mg/l, while the water quality standard is set at 500 mg/l.) The project team should evaluate whether the specific flora and fauna identified in the area can well tolerate the proposed standards.

- Location of stormwater treatment system: Stormwater management systems should not be built in or compromise existing wetlands. For instance, stormwater management systems should not allow pollutants to infiltrate into groundwater that is hydrologically connected to existing wetland complexes in surrounding natural areas, such as Surrey Marsh, Almond Marsh, and other hot spots identified in the project plan. Stormwater Treatment Train areas will isolate and clean all metabolizabled or sequestrable contaminants in the water from the highway (and existing pass-through waters from up-gradient in the tributary watershed to the right of way), and then release the waters in created wetland polishing areas.

- Codification: Stormwater management thresholds, requirements and restrictions for this project should be included both in legislation as well as in deed restrictions and conservation easements to ensure the perpetual integrity of the stormwater management systems.

- Legal Protections: The restrictions and requirements should be recorded as both deed restrictions and incorporated into easements (held by a third party) within the project corridor.

- Adequate funding: A secured perpetual funding source should be required for ongoing stewardship, maintaining the stormwater management system, for catastrophic impact needs, and for all open space that is part of the direct and indirect mitigation/compensation package for the Tollway project.

- A qualified third party team should be required to be directly responsible for the design and build of this project, as well as the construction, monitoring and maintenance of the stormwater treatment system, in concert with the Tollway.

Illinois Department of Transportation

Division of Highways/Region One / District One
201 West Center Court/Schaumburg, Illinois 60196-1096

May 7, 2012

Mr. David Stolman
Lake County Board Chairman
18 North County Street
10th Floor
Waukegan, IL 60085

Dear Mr. Stolman:

In response to your April 17th letter regarding Illinois Route 53/120 project, the Department strongly supports the efforts of the Advisory Council, which has made tremendous progress. The Illinois Route 53/120 project, also known as the Central Lake County Corridor, is the number one project listed in the CMAP "Go To 2040" plan and will be a significant transportation improvement for the Region.

Given the level of detail of the current planning efforts, there are many possibilities for reducing the overall project cost, including a reduced scope along the Illinois Route 120 portion of the project. Naturally the Department is concerned about the level of service along Illinois Route 120 after Illinois Route 53 is extended. Any future planning or design efforts should examine this issue to determine the extent of any needed improvements and project phasing.

With regard to toll collection along the existing Illinois Route 53 expressway south of Lake Cook Road, close coordination with IDOT and the Federal Highway Administration, as well as extensive stakeholder outreach will be needed to determine how this portion of the project could be implemented.

We look forward to working with you as the process moves forward. If you have any questions or need additional information, please contact me or Mr. Peter Harmet, Bureau of Programming, at (847) 705-4393.

Very truly yours,

Diane M. O'Keefe, P.E.
Deputy Director of Highways,
Region One Engineer

cc: Maria Rodriguez, Village President, Long Grove
Jeff Braiman, Village President, Buffalo Grove

MetropolitanPlanningCouncil

Input to the Illinois Route 53/120 Blue Ribbon Advisory Council
Submitted by MarySue Barrett
April 20, 2012

Thank you for the opportunity to participate in the Illinois Route 53/120 Advisory Council and to comment on the draft resolution and summary report. The Metropolitan Planning Council (MPC) is grateful for the dedication of the Advisory Council co-chairs and commends them for designing a thorough, open and participatory process to determine whether to continue planning for this new road. As a strong advocate for regional planning, MPC believes the high level of debate and discussion around Route 53/120 has been warranted, especially as this project was identified as one of five "fiscally constrained" major capital transportation projects by the Chicago Metropolitan Agency for Planning's (CMAP) broadly participatory GO TO 2040 Comprehensive Plan for northeastern Illinois.

MPC supports GO TO 2040 as the Chicago region's plan for growth; we are also keenly aware that all good plans must evolve to address new realities. Illinois Route 53/120 presents such an opportunity. GO TO 2040's fiscally constrained major capital projects, including Route 53/120, were prioritized based on their support of the Preferred Regional Scenario (one of balanced growth), results of individual evaluations, and information derived from project analyses. The five projects selected were those that yielded the highest rankings on measures such as economic growth, reduced congestion, shorter commutes, and improved job accessibility. In the case of Route 53/120, CMAP based its traffic demand forecast on its own 2007 Lake County and McHenry County population forecasts – the most up-to-data data set at the time.

Since then, CMAP has revised its population forecast for Lake County, resulting in a decline. Census data shows a decline of 6,000 people from 2007-2010 in Lake County. To develop accurate traffic demand projections for Illinois Route 53/120 – which is necessary to determine both a baseline assessment of need and funding scenarios – it is imperative to use updated population figures. This revised analysis may show that projected traffic demand and corresponding toll revenues were overstated in the Advisory Council Summary Report. CMAP plans to review its 2040 projections in light of the new base year data in the course of updating GO TO 2040 in 2014.

MPC commends the Advisory Council for remaining staunchly committed to an environmentally sensitive design. As a policy advocacy organization dedicated to helping shape a more competitive *and* sustainable Chicago region, MPC promotes context-sensitive transportation planning. Rte. 53/120, envisioned as a four-lane, 45 mph parkway, could "break the mold" by coordinating transportation investments with nearby land use planning, environmental concerns, and mixed-use economic development. No doubt this region has the resources, talent and expertise to make this roadway an exemplary, multimodal, limited-access thoroughfare that drives coordinated economic investment, instead of just hurtling people from one uncoordinated destination to another. Rather than build a sprawling highway that ignores and even diminishes local environmental assets and interchanges that primarily support auto-centric big-box development, we have the opportunity to develop a winding parkway designed with sensitivity to the natural environment and sensible features – such as interchanges that promote "town center," mixed-use developments and foster long-term economic growth for local communities.

In short, the vision for Illinois Route 53/120 must embrace the values of local residents – and, in so doing, will increase the value of their property: Because well-planned transportation investments increase people's access to desirable destinations, locations near these investments command higher land prices, benefiting land owners and developers. This fact plus the reality of inadequate federal and state transportation funds

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are among the reasons why MPC believes all major capital projects, including Route 53/120, must consider a broader menu of financing options, from variable pricing to value capture.

After reviewing the proposed funding plan and funding scenarios, MPC is not convinced that they are financially sound.

- In CMAP's evaluation of Illinois Route 53/120 for GO TO 2040, it determined that toll revenues system wide and from this proposed extension would account for 75 percent of construction costs, yielding a public sector cost return of 0.85. This is one of the measures that placed Illinois Route 53/120 on the fiscally constrained major capital projects list. The Toll Highway Authority's baseline Illinois Route 53/120 Funding and Financing Information projected toll revenues from this proposed tollway extension will cover only 20 percent of the costs, leaving a funding gap of between $1.7 billion and $2.062 billion, depending on alignment, which will need to be closed with local funds and other toll revenues.
- Because projected traffic demand was based on 2007 population and employment data, toll revenues generated by Illinois Route 53/120 may be overstated, which would result in tolls from this proposed extension covering even less than 20 percent of construction costs.
- Baseline funding calculations do not include the $200 million to $500 million in right-of-way acquisition costs, nor do they include funds for land protection and conservation endowment measures that are a key recommendation of the Advisory Committee.

The Advisory Council's guiding principles embrace environmental sensitivity and sustainability, a foundational value which was important to MPC and many other advisory participants at the outset. These principles reflect local values and merit local investment. It is reasonable – and will soon become the "new normal" – that the economic benefits this public investment will generate for private land owners should help pay for the cost of the investment. While not common practice in our region today, value capture financing mechanisms have been used successfully throughout the country. Indeed, tapping value capture mechanisms to finance new or existing transportation infrastructure is good policy precisely because it connects the benefit (and benefactors) of the investment with its cost. Right now, cities such as San Francisco, Washington, D.C., Denver, and Atlanta are using value capture tools such as a tax increment financing, special assessment, and joint development to finance, design, build, operate and maintain major transportation projects (see http://www.metroplanning.org/search-results.aspx?q='value+capture'). In fact, if not for these financing strategies, these projects would otherwise not be built, given limited federal and state dollars available for new transportation investments. For metropolitan Chicago to remain economically competitive, we must open our minds to options like these that are working in other regions.

In summary, it is necessary to update traffic demand forecasts for Illinois Rte. 53/120 using current population figures so that the Advisory Council can make an informed decision regarding whether to continue planning for Illinois Route 53/120. CMAP would need additional resources to update traffic demand in advance of 2014. Once that analysis has been reviewed, the Advisory Council ought not lower its design standards, but must continue to pursue an exemplary, environmentally sensitive project. Finally, as adequate funding has yet to be identified to construct Illinois Rte. 53/120 to such standards, local funding options must remain on the table, including value capture financing.

We look forward to continuing to work with other members of the Advisory Council to further evaluate the merit of constructing Illinois Route 53/120 and implementing fiscal solutions that are realistic and achievable.

April 20, 2012

Members of the Illinois Route 53/120 Blue Ribbon Advisory Council,

The League of Women Voters - Lake County has been concerned about transportation and land use for decades. The League's position supports balancing orderly growth and transportation needs while protecting the environment, conserving natural resources, and preserving our natural heritage. We also believe that the public must be fully informed from the beginning and throughout the planning process. Current, unbiased, quality research should be made available to the public and decision making bodies. Transportation systems should support viable business centers and reduce sprawl. Alternatives to any proposed plan, including "no-build" options should be fully explored. High priority should be given to transportation alternatives that mitigate road gridlock.

The League supports environmental protection and pollution control by preserving the physical, chemical and biological integrity of the ecosystem, with the maximum protection of public health and the environment.

The League urges the formation of citizen's advisory groups and was pleased when the Illinois Route 53/120 Blue Ribbon Advisory Council was established. According to the Illinois State Toll Highway "The Tollway will look to the Advisory Council to recommend a series of best practices for an integrated, multi-modal corridor that is financially viable, environmentally sustainable and socially responsible."

Below are some of the Advisory Council's stated guiding principles in determining if the Tollway should build the extension. As the Council prepares its report, have all important questions been answered?

Guiding principle #1 - *Enhance mobility and accessibility, and relieve congestion*. The GO TO 2040 plan suggests that an extension of Route **could** (not will) ease congestion. Transportation experts, including a previous Toll Authority Chairman, generally agree that "we cannot build our way out of congestion." While LCTIP conclusions often implied congestion relief, its process and study had many flaws. Is there evidence from an independent, reliable source that a new road will relieve congestion? Or will it promote sprawl, with long term consequences of exacerbating the problems?

Guiding Principal #2 - *Seek innovative design solutions for a safe, integrated, multi-modal corridor that preserves the environment and character of nearby communities*. The Toll Authority has estimated that the cost will be $2.2 billion. Does that $2.2 billion include the cost for anything other than the road? What other means of transportation are included in the design? What will be their costs? Who will pay? How will a new road preserve the environment, the wetlands, the air quality, and the character of Long Grove and other areas zoned for low density?

Guiding Principle #3 - *Analyze potential funding options and pursue corridor concepts to the extent that are financially viable, fiscally sustainable and equitable*. How much will the Toll Authority have to raise tolls throughout the system to pay for this extension? Will there be a new referendum asking residents throughout the Chicago region if they want to pay? The last referendum which passed with very low voter turnout contained no information. Can the Toll Authority which has financial difficulties with current upkeep on existing roads be able to sustain more miles?

Guiding Principle #5 - *Promote environmental enhancements and sustainable practices ... and strive to improve the overall environment.* What are the enhancements and environmental improvements? The Chicago region does not meet air standards; will this improve air quality? How will wetlands and water quality be improved?

Is there a different solution for Central Lake County that will enhance mobility, relieve congestion, and preserve the environment, and that is financially viable and socially responsible? Is a road the best answer for the 21st Century? What are the alternatives? Will this be detrimental to the economic development of older communities in distress? How is this road socially responsible?

Sincerely,

Mary Mathews
League of Women Voters - Lake County

April 18, 2012

VIA ELECTRONIC MAIL
George Ranney and David Stolman, Co-Chairs,
Illinois Route 53/120 Project Blue Ribbon Advisory Council and
Kristi Lafleur, Executive Director,
Illinois State Toll Highway Authority

c/o Illinois Tollway
2700 Ogden Ave
Downers Grove, IL 60515

Dear George, David, Kristi and Members of the
Illinois Route 53/120 Project Blue Ribbon Advisory Council:

We commend you for leading an open process to evaluate a possible extension of route 53, and we recognize the need to address roadway congestion and mobility problems in central Lake County.

The Blue Ribbon Panel has revisited many of the concerns that have resulted in so much opposition to this project for many years. However, this new process cannot change the fundamental flaws of this project: unavoidable environmental impacts, and the inducement of car dependent development patterns that lead to more cars, more air pollution, and more congestion over time and that undermine other transportation options. Moreover, the project's costs are prohibitively high.

For these reasons, we write to voice our opposition to the extension of Route 53 in central Lake County and encourage government officials to do an up-to-date study of alternatives, including transit, improvements to local roads, transportation demand management, and transit-oriented development.

Extending Route 53 into Lake County, even as a "parkway", will still destroy irreplaceable natural resources; contribute to new development, congestion problems, and pollution; and be so exorbitantly expensive as to drain needed resources from investments in our region's transportation system that would actually benefit our entire region. The road would also be a physical barrier that impedes travel between communities on opposite sides.

The extension of Route 53 threatens our health and environment in several significant ways. Even as a "parkway", the project would:

Destroy Irreplaceable Natural Areas And Increase Water Pollution

The high quality wetlands and other natural areas in the path of the Route 53 extension have been at the heart of the longstanding opposition to this project. These natural areas remain of unusual quality. If anything, they have grown in importance to our region's biodiversity as many others have been lost. Although the Council has worked to envision a more sensitive highway through this unique concentration of natural areas, the Route 53 extension – in any form – will destroy natural areas that cannot be recreated, and, as the Council's own study determined, will degrade thousands of acres with runoff from operation of the road in the future.

Increase Congestion and Health-Threatening Air Pollution

Experience shows that adding new highways in the Chicago region will over time lead to more cars and emissions, more congestion, and development that is often not conducive to walking, biking and transit. Any benefits from congestion relief will be short-lived, as new capacity attracts new traffic, induced development, and ultimately, demand for the next extension. With gas prices and roadway congestion increasing, we need to help people be less dependent on cars by providing transportation options. Research has also shown an increase in toxic air pollution in communities along roadways with the traffic volumes expected on the new road.

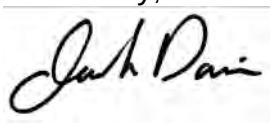
Tax The Region's Strained Transportation System

The price tag for extension would be so expensive, in part because of the tremendous environmental damage that would require mitigation, that it likely cannot be built and maintained without substantial subsidization from the rest of our transportation system. This would be an unwise use of resources, and would drain precious funding away from transportation projects that are in our region's best interests.

We appreciate the time and effort that the Council has put into trying to find consensus around this controversial project. However, it is now clear that we cannot afford the cost and environmental damage associated with this project. Moreover, an extension of Route 53 does not offer long-term congestion relief and mobility enhancement. What the region truly needs is the leadership to look to the future, and not the past, for solutions to traffic congestion in this corridor that work for the region and our environment.

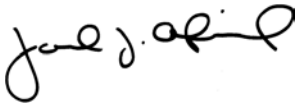
Our organizations would be willing to work with you to build a true consensus around new solutions that the region can afford, and that improve rather than further degrade our environment.

Sincerely,

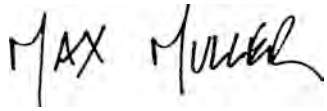


Jack Darin
Director
Sierra Club, Illinois Chapter

Henry Henderson
Director Midwest Program
Natural Resources Defense Council

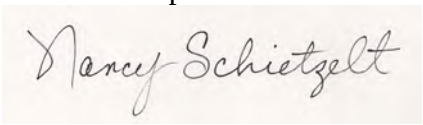


Joel J. Africk
President and Chief Executive Officer
Respiratory Health Association of Metropolitan Chicago



Max Muller
Program Director
Environment Illinois

Ron Burke
Executive Director
Active Transportation Alliance



Nancy Schietzelt
President
Environmental Defenders of McHenry County

ENVIRONMENTAL LAW & POLICY CENTER
Protecting the Midwest's Environment and Natural Heritage

MEMORANDUM

TO: **Route 53/120 Lake County Extension Blue Ribbon Advisory Council Members**

FROM: **Council Member Howard A. Learner, Environmental Law & Policy Center Council Member Jacky Grimshaw, Center for Neighborhood Technology**

RE: **Comments on Proposed Draft Resolution and Summary Report**

DATE: **April 18, 2012**

We appreciate the opportunity to provide comments on the Illinois Route 53/120 Draft Resolution and Summary Report. However, the extremely limited timeframe for requested comments – only two business days after dissemination of the draft document – does not allow sufficient time to provide detailed analysis and full comments. Accordingly, we will later supplement these initial comments, which address several fundamental challenges.

We respect the hard and thoughtful work of both Co-Chairs of the Blue Ribbon Advisory Council and their commitment to attempting to design an environmentally-sensitive road. We also appreciate the work of the Toll Highway Authority staff. However, there is not a consensus among the Blue Ribbon Advisory Council members, and the text stating a "consensus" in the Executive Summary at page 7 should be deleted. These comments identify some key challenges with the proposed tollway and the draft of the Illinois Route 53/120 Draft Resolution and Summary Report that must be addressed and solved, as follows:

1. This proposed new Lake County Route 53 tollway extension cannot be financially justified and the presently proposed funding plan and funding scenarios (pages 47 – 60) are neither realistic, nor reasonable. Unless and until there is a realistic, reasonable and responsible plan for financing this proposed new tollway, there is no purpose served by moving forward with the proposed next steps. Since the financing and funding plan is just now being presented to the full Council it is premature at the very least, to claim consensus.

According to the Toll Highway Authority's baseline IL Route 53/120 Funding and Financing Information, **the projected toll revenues from this proposed new tollway extension cover only 18% of the costs. The close to $2 billion funding gap is a huge 82% of the costs.** ($1.828 B - $2.062 B funding gap as a percentage of $2.228 B - $2.502 B). When the Funding and Financing Information is corrected and adjusted for the reasons explained below, the funding gap is even larger, and the toll revenues cover an even smaller percentage (perhaps about 10% - 15%) of the tollway costs. Moreover, converting the proposed new Route 53 tollway extension from 4 lanes to 6 lanes actually widens the funding gap by $151 million - $249 million more

according to the Toll Highway Authority's Five Draft Funding Scenarios. That makes a very bad problem even worse.

The Illinois State Toll Highway Authority recently approved an 87% toll increase and authorized going forward with three major tollway projects including the Elgin-O'Hare, which will be a huge financial drain on the toll system. Not all members of the Toll Highway Authority Board nor tollway users agreed with the very large toll increases. The Toll Highway Authority chose to prioritize other tollway projects over the proposed new Lake County Route 53 extension. While some Lake County officials questioned the Toll Highway Authority's prioritization decisions during that process, what they are really doing now is asking for yet another system-wide toll hike for another new tollway that doesn't come within the proverbial country mile – indeed, more than $2 billion miles – of paying for itself. That is called financial irresponsibility. We have seen the pension funding messes across our state. We should not repeat that here.

2. The financial shortfalls are actually even larger than identified in the Summary Report because the Toll Highway Authority's stated close to $2 billion funding gap is greatly understated for multiple reasons:

A. The baseline funding calculations (pages 48 - 50) apparently do not include right-of-way (ROW) acquisition costs, and thus treats them as $0. Why should the Illinois Department of Transportation – in these tight transportation project funding times – use public taxpayers' money to acquire ROW land in Lake County for the proposed new Route 53 tollroad extension and then give away that land for free to the Toll Highway Authority? That suggested Illinois taxpayer subsidy is wrong, unfair and potentially illegal. The ROW costs are at least $200 million and, perhaps, as high as $500 million. The real cost figures of this proposed new tollway extension should be included in the financial modeling. This widens the funding gap.

B. The baseline funding calculations (pages 48 - 50) apparently do not include funds for land protection and endowment, and thus treats them as $0. The land protection and endowment measures have been a key part of the recommendations by one of the three committees of the Advisory Committee and a necessary part of potentially advancing the proposed new Lake County tollroad extension. The real cost figures of this proposed new Lake County Route 53/120 tollroad extension must be included in the financial modeling. This, too, widens the overall funding gap.

C. The baseline funding cost calculations (pages 48 - 50) apparently do not include the financing costs during the time period from when the bonds are issued (2016) to support the beginning of construction and when toll revenues begin to be received upon tollway completion (2022 – 2023). If, for example, the Toll Highway Authority issues $2 billion in bonds in 2016 at 5% interest rate, the financing costs will be about $150 million per year, or about $1 billion over the 6 to 7-year period between the start of construction and when toll revenues begin to be received upon completion. (The bond issuances could potentially be staggered, thus reducing the costs somewhat, but not fundamentally changing the overall problem.) This, too, widens the overall funding gap.

D. The baseline funding cost calculations (pages 48 - 50) and Five Draft Funding Scenarios mostly assume 1.5 debt coverage ratio (much lower than the more normal 2.0 debt coverage ratio). This will increase the financing costs because the bonds will be viewed as more risky by investors. On the other hand, using the 2.0 debt coverage ratio will reduce the bonding capacity as the Toll Highway Authority's Menu of Funding and Financing Options recognizes. Either way, this, too, widens the overall funding gap.

E. There has not been an independent review of the construction cost calculations. The Toll Highway Authority staff has worked hard in rushing to assemble the baseline funding cost calculations (pages 48 - 50) and Five Draft Funding Scenarios. This multi-billion dollar proposed project requires more careful and thorough analysis, and prudence warrants an independent, outside review.

F. The traffic demand projections and modeling apparently used for the proposed baseline assessment of need and funding scenarios are, in turn, based on CMAP's 2007 Lake County and McHenry County population forecasts, which are outdated and overstated; they do not reflect the "burst of the housing bubble" and Great Recession. As we are all painfully aware, these wrenching economic changes occurred in 2008 – 2010 and fundamentally affected the housing and development market in the CMAP region, including Lake and McHenry Counties, as well as the overall economy. In short, the population forecasts relied upon for the traffic demand projections exceed reality. (Please see the attached memo: "Comparing U.S. Census Bureau Actual Lake County and McHenry County Populations with CMAP Population Projections for Go To 2040 Transportation Modeling: Big Differences") Therefore, the projected traffic demand is overstated and the toll revenues are correspondingly overstated. This, too, widens the overall funding gap.

G. The Five Draft Funding Scenarios (page 50) are based on a 600% - 700% increase over the 3 cents per mile toll charges that were in effect on the Tri-State Tollway in Lake County through 2011. A key to-be-addressed question: how will most of the public regard these super-high tolls of 20 cents per mile on the proposed new Lake County Route 53 tollway extension, which is a 600% - 700% increase over last year's toll levels and a 300% - 400% increase over the newly-raised 5.6 cents per mile tolls on the Tri-State Tollway. Lake County residents recently voted down a referendum to increase the County's gas tax. Lake County public officials on the Blue Ribbon Advisory Council have expressed opposition to a proposed 0.25% increase in the County's sales tax.

Basic market economics indicate that such greatly increased tolls will also have some impact on drivers' choices to use the new tollway or bypass it by either driving on arterial roads or choosing other alternatives (trains, transit, ride-sharing or skipping the trip altogether.) Activity-based model runs would give greater insight on traveler choices. That will have an impact on traffic projections and toll revenues. Indeed, if it doesn't, then the Toll Highway Authority's suggestions of using congestion pricing to alter traffic demand are not realistic. Apparently, this kind of attrition has not been fully incorporated into the traffic demand projections and, therefore, the toll revenue projections in the Summary Report. This, too, widens the overall funding gap.

H. This Lake County-focused Advisory Council should not recommend imposing tolls in Cook County and other counties that have not been specifically consulted and are not significantly participating in the process. The Summary Report states (page 65): "The Council supports tolling existing Route 53 from Lake Cook Road to I-90 . . . [and] adding tolls to existing un-tolled access points." That recommendation cannot and should not be made without full and fair consultations with Cook County public officials and interest groups.

I. Local Lake County funding options should be more fully explored. The Advisory Council's guiding principles embrace environmental sensitivity and sustainability. These principles reflect local values, which many Lake County residents may deem worth paying for. The proposed design (45 mph and 4-lane parkway) would deliver much greater benefits to the sub-region than to the broader region. Economic benefits that would accrue sub-regionally are desirable and can potentially be captured. While not common practice in our region today, the deployment of congestion pricing and value capture tools have been and are being used elsewhere. There is much – some positive lessons, some cautionary – to be learned from these experiences.

J. There is also a fair question as to extent of the recommendation (page 65) in the Summary Report "for the use of Tollway system generated revenues to enable this project . . .". The fact of the matter is that this proposed new Route 53 in Lake County is being designed more to serve local Lake County traffic than to meet regional transportation priorities. Proposing to rely on "other peoples' money" by raising tolls in other counties who haven't been consulted is just wrong and unfair.

At present, this proposed new Route 53/120 tollway extension is financially irresponsible and also unjustified for "need," as explained below. The Blue Ribbon Advisory Council should not commit and spend the taxpayers' money in financially irresponsible ways and kick the can down the proverbial road. We have seen that on state governmental finances and on pension funds around the state. Those mistakes should not be repeated here.

The Blue Ribbon Advisory Council should get more accurate cost data, traffic demand estimates and financial projections on which to base its important, practical and thoughtful decisions. What is the real funding gap, and are there financially and politically realistic, practical and reasonable ways of addressing that gap? Unless and until there is a realistic, reasonable and responsible plan for financing the proposed new tollway, there is no purpose served by moving forward with the other proposed next steps.

3. The proposed stated "need" for the proposed Route 53 tollroad extension in Lake County (pages 1 – 2) is not supported, is not a consensus statement and should be deleted from the report. There <u>is</u> a "need" for better transportation management and land use solutions to reduce traffic congestion in the immediate Buffalo Grove area where Route 53 going north through Cook County ends at Lake Cook Road. There may also be other particular places in Central Lake County where there needs to be solutions to traffic congestion problems. **The**

preferred approach for the Blue Ribbon Advisory Council is to scale and right-size the solutions to the particular problems and to fully and fairly consider and evaluate a range of transportation and land use alternatives to address the particular problems. That evaluation should consider cost, congestion relief, environmental impacts and mobility pros and cons of reasonable alternative approaches available to solve the more focused problems.

The Blue Ribbon Advisory Council should fully and fairly examine alternative ways of addressing particular problems with right-sized solutions that may be less expensive, better faster and cheaper, and more environmentally sensible than building the proposed new tollway. Accordingly, the corridor planning and implementation steps described at pages 10 – 11, 61-67 and in other related pages of the report are premature and should be deleted from the report.

4. As explained above, the population forecasts relied upon for the traffic demand projections exceed reality, bringing into question whether the proposed new Route 53/120 tollroad extension is needed for this reason as well. Please see the attached memo: "Comparing U.S. Census Bureau Actual Lake County and McHenry County Populations with CMAP Population Projections for Go To 2040 Transportation Modeling: Big Differences." Accordingly, the stated "Need for a New Road" (pages 1-2) "Advisory Council Consensus" paragraph in the Executive Summary (page 7) and the stated "consensus for the Tollway to move forward" (page 7) should be deleted. Likewise, the corridor planning and implementation steps described at pages 10 – 11, 61-67, and in other related pages of the report, are premature and should be changed or deleted from the report. Moreover, the baseline assessment of funding scenarios (pages 47 – 60) should be changed to reflect more realistic contemporary population forecast and traffic demand data.

5. Each of the elements in the "Secure State Legislature Authorization" section of the Summary Report (page 66) might be reasonable to discuss, but we do not support recommending them at this point. Many of the proposed federal and state legislative recommendations have widespread implications beyond Lake County and involve transfers of taxpayers' funds from outside of Lake County to subsidize tollway construction and financing, and bondholders. This section should be deleted from the Summary Report at this time.

6. We support the Advisory Council's guiding principles embracing environmental sensitivity and sustainability. Some elements of the Draft Resolution and Summary Report that seek to mitigate environmental impacts are commendable. **Lake County's natural areas are of unusually high quality, and the Draft Resolution and Summary Report does not assure that adverse impacts will be avoided, rather than just mitigated.** The specifics of the road design, coupled with a 1:1 direct and indirect impact acreage mitigation strategy are good, but will not begin to mitigate the effects of this proposed new tollroad, as Openlands and other groups have been explaining. Moreover, these strategies can be costly, and we have seen in the past that when finances get tight, environmental pledges may sometimes be set aside. **There is a fair legal question of whether the Toll Highway Authority can, indeed, be firmly bound to environmental commitments made in this process.**

* * *

We began this process with open minds, but the need for this road is unproven and alternatives were not explored, the funding gap is very large and the financing approaches raised thus far do not achieve responsibility. The commitment of the Co-Chairs and many others to environmental sensitivity and sustainability are sincere, but the adverse impacts of the proposed new Route 53/120 tollroad extension through high-quality natural areas in Central Lake County have not been avoided. Accordingly, we cannot support the Draft Resolution and Summary Report. We look forward to working with other members of the Blue Ribbon Advisory Council to constructively address the opportunities and challenges explained above.

April 17, 2012

To: Il Route 53/120 Blue Ribbon Advisory Council

From: David Stolman, Lake County Board Chairman
Jeff Braiman, Buffalo Grove Village President
Maria Rodriguez, Long Grove Village President

Subject: IL Route 53/120 Funding Plan

At the April 10th Mobility and Finance meeting, the discussion on the funding gap overshadowed the consensus achieved to date. The difficulty with funding costly projects is nothing new. We need to continue to discuss options to find the right funding mix necessary to build what CMAP listed as the #1 congestion mitigation project in the Chicagoland region.

Following the April 10th committee meeting, Maria Rodriguez, Jeff Braiman, and I met as a follow-up to the discussion. We all agree that this project is very important and it must be built. We also agree that the environmental protections discussed throughout this project are critical to addressing potential flooding concerns as well as maintaining the character of Lake County. The size of the funding gap continues to be a significant problem. However, the funding gap is a range with many assumptions built into it. For planning purposes, we used very conservative assumptions to prepare estimates. As we develop this funding mix, we should focus on the costs of the project and the borrowing costs before pursuing other options.

The project currently assumes opening the extension in 2025. It also assumes a 5% construction escalation from today through mid-point of construction. Given the current bid climate, freezing the escalation costs for the next two years and using 5% thereafter may still be a reasonable assumption.

Another idea worth pursuing would be to fast track this project based on the level of consensus we have reached, and open the extension by 2020. The combination of delaying the escalation and opening it earlier than projected closes the funding gap significantly by eliminating cost escalation in the out years and reducing the overall cost of the project. On the menu of funding and financing options, 15 different options are listed. Further refinement of options numbered 9 & 10; (the terms and cost for borrowing) would also help decrease overall project costs.

The east section of Rt 120 from Almond Road to I-94, shown as a reconstruction, can be removed from this project because volumes shown with implementation of value capture pricing are very similar to

many other IDOT expressways. This section could operate similarly; therefore, one could argue that immediate reconstruction is not necessary.

The second issue that should be addressed as part of the funding mix is a toll system in Lake County that is equitable and uniform. While change is never easy, we recognize that have to be willing to address issues of fairness. Items 12, 13A, and 13B address inequities in the existing toll system in Lake County but are also critical in the overall funding mix for the project. In fairness, we should require a rebalancing of the toll charges throughout Lake County so they are equitable and uniform for all users. The Waukegan Toll Plaza is one of the highest tolls in the system and not in alignment with the other toll plazas. Moving it to the state line and rebalancing the tolls at all access points would help address this imbalance.

The third issue deals with the concept of some form of Value Capture. The extension of Rt 53 with the By-Pass will undoubtedly enhance the value of the vacant land in the area and open up tremendous economic development opportunities in this region. Without a better transportation system, western Lake County will continue its struggle to attract non-residential development. With that said, we also recognize that if the business costs are too high, we limit our economic development opportunities. As part of the overall funding mix, some type of Value Capture is obviously needed for this project; continued thorough discussion is needed to identify details of an appropriate Value Capture agreement. Finally, we support the continued discussion of tolling existing Rt 53 with reconstruction. Currently, 103,000 cars per day access Lake-Cook Road. The extension of Rt 53 north is directly tied to congestion relief and quality of life for the communities along Lake Cook Road. Tolling existing Rt 53 is a reasonable option and should be discussed. The commuters in the area also receive the benefit of the Rt 53 extension and the reconstruction of existing Rt 53. The reconstruction is not funded in the state's plan. This option accomplishes both.

The Rt 53 extension will have a significant impact not only in Lake County, but for the region. The extension was needed years ago, but it is critical today. The items outlined in this memo create a funding plan that is balanced and reasonable provided there is support from the Tollway. The remaining funds necessary to fully fund the project should come from the overall tollway system. In the same way that users of I-94 pay for improvements to other areas projects, this project will be part of the tollway system and should, at least in part, be supported by system revenue.

We are pleased with the progress achieved thus far and look forward to working with you to build a project that we can all be proud of. We feel that with environmental protections integrated as part of the road design we have the consensus and momentum to move forward. Now is the time to come together and send a very clear message that we can build Route 53.

Thank you

HAINESVILLE
Lake County's Oldest Village

April 16, 2012

Chairman David Stolman
Lake County Board

Village President Mark Knigge
Village of Wauconda

Mayor Leon Rockingham
City of North Chicago

Village President Maria Rodriguez
Village of Long Grove

Village President Arlene Mulder
Village of Arlington Heights

Village President Jeff Braiman
Village of Buffalo Grove

RE: IL Route 53/120 Blue Ribbon Advisory Council - Design & Land Use Committee Recommendations

Dear Fellow Elected Officials:

Thank you for inviting me to the March 12, 2012 Public Officials Information Meeting. I appreciate your commitment to serve on this Blue Ribbon Advisory Council, and as a fellow public official in Lake County, I would like to share some concerns that I have that will not only affect the Village of Hainesville, but the greater Lake County area.

Based on our Village's review of the information presented, I noted some concerns with respect to the CMAP Memorandum - Route 53/120 Land Use Analysis and Impacts, dated February 10, 2012. The findings of the memorandum are that the municipalities in the area have over planned for commercial in the corridor appears to be invalid due to some of the underlying assumptions by CMAP. CMAP's analysis states that Floor Area Ratios (FARs) used to estimate development "were checked against average new construction FARs in Lake County for non-residential buildings constructed since 2000." The resulting FAR used by CMAP to estimate commercial development was 0.30. As can be seen on the attached exhibit, the shopping center in our Village, which has been constructed since 2000 at the northeast corner of Hainesville Road and Route 120, provides for actual commercial development in the FAR range of 0.14 to 0.16 or approximately one half the level of intensity of the 0.3 FAR assumed in the CMAP memorandum. I have heard from some of the other Villages in our area and they are finding similar FAR levels of approximately 0.15. Based on using these actual development levels, it is apparent that the assumptions for the intensity of commercial development by CMAP for our central Lake County area are significantly too high, and I would not want to see these inflated

assumptions used as any sort of basis for planning the roadway design for this major highway in our area. I am of the opinion that this future roadway is needed without inflating the assumptions for commercial land use intensities in our area.

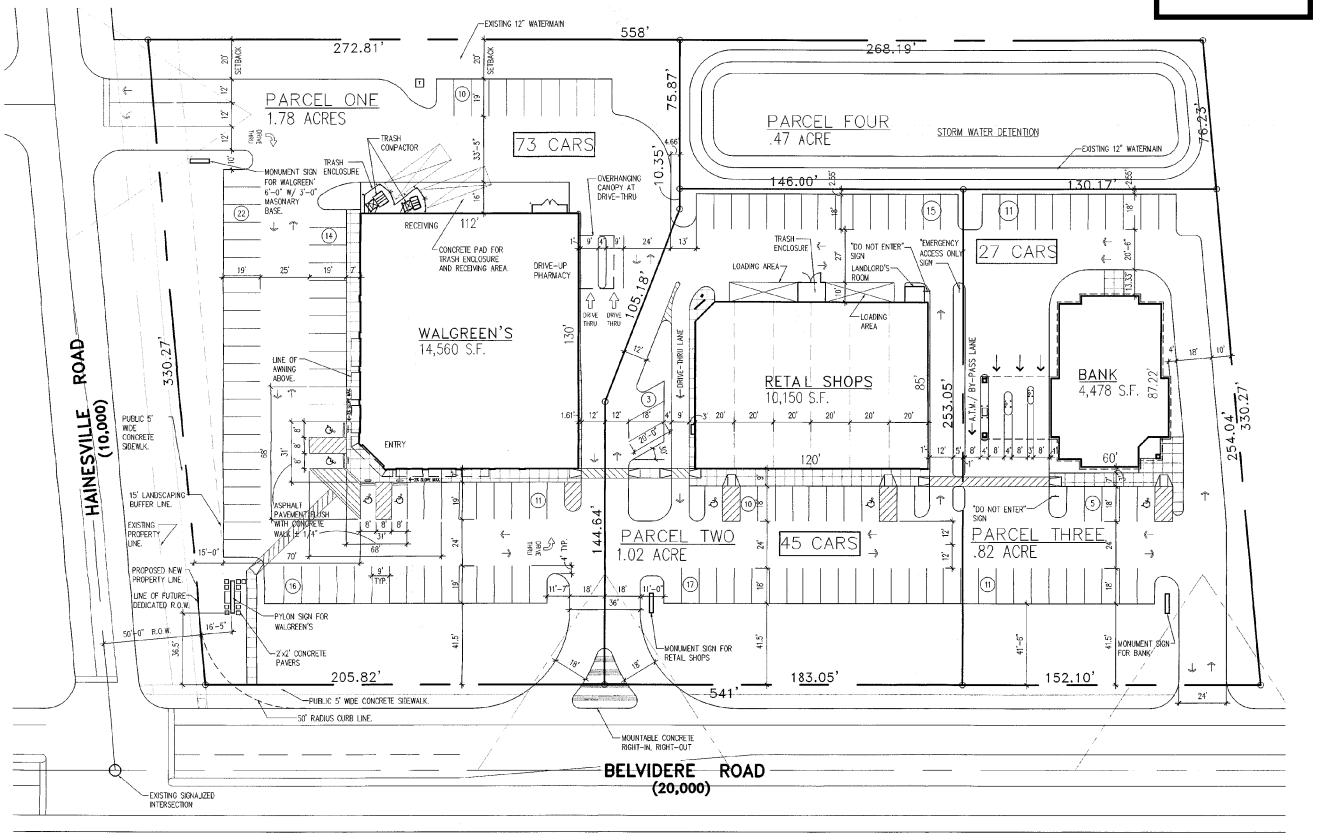
In addition to this concern, the proposed alignment of the interchange between Route 53 and Route 120, which is proposed to funnel traffic from the primarily north-south Route 53 roadway to the Route 120 primarily east-west roadway, seems to transfer the current problem of ending Route 53 at Lake Cook Road with the north oriented traffic ending at an east-west road whereby adding congestion to the east-west road until it can find an acceptable north-south alternative road. In the Village of Hainesville Comprehensive Plan, we addressed the concept of a more balanced distribution of traffic for all directions (north, south, east, west) if the Route 53 roadway where to blend into existing roadways in our area. For traffic to the east, there would be the new Route 120 alignment for through traffic as well as a connection with Allegany Road for more local east bound or northeast bound traffic or local north-south destinations off Allegany Road. For traffic to the west, there is an opportunity to transition into existing Route 120 west of the existing at-grade Route 120 railroad crossing. For traffic that is north oriented, our Comprehensive Plan presents the concept of an extension of existing north-south Hainesville Road south from its current terminus at Route 120 to go under the railroad tracks for a connection with the new Route 53 roadway. Hainesville Road provides connections to both Washington Street and Rollins Road that are both planned for improvements of existing at-grade railroad crossings to grade separated underpasses. This concept of a more balanced distribution of traffic in all directions (north, south, east, west) through any alternative terminus of the Route 53 roadway in this area is critical not only for the Village of Hainesville, but also for the greater Lake County area.

I hope you will consider these comments at this time and also share them with the other members of the Route 53/120 Blue Ribbon Committee. Please contact me with any questions or comments. Thank you for your attention to this matter.

Sincerely,

Linda Soto

Linda Soto
Mayor
Village of Hainesville



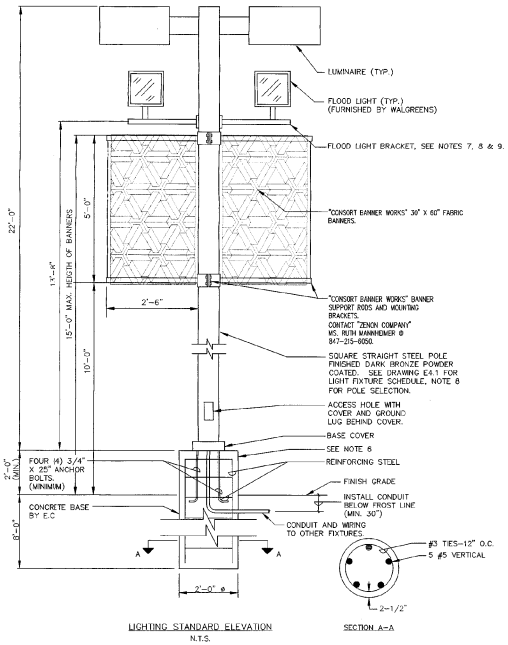
1 SITE PLAN
SCALE: 1" = 30'-0"

N

SITE ANALYSIS

NOTE:
FAR = 0.16

TOTAL SITE AREA (PARCEL'S "1-4")	±4.09 ACRES
TOTAL BUILDING AREA (PARCEL'S "1-4")	29,188 S.F.
PARCEL ONE	1.78 ACRES
WALGREEN'S	14,560 S.F.
PARKING REQUIRED (1 CAR / 300 S.F.)	49 CARS
PARKING REQUIRED (3.3 CARS / 1,000 S.F.)	49 CARS
PARKING PROVIDED	73 CARS
PARCEL TWO	1.02 ACRE
RETAIL SHOPS	10,150 S.F.
PARKING REQUIRED (1 CAR / 300 S.F.)	34 CARS
PARKING REQUIRED (3.3 CARS / 1,000 S.F.)	34 CARS
PARKING PROVIDED	45 CARS
PARCEL THREE	.82 ACRE
BANK	4,478 S.F.
PARKING REQUIRED (1 CAR / 400 S.F.)	11 CARS
PARKING REQUIRED (2.5 CARS / 1,000 S.F.)	11 CARS
PARKING PROVIDED	27 CARS
PARCEL FOUR	.47 ACRE
STORM WATER DETENTION	



LIGHTING STANDARD ELEVATION
N.T.S.

SECTION A-A

2 SITE LITE POLE DETAILS
SCALE: NTS

RUBLOFF DEVELOPMENT
2800 WEST HIGGINS ROAD, SUITE 205
HOFFMAN ESTATES, ILLINOIS 60195

SITE PLAN - STORE #07824
PROPOSED RETAIL DEVELOPMENT
N.E.C. OF HAINESVILLE RD. AND BELVIDERE RD.
HAINESVILLE, ILLINOIS

Arcline Associates Ltd.
3025 Highland Parkway, Suite 140 Downers Grove, IL. 60515

DATE 2/3/03

REVISIONS NO.	DATE
R1:	4-9-03
R2:	4-9-03
R3:	5-2-03
R4:	5-9-03

SHEET NO. SP1 OF

PROJECT NO. 2301