Chapter 6
Capital Plan

This chapter presents the future transportation needs that are recommended to receive the remaining funds in the 2021-2040 capital improvement program for DuPage County. The chapter presents recommendations in two sections: (1) capital improvement projects and (2) programs and policies.

6.1 Capital Program

The recommended capital program in this section is the result of many assessment processes. Reconstruction project recommendations are the result of assessment of conditions and life cycle tracking; mobility project recommendations result from the assessment of sidewalk and trail connectivity and condition; system enhancement and system expansion project recommendations are the result of modeling of existing intersection and roadway performance.

Slightly more than one-half (51 percent) of expected revenue is needed for core operational, maintenance, and contractual commitments. All other programs, projects, and initiatives must be constrained to the remaining funding totaling approximately $795.5 million.

The capital improvement project list included below attempts to address immediate and future needs and allocate funds to projects across the county and across the spectrum of project types. The projects are classified according to the goals expressed earlier in Chapter 3, including: State of Good Repair, System Enhancement, System Expansion, Mobility and Facility. It is important to note that the County has not called out safety as a separate category because each and every project that is included in the capital program includes elements of safety. Similarly, many of the projects included in the program include operational efficiency (i.e., system performance and congestion reduction), environmental remediation (i.e., stormwater management and landscaping) and equity (i.e., accessibility and accommodations for elderly and disabled).

**State of Good Repair**

These projects involve reconstructing a facility in kind or with slight modifications to improve mobility, accessibility, or efficiency in the system. Typical projects under this category include bridge replacement, highway reconstruction, bike path or sidewalk reconstruction, drainage repair, and traffic signal replacement at intersections.

**System Enhancement**

There are many intersections and roadway segments in need of minor capacity improvements such as turn lanes, sidewalk, traffic signal communications and power supply, and roadway widening. These improvements attempt to address chronic congestion and poor system performance that cause delays, excess fuel consumption and emissions, and loss of economic productivity.

**System Expansion**

These projects are the most expensive and require the most planning and time to deliver. These projects usually involve the construction of additional lanes or new facilities. There are few of these
projects within this plan but the projects that do appear consume over one-quarter of the available capital program budget.

**Mobility**
These projects include modifications and expansions to the DuPage County multi use path system. Addition of new path and sidewalk are featured prominently in this plan, along with allocations for filling in gaps in path and sidewalk systems. Many of the system enhancement, state of good repair, and expansion projects include elements of mobility as well.

**Facility**
DuPage County needs modernized facilities for its maintenance department. The Plan includes the reconstruction and replacement of the County's 140 County Farm building with attendant modifications to the parking lots and fuel station. This capital program represents less than 5 percent of the overall capital program.

**Cost Participation and Project Partnering**
The capital program also includes a line item for County cost participation in peer agency projects. The County has identified key state and municipal projects where it is likely that the County will share in the cost of enhancements to traffic signals, sidewalk, and ADA accommodations, and turn lanes. County staff has estimated order of magnitude costs based on historical participation patterns.

**Program Schedule**
Projects are further classified as “Programmed” or “Planned”. Programmed projects are those where the county has initiated environmental, design or construction engineering and where the County anticipates constructing the project within the next five years.

For the purposes of this report, planned projects refers to projects that are prioritized for funding and construction between 2026 and 2040. These are projects that both address the network needs identified in Chapter 4 and are considered feasible and effective based on the screening process described later in this Chapter. Few of the planned projects have any funding allocated to them. The DOT will begin to seek federal funding for many of these projects over the next few years in anticipation of beginning environmental and design engineering. Planned projects are allocated to five-year increments (2026-30, 2031-35, and 2036-40) based on need, availability of funding in the five-year period, and time needed to organize, plan, coordinate and gather resources for larger projects. It is likely that various projects will move forward and backward within the program based on project complexity, funding availability, and need. Project status will be continuously evaluated over the life of the Plan and program updates will be published in regular intervals.

**Cost Estimation**
Programmed projects (scheduled from 2021-25) are well advanced in planning and design and costs have been estimated per the project engineer’s estimates. All engineering costs (i.e., environmental, design, and construction engineering), land acquisition, and reasonable contingency costs (such as utility relocations, fencing, lighting, landscaping, and other project appurtenances) have been included in the project cost estimates. Some of the programmed projects have advanced sufficiently so that only a small amount of the total project cost remains to be paid out.
Planned projects costs are estimates based on typical costs according to project type and extent. These costs also include inflation factors applied to an initial 2018 cost estimate. Project costs are inflated to the midpoint of the proposed five-year funding period. Inflation is projected at a conservative annual 2 percent rate. Project costs will ultimately be determined by the final project scope and project bid. Some projects in the program include an estimated cost participation from municipal and state agencies and this amount is deducted from the overall project cost.

### 6.1.1 Proposed Capital Program

As documented in Chapter 5, estimated funding for the 20-year program will total over $1.61 billion. Of this amount, more than half (approximately $819 million), will be allocated to operations and capital maintenance programs. The remaining funding for capital improvements totals approximately $795.5 million, as shown in **Table 6-1** below.

**Table 6-1. Capital Program Funding Constraint (millions)**

<table>
<thead>
<tr>
<th></th>
<th>Programmed Projects</th>
<th>Planned Projects by Funding Period</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td>Estimated Funding (1)</td>
<td>$380.2</td>
<td>$391.2</td>
<td>$410.7</td>
</tr>
<tr>
<td>Estimated Operations Costs</td>
<td>103.0</td>
<td>102.2</td>
<td>112.2</td>
</tr>
<tr>
<td>Estimated Capital Maintenance and Contractual</td>
<td>89.7</td>
<td>92.2</td>
<td>97.3</td>
</tr>
<tr>
<td>Funds Available for Capital Improvements (2)</td>
<td>187.6</td>
<td>196.8</td>
<td>201.2</td>
</tr>
<tr>
<td>DuPage Capital Projects (3)</td>
<td>174.2</td>
<td>192.9</td>
<td>211.5</td>
</tr>
<tr>
<td>Other Capital Project Participation (4)</td>
<td>$1.6</td>
<td>$1.8</td>
<td>$2.0</td>
</tr>
</tbody>
</table>

(1) Estimated DuDOT revenues based on assumptions presented in Chapter 5.
(2) Remaining funds carry over into next period.
(3) More detailed breakdown presented in **Table 6-2**.
(4) Funding reserved for DuDOT participation in projects led by other agencies.

DuDOT has allocated projects to five-year increments as Table 6-1 demonstrates. The Capital Projects and Capital Project Participation lines represent the estimated expenditures on constrained projects that the 20-year capital program can accommodate. The first five years are “programmed” projects. The following 15 years represent planned projects. Five-year allocations are for budgeting purposes only. Many of the County’s projects and programs require more than five years to plan, program, and build so five-year increments are arbitrary. DuDOT has not split projects between five-year increments so that it is easier to assure that whole projects are constrained. In its regular LRTP updates, DuDOT will update project costs and project scheduling.

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1 Engineering News Record construction cost index history 1908-2020 indicates an average construction cost index year over year increase of 2.66% between 2008 and 2020.
2 For details on capital maintenance expenditures, see Appendix XX.
for tracking purposes and the LRTP website will track accomplishments and performance toward the program.

**Constrained and Unconstrained Projects**

Federal regulations require metropolitan transportation plans, transportation improvement programs, and statewide transportation improvement programs to be fiscally constrained, meaning that agencies have identified sufficient financial information to demonstrate that projects can be reasonably implemented with available revenue sources.

Each project in the LRTP program was evaluated based on how well it addressed the goals and objectives of the LRTP (presented in Chapter 3) and overall cost effectiveness. Every one of the recommended projects helps to address multiple objectives listed under the safety and economic vitality goals; More than three-quarters of the projects address objectives under mobility choice and sustainability and resilience; And nearly half of the projects address objectives included under the efficient operations goal. Appendix 6-A presents an overview of process and results used to evaluate each project according to the goals and objectives of the plan.

**Table 6- 2** demonstrates DuDOT's commitment to construct projects that are consistent with public goals and the safety and performance needs of the users of the overall system.

<table>
<thead>
<tr>
<th>Table 6- 2. Constrained Capital Projects by Goal Category (millions)</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Programmed Projects</strong></td>
</tr>
<tr>
<td></td>
</tr>
<tr>
<td>Mobility</td>
</tr>
<tr>
<td>Facilities</td>
</tr>
<tr>
<td>State of Good Repair</td>
</tr>
<tr>
<td>System Enhancement</td>
</tr>
<tr>
<td>System Expansion</td>
</tr>
<tr>
<td>Project Participation - DuPage Share (1)</td>
</tr>
<tr>
<td><strong>Total</strong></td>
</tr>
</tbody>
</table>

(1) Funding reserved for DuDOT participation in projects led by other agencies.

As [Figure 6- 1](#) shows, the County intends to allocate almost 60 percent of its available funding to state of good repair and system enhancement. Another 9 percent will be allocated to mobility projects such as bike path, trails, sidewalk, and ADA accommodations.
6.1.2 Program Elements

The 2021-2040 program includes 41 programmed projects and 70 planned projects. The project map is included below as Figure 6-2. A number of projects like the Central Signal System Phases I-IV and Capital Pavement Maintenance projects do not appear on the project maps because they involve many elements across the entire county. Some of the key features of the plan are listed below.

State of Good Repair Projects

Bridges

Five bridges appear in the programmed project list including Warrenville Road at East Branch DuPage River, Geneva Road and Army Trail Roads at West Branch DuPage River, and Bloomingdale Road over the Canadian National (CN) Railroad. These are all significant reconstruction projects.

Five bridges appear on the planned project list including repair to the Volunteer bridge in Wheaton, reconstruction of the Yackley Avenue bridge over the Burlington Northern Santa Fe Railroad, and two river bridges on County Farm Road.

Highway Reconstruction

A number of older rural legacy roadways are scheduled for complete reconstruction during the 20-year program. These roads were built to out of date paving standards and need repair and resurfacing at a much more frequent rate than roads built in the last 30 years.

Ten projects are included in the planned project list, totaling more than $160 million. Only sections of the entire length of the County highway will be included in this plan. Sections of the following roads will be reconstructed: Wood Dale Road, York Road, Medinah Road, St. Charles Road, 55th Street, 63rd Street, 75th Street, and Maple Avenue in Downers Grove. Please refer to the planned project list for details.
Figure 6-2. 2021-2040 Programmed and Planned Projects Map
System Enhancement Projects

Because there are many enhancement projects, it is recommended that the reader refer to the project lists in Appendix 6-B for details. Seventeen enhancements projects appear in the programmed list and 20 more in the planned list. Some of the more significant projects are listed below:

Intersections

- Programmed
  - 75th Street from Millbrook to Greene Road
  - 87th Street at Woodward Avenue
  - Lemont Road from 87th Street to 83rd Street
  - Bloomingdale Road at Geneva Road
  - Naperville Road at IL 38/Roosevelt Road

- Planned
  - 63rd Street at Cass Avenue
  - Army Trail Road at County Farm Road
  - Army Trail Road at Munger Road
  - County Farm Road at Stearns Road
  - Finley/Belmont Road at US 34/Ogden Avenue
  - Yackley Avenue at US 34/Ogden Avenue

Other Improvements

- Programmed
  - Central Signal System Implementation
  - 63rd Street from Suffield Court to Americana Drive
  - Highlake Road at Sunset Avenue

- Planned
  - Stearns Road from west county line to Bartlett Road

Mobility Projects

Many mobility projects are smaller or geographically shorter projects to fill sidewalk gaps, convert older unfinished path into paved path, or address ADA program needs. However, there are a few select bike path and trail sections that are uniquely identified as corridor projects:
Chapter 6 • Capital Plan

- Programmed
  - Hobson Road sidewalk from Woodridge Drive to Janes Avenue
  - Aurora Branch Illinois Prairie Path – realignment

- Planned
  - East Branch DuPage River Trail
  - Stearns Road Bike Path
  - 31st Street Bike Path from Highland Avenue to Meyers Road
  - Meyers Road Bike Path from 31st Street to IL 56/Butterfield Road

System Expansion Projects
All of the projects listed here are comprehensive corridor projects which involve roadway widening, added lanes, intersection channelization, bridge widening, signal systems, and signal updates, and all of the ancillary relocation services necessary. The projects in the program include:

- Planned
  - 75th Street from Janes Avenue to IL 59
  - Army Trail Road from west of Gary Avenue to west of Bloomingdale Road
  - Eola Road from Ferry Road to New York Street

6.1.3 Project Participation
DuDOT routinely cooperates and participates in projects managed by other regional or local agencies. Participation ranges from planning to design to construction. Participation almost always occurs when a county roadway, bike path, or trail intersects a state, toll, or municipal project. DuDOT has estimated that more than $7.5 million will be allocated to projects of this nature.

The bullets below list several capital projects that DuDOT considers important improvements from which the county network would benefit. DuDOT recommends these projects for future planning. The projects are also present in the map in Figure 6-3.

State Projects
- IL 38 (West of Finley Road to West of Summit Avenue) – add lanes
- IL 53 (IL 64/North Avenue to IL 56/Butterfield Road) – add lanes
- IL 83 (N of 31st Street to 55th Street) – add lanes
- IL 83 (63rd Street to I-55 Frontage Road) – add lanes
- IL 83 (at IL 19/Irving Park Road) – reconstruct/improve interchange
US 34/Ogden Avenue (US 30 to 75th Street) – add lanes

IL 56/Butterfield Road (Loop Road to IL 53) – add lanes

IL 56/Butterfield Road (Farnsworth Ave to IL 59) – add lanes

US 34/Ogden Avenue (Iroquois Avenue to Fender) – Intersection improvements, alignment, and channelization

US 34/Ogden Avenue (North Aurora Road to Rickert Drive) – Intersection improvements and bridge reconstruction and widening

**Tollway Projects**

- IL 390 Extension (US 20/Lake Street to County Farm Road) – new ramps, new alignment, intersection improvement

- I-88 WB ramp at Fairfield or Technology Drive

- I-294 at 22nd Street and 31st Street – new interchanges

**Municipal and Other Projects**

- Bilter Road (DuPage Blvd to E of Farnsworth Ave) – add lanes

- Book Road (75th Street to 87th Street) – add lanes

- Commons Drive Extension and Grade Separation (Liberty Street to North Aurora Road) – new alignment and bridge at BNSF Railroad

- Liberty Street (Commerce Street to Eola Road) – add lanes, intersection improvements, railroad grade crossing

- Powis Road (Smith Road to IL 64/North Avenue) – widen, re-align, intersection improvements, railroad crossing improvements

- York Road (Church Street to IL 56/Butterfield Road) – channelize and intersection improvements
DuPage County is supportive of public transit throughout the region including rail, bus, and private networks, and encourages the development of supportive car and bike share systems that make transit more accessible and efficient. The DuPage Transit Plan, updated in 2011, describes many goals for services in the County. Since that plan, some transit agency priorities have evolved in
response to financial constraints and organizational performance objectives. A new initiative by DuPage County under the auspices of the DuPage Mobility Plan will update the Transit Plan and expand horizons by identifying opportunities for public and private partnerships to increase mobility and transit effectiveness to people throughout the region.

Discussions with transit agencies have revealed the following projects and initiatives as potential future needs:

**PACE**

- Cermak Road/22nd Street Pulse Route – Arterial Bus Rapid Transit
- IL 38/Roosevelt Road Pulse Route – Arterial Bus Rapid Transit
- I-294 Express Bus Service and Passenger Facilities
- IL 64/North Avenue Pulse Route – Arterial Bus Rapid Transit (Future)
- I-290/Eisenhower Expressway – Express Bus Service (Future)

In 2021, Pace produced a new Strategic Plan known as Driving Innovation. This plan is reshaping how Pace views its service. It is de-emphasizing its role as merely a suburban bus operator and strategizing on ways to transition to a regional mobility coordinating agency. Pace will continue many of its services including On Demand, Paratransit, Dial-A-Ride, RideShare, Vanpool, Pulse, and Express Bus. The agency is looking to leverage its assets to provide the best benefit to travelers and to use its modernized technical capacity to enhance connections for travelers.

**METRA**

Metra’s Capital Plan includes a number of DuPage County relevant projects including the following:

- Elmhurst Train station renovation
- Westmont Station Platform improvements

In addition, sections of Union Pacific Railroad track in Kane County and Cook County will be improved to allow three tracks. This improvement will benefit DuPage County by allowing an increased number of Metra commuter trains as well as more efficient express services.

Metra is committed to station updates, repairs and initiatives that encourage the station to be a focal point of the community. Innovative practices and uses are emerging that support that view, and station area planning is an active part of Metra’s vision to make its stations accessible to all forms of transportation.

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Much of Metra’s budget can be described as being allocated to state of good repair projects including rolling stock, maintenance equipment, track maintenance, bridge repair, and parking and station repairs.

**RTA**

The RTA produced its Invest in Transit Strategic Plan in 2018. This document provides a comprehensive examination of the needs of the regional transit system. It too documents a system that is in urgent need of repair. There is a significant backlog in needed repairs throughout the system and there is great concern over sufficient funding to be able to conduct all of the necessary asset repairs while also expanding the systems to meet the needs of transit dependent customers throughout the region.

Much of the RTA focus is on making difficult repairs and upgrades to systems that create greater efficiencies in CTA, Metra, AMTRAK, and freight rail movement. A number of key congestion points in the region are undergoing expensive separation projects that will reduce competition for the same rail segments and will thereby reduce rail service and surface street delays.

Altogether, the 10-year expected cost of CTA, Metra, and Pace priority projects is over $30 billion. With so much of the focus of these programs on existing problems in Cook County and City of Chicago, it is unreasonable to believe that DuPage County and the remainder of the collar counties will see significant expansion in transit services over the life of this Plan. It is therefore incumbent upon the counties and their communities to work collaboratively to identify future mobility needs and cooperate on initiatives that make the existing transit systems more accessible.

### 6.2 Policies and Programs

The recommended capital projects above are not simply highway or signal projects. Many of the projects include elements that advance multiple policies and programs. It is the department’s intention to uphold and comply with federal and state standards, best practices, and fundamentally sound engineering design in all parts of the DuDOT program.

DuDOT programs and policies play an important role in:

- Guiding project programming decisions (i.e., which projects and programs require immediate and longer-term attention)
- Aiding DuDOT with financial planning decisions
- Guiding everyday management decisions
- Directing key project implementation strategies and activities

Key policies and best practices that contribute to specific DuDOT projects and activities come from a wide variety of resources include but are not limited to:

- The DuPage County Strategic Plan

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- The DuPage County Healthy Roads Initiative
- Illinois Department of Transportation Design Manual
- DuPage Americans with Disabilities Act Transition Plan
- Manual of Uniform Traffic Control Devices
- DuPage Transportation Coordination Initiative
- DuPage Transit Plan
- Permit and Impact Fee Ordinances
- DuPage Stormwater Ordinance

These documents are updated on variable schedules and the County reviews and responds according to the type of policy or recommended practice.

This section provides recommendations for refining existing programs and policies and adopting additional strategies to support the goals and objectives of the LRTP. The recommendations are presented under the following five sub-sections, each section covering one of the goals of the LRTP:

1. Improve safety
2. Provide mobility choice
3. Promote access to opportunity and increase economic vitality
4. Enhance operational and maintenance efficiency
5. Foster sustainability and resilience

Each section also includes a summary of current DuDOT initiatives that support the objectives under each goal.

Many of the policy and program recommendations were developed by DuDOT staff in a workshop that was conducted on August 16, 2019. The workshop identified major cross-cutting issues that recognize the County highway departments’ increased scope of responsibilities to other modes of travel, economic development, environmental stewardship, equity, technology, and other considerations.

Specific programs, including those for safety, intelligent transportation systems (ITS), trails, and mobility are continually refined and may have already undergone some changes during the development of the LRTP.
**Improve Safety**

As outlined in Chapter 3, the key objectives under this goal are to ensure state of good repair, reduce the number of roadway incidents, incorporate safety considerations into all plans and design elements, and prioritize projects that maximize safety benefits.

Safety is always the highest priority for DuPage County. A key objective to achieving a safe system is maintaining a state of good repair. The DOT maintains a traffic crash database that it uses to assess causes of crashes and potential engineering solutions. This database has been instrumental in the County’s effort to procure safety funding. Many life-saving safety projects have been delivered in the last 20 years under the County capital and capital maintenance programs and the County is committed to continuing this primary function.

Some of the more significant existing programs relating to safety and state of good repair include the pavement management program, ADA Transition Plan, and routine electrical maintenance contracts. These programs assure the public that DuDOT will be a responsible caretaker and will deliver timely repairs to protect all system users. The pavement management and electrical maintenance programs are located under the Capital Maintenance and Contractual portion of the program and presently represent almost $12 million of the annual budget. Pavement maintenance assures that the County will maintain a higher standard of pavement for safe travel. DuDOT intends to continue this program and attempt to achieve a 15–17-year surface replacement goal. This program will complement the Reconstruction projects listed under the capital program.

The electrical maintenance contract is a program that is renewed biennially and supports County staff with on-call services for repair of signal and communication equipment. Damages sustained due to storms, traffic collisions, or normal wear and tear are handled through this contract and are separate from the capital signal replacement projects.

Additionally of highest priority, and featured prominently among the proposed capital projects, is the County’s bridge repair program. DuDOT policy is to perform regular inspections of bridges under County jurisdiction and to increase that frequency as the bridge ages. The DOT allocates resources for repair throughout the lifecycle of the bridge and ultimately programs bridge replacement based on condition.

Another initiative that began in 2020 is the DuPage Local Road Safety Plan (LRSP). This plan is under development in cooperation with FHWA and IDOT. It is intended to be a plan that is amended and updated regularly in hopes of directing efforts and resources to reducing crashes across the county. The mission of the plan is to reduce crashes through engineering, education, enforcement, and collaborative engagement with state and local partners. Key features of the plan will include policies and best practices related to safety for vulnerable populations (pedestrians and bicyclists), aging population safety, intersection safety, and speeding/aggressive driving.

Some of the possible outcomes of the LRSP could include:

- Adoption of safety audit and screening processes to identify projects that merit short-term programming,
- Cost collaboration with peer agencies
Education campaigns directed at specific corridors or crash causes

Directed enforcement or mitigation activities in corridors or at intersections

The ADA Transition Plan is ultimately a safety plan. The Plan’s goals and practices, which focus on pedestrian safety, remediation of out-of-date facilities, and the improvement of non-motorized mobility along the highway network, include:

- Providing obstruction-free sidewalks and easily traversable curb ramps
- Improving pedestrian access to push buttons
- Improving roadway pedestrian crossings
- Installation of audible pedestrian signals when an intersection improvement is completed
- Improving pedestrian crossings of railroads

The Plan also incorporates processes for notifying the County of unsafe conditions and for the County to remediate and respond to complaints. DuDOT views this process as important to the health and safety of its vulnerable users. For more information on the ADA program, please visit the DuPage County DOT website.

A critical element in state of good repair is knowing where assets are, when they were installed, the design life of the asset and when an asset was repaired. The DuDOT asset management program includes many databases such as signs, pavement, sidewalk, and signals. As noted by workshop attendees, one centralized system would allow for a more complete knowledge base, more efficient tracking, and improved coordination of repairs.

The DOT currently maintains a Citizen Reporter mobile application which allows system users to report any problem they encounter on any part of the DuDOT system. The application alerts the maintenance staff to the issue immediately and tracks how and when staff attend to the issue. DuDOT will continue to offer citizens this access and will enhance the program as needed. For more information or to report issues, please get the application or visit https://gis.dupageco.org/CitizenReporter.

Figure 6-4. Citizen Reporter Mobile Application

6 www.dupageco.org/dot/ada
Provide Mobility Choice

The key objectives under this goal include enhancing connectivity to and from bus, rail, and multi-use paths, ensuring the County’s system of paths, trails, and sidewalks complies with accessibility standards, and leveraging technology to encourage increased use of transit.

Existing programs and policies that support enhanced mobility choice include:

- **Trail System Coordination and Expansion** – DuPage County maintains the Illinois Prairie Path, Great Western Trail, and portions of the Southern DuPage Regional Trail. DuPage will work with the public and stakeholder organizations to improve and add path and trail where practicable and where projects make sense from the connectivity and maintenance standpoint.

- **ADA Transition Plan** – through this plan the County commits to making DuPage County’s transportation network fully compliant with the Americans with Disabilities Act (ADA). As highlighted with examples in the previous section on safety, achieving this plan will help to improve mobility choice and provide greater access to economic opportunity for all users.

- **Healthy Roads Initiative (a.k.a. Complete Streets Policy)** – this initiative directs DuDOT to ensure that transportation projects create safe facilities for motorized and non-motorized travelers. The policy recommends sidewalks and multi-use paths are implemented with roadway projects whenever safe, feasible, and cost-effective. In 2008, the County Board passed an amendment to the Healthy Roads Initiative that directs DuDOT to consider on-road accommodations for bicyclists in locations where off-road facilities are not feasible.

- **Transit Infrastructure** – DuPage County, in accord with the Healthy Roads Initiative, will continue to pursue improvements within its rights of way that encourage use of public transit. Improvements include bus shelters, pads, turnouts, and other physical improvements pertinent to transit.

- **Transit Service** – DuDOT does not currently operate any services within the County, leaving those operations to Pace Suburban Bus, Metra, and private operators. There is no plan in the foreseeable future for the DOT to operate transit. However, the County is committed to policies and programs that support regional efforts to improve mobility such as:
  - Last mile initiatives
  - Mobility services such as Ride DuPage
  - Transit traffic signal pre-emption
  - Local and regional mobility management

Ride DuPage is a transportation program that provides bus or taxi services for people who need travel assistance due to physical or cognitive limitations. The program is funded by a partnership...
between DuPage County, Pace, and local townships, cities, and villages. Ride DuPage provides subsidized transportation 24/7 for users within its boundaries.

Workshop attendees recommended that that DuDOT adopt several additional mobility related policies and programs:

- **Comprehensive Trails Plan.** This Plan would set the standard for wayfinding and use of paths to provide valuable local and regional transportation connectivity. Since this workshop, the County has initiated a DuPage County Trails Plan. In addition to the requested standard for wayfinding, the plan will include a comprehensive review of policies, practices, and design of trail facilities. It will also encourage partnerships with local agencies on signage, maintenance, and use of public space.

- **Development of Countywide Mobility Plan.** This Plan would act as a framework for building consensus among local government, private companies, public transit, and private mobility providers regarding tools that can be used to improve mobility for all people. The County and its partners must establish principles for making employment, shopping, medical, and food services more accessible for people of all abilities.

Examples of active mobility initiatives that align with the mobility objectives and policies recommended for this plan include:

- Coordinate with IDOT and Pace Suburban Bus to create rapid transit corridors
- Develop transportation-land use design standards to foster transit and pedestrian access
- Form and promote a last mile advocacy group or support a mobility coordinator to coordinate with Choose DuPage, local economic development agencies, and neighboring jurisdictions like Cook County
- Cooperative investment with peer agencies for signal upgrades, sidewalks, and operation of traffic systems on major arterials that connect Cook and DuPage, such as IL 64/North Avenue and 22nd Street/Cermak Road/IL 56 Butterfield Road
- Partner with state and Tollway to improve non-motorized transportation network solutions crossing interstate highways and ramps
- Investigate development of a multi-modal transportation hub on the County’s Wheaton campus, including car- and bike-share services
- Build partnerships or sponsorships with agencies that provide regional bike sharing, car sharing, and sustainable models of shared mobility. DuDOT could convene stakeholders and facilitate discussions, potentially in coordination with stakeholders such as Choose DuPage, workNet DuPage, local businesses, DuPage County Community Services, and transit service providers
- Share project costs and maintenance responsibilities between the County, municipalities, and other funding partners for key trail projects, starting with the East Branch trail
Promote Access to Opportunity and Increase Economic Vitality

The LRTP sets a goal to leverage the transportation system to promote economic development. Specific objectives include the promotion of first- and last-mile connections, both at the local and countywide scales, increasing the efficiency of freight movements, and improved alignment between land use and transit access through collaborative planning efforts.

Currently active strategies that promote this goal include:

- Ongoing context-sensitive approaches to improve key intersections for freight movement throughout the county

- Support for the regional effort to coordinate oversized/overweight truck permitting across jurisdictions
  - Key stakeholders include IDOT, neighboring county DOTs, municipalities, and townships
  - Greater efficiencies in the permitting process lower transportation costs for products and create an administratively efficient and equitable system

- Support for alternative modes of transportation, as described in the Provide Mobility Choice theme

- The County's ADA Transition Plan and Mobility Plan both direct future capital towards assets that improve accessibility for all

Other policies recommended to support the LRTP’s economic development goals include the following:

- Adopt a policy that further promotes equitable access to quality jobs by addressing transit deserts and employer last-mile access
  - Consistent with its Strategic Plan, the County will be supportive of, and promote access to, quality jobs, and will advocate for the needs of diverse and disadvantaged populations to obtain accessible employment

- Use Local Technical Assistance grants from CMAP to initiate or participate in corridor planning efforts focused on modernizing the interface between land use and transit systems

- Establish policies that promote improvements to the transportation system that accommodate freight activity on key corridors
  - Steps include identification of key locations where improvements would most impact DuPage County businesses; adopt new freight access requirements and pavement design standards that align with these findings; and consideration of more structural pavement designs in corridors with heavy truck traffic

- Review and adjust long-term impact fee and highway permit structure to determine fair and equitable fees relative to the impact of new developments on county assets
The workshop also identified a number of new planning efforts regarding economic opportunity. One recommended plan would assess freight rail activity to understand rail traffic patterns in DuPage County and the impacts on local communities. This study should include grade crossing safety upgrades, potential highway/rail grade separations, commercial truck crash incidence and causality, and pavement maintenance models for industrial corridors.

Enhance Operational and Maintenance Efficiency

Key objectives under this goal include reducing congestion, closer coordination with partner agencies and jurisdictions, increased use of technology, and further use of shared services to make best use of limited resources.

DuDOT is always seeking opportunities to use new technologies to improve system efficiencies and refine its approach to pavement maintenance, materials, testing, and replacement. Existing programs and policies that support its efficient operations and maintenance goal include:

- **Coordinated Signal Systems Plan** – As first set out under the Transportation Coordination Initiative, the County and municipal partners are committed to implementing extended coordinated signal systems

  - This allows better and more frequent adjustments to signal coordination patterns for the efficient flow of vehicles

  - The County will continue to implement its Central Signal System which includes extending communications to most of the County’s 324 signals for the purposes of virtual signal management

- **Under this plan, DuDOT will upgrade approximately 200 signals throughout the county**

  - This effort complements the deployment of the DuPage County Central Signal System by replacing outdated signal control equipment

  - Taken together, these initiatives expand the County’s ability to monitor traffic and implement new traffic control patterns related to events, weather, or emergencies

- **Pavement Management Program** (also noted under Safety Initiatives) – This program provides DuDOT engineering and maintenance groups with critical information on highway pavement sections

  - This information allows the two groups responsible for maintaining and replacing pavement to make efficient logistical decisions on annual or multi-year repair
Southwest Campus Master Plan – this plan is currently in development

- The Plan recommends replacement of outdated and inefficient buildings with structures that support efficient operations, material handling, and modern environmental systems
- The Plan also includes replacement of outmoded fueling systems
- The Plan is supported by a Concept of Operations Plan (COOP) with emphasis on sustainable operations in the event of emergencies or environmental disasters

Workshop attendees reiterated the importance of policies that promote interagency coordination. The workshop identified three key strategies in this area:

- Coordination of project development, design, and management with IDOT, the Tollway, and municipalities
- Continue and expand, where practicable, the practice of cooperative purchasing contracts
  - This has been a cost-saving effort in the acquisition of materials and equipment
  - Possible next steps include the development of a cooperative electrical maintenance contract or bridge inspection and maintenance contracts
- Identify opportunities to improve efficiency and continuity of the transportation system through jurisdictional transfers
  - Key facility transfers may be pursued where the following conditions would be met:
    - The transfer is agreed to by all parties in the transfer
    - The transfer benefits both the County and the participating agency in terms of system continuity
    - The transfer creates operational and maintenance efficiencies

The workshop also identified several potential new programs or initiatives:

- Modernize data collection efforts and technology, including use of big data and video data for traffic count and traffic behavior purposes
- A secure regional document management system for efficient project delivery.
  - This technology would need to be coordinated with IDOT, the Tollway, and larger municipalities in the region
- Participation in a regional, co-located, ITS operations center, engaging peer agencies to improve the continuity of operations and resilient infrastructure
- Adopt a countywide maintenance and operations plan, with scope similar to the Southwest Campus Master Plan, which would include an assessment of parts and fleet garage facilities to
meet future demands, as well as a long-term strategy for equipment replacement and purchasing needs

**Foster Sustainability and Resilience**

The LRTP sets a goal of avoiding environmental impacts and enhancing the resilience of the transportation system through incorporating context sensitive design and planning for increased disruption of the transportation system due to extreme weather incidents.

Currently active efforts that support this goal area include:

- Incorporation of context-sensitive environmental solutions into project development
- Continuous monitoring and maintenance of wetlands and detention structures adjacent to county highways
- Snow and ice removal – Reduction of chlorides and ground water contaminants through the use of natural chemicals
- The Citizen Reporter and DuPage Trails applications
  - The county will continue to expand the tools and data integration of those efforts
- Collaboration with DuPage Public Works and Stormwater departments on permitting, mitigation, and water quality

These activities will continue into the future, but efforts should expand with forward-looking infrastructure and natural habitat strategies:

- Expand coordination with Stormwater and Public Works on projects of mutual benefit such as cooperative efforts to evaluate in-system stormwater storage and plans for future compensatory storage systems
- Outfit all traffic signal locations and systems with battery backup for continuity of operations during weather events
- Develop policies and practices that protect natural habitats along trails. Strategies include management of invasive species, expanding vegetation for pollinators and establishing a tree nursery for replacement of trees throughout the trail system
- Reduce lighting and signal energy consumption and power some of these systems using alternative energy applications (e.g., solar and wind energy solutions)
- Evaluate opportunities for protective right-of-way acquisition on corridors
- Encourage and permit natural and native plantings in highway medians, rights of way, and adjacent to trail system

The County should also be at the forefront of emissions reduction efforts in the national goal toward zero net emissions by 2050. Over 27 percent of greenhouse gas (GHG) emissions originate from the transportation sector of the United States, including personal, commercial, commercial
freight, rail, and aviation modes. While the pathway to net zero emissions is difficult, there are a variety of short, medium, and long-term goals that the County will entertain and support.

- Include fuel consumption and emissions metrics into project design and decision-making
  - Identify opportunities to reduce fuel consumption and emissions through operational and design strategies that contribute to more efficient traffic flow
- Participate in air quality data collection and analysis and monitor DuPage County GHG
  - Expand monitoring stations for NO2, CO, Ozone and Particulate Matter in DuPage County
- Encourage the development of a regional electric re-charging infrastructure and expand and modernize County charging infrastructure for fleet and employees
- Convert DuDOT fleet to electric or hybrid-electric vehicles where possible and set targets for vehicle replacement
- Transportation demand management:
  - Encourage strategic densification of corridors through re-zoning
  - Support transit-oriented development and supportive non-motorized systems
  - Design, support and collaborate in last mile transportation programs to encourage less use of personal automobiles
  - Reduce parking requirements at employment and retail sites through zoning ordinance modifications
  - Convert unused parking or surplus parking into naturally vegetated areas to promote carbon sequestration and reduce urban heat islands
Key Takeaways

- DuDOT estimates that $1.61 billion in funding will be available between 2021 and 2040 (Chapter 5)

- Fifty-one percent of the projected revenue is allocated to Capital Maintenance and Operations which includes the annual pavement maintenance and electrical (signal) maintenance contracts and the daily personnel, fleet, and materials costs

- Forty-nine percent, or almost $800 million of the projected revenues, the “constrained” capital, is allocated to capital projects

- Twenty-four state of good repair projects totaling more than $285 million and $383 million in Capital Maintenance projects represent over 41 percent of the projected 20-year Plan budget

- Twenty-five system enhancement projects, including intersection and signal system performance enhancements, are included in the Plan at $174 million

- Mobility projects account for about 9 percent of the allocated revenues and include significant bike path projects such as the East Branch DuPage River Trail and the Stearns Road bike path

- System expansion projects account for over $217 million, or a little more than a quarter of all capital program allocations
  - These projects include 75th Street, Eola Road, and Army Trail Road capacity projects

- The County has established forward-looking policies and processes that allow DuDOT to identify opportunities and strategically plan to address multiple needs within projects

- DuDOT is allocating significant resources to complementary systems like non-motorized access, greater use of technology to allow County staff to make inexpensive adjustments to traffic systems to improve performance, better drainage and environmental systems and cooperative purchasing arrangements to help improve safety and efficiency throughout the County

- The County must take a broader and more involved role in setting policies that reduce environmental and economic effects of transportation