



# Infrastructure & Planning Services

## Service Delivery Promise

The people of Essex County deserve first priority as we raise and educate families in an area that offers good quality jobs, education, recreation, culture and opportunity all while considering each other and the environment around us.

Infrastructure & Planning Services (IPS) will strive toward development, and infrastructure that earns the public trust.

Infrastructure & Planning Services has the responsibility to build and manage buildings and infrastructure, and to support and encourage land development that is sustainable, safe and responsible. Our work is part of everyday life and we strive to enhance the quality of life for the people of the County.

Service delivery is offered through several initiatives: policy, planning, construction, operations and maintenance, traffic management, permits and facility strategy and implementation programs. With a continued focus on multi-modal mobility, asset management, service delivery, and our people and culture, the Infrastructure & Planning Services department will continue to provide responsible planning, transportation, and facilities services.



### Level of Service Statement

The goal of our services is to execute to a level that maintains infrastructure in a state of good repair, considers the integration of sound planning, design and construction, the inclusion of multi-modal transportation facilities, delivers quality and timely service and adapts to changing cultures and challenges.

The Engineering and Roads divisions maintain approximately 1500 km of various classes of road, 84 bridges, 126 large drainage culverts, 42 traffic control systems, a single pedestrian crossover and over 400 km of bike lanes/trails/routes.

Facilities Management provides custodial, building maintenance, energy and construction services to County owned facilities. The division continues to invest in tools and technology to meet and improve our level of service with an increasing amount of work orders annually.

The Planning group provides planning advisory services to County Council on matters related to County-wide land use planning, economic development and strategic planning matters. Planning is responsible for preparing responses to provincial policy and program initiatives as well as acting as the Provincial approval authority in accordance with legislation for various planning applications. By ensuring the County's planning perspective is collaborative and regional, Planning works to support the planning and development of the entire County, including the local municipalities.

## 2022 Achievements and Challenges

### Infrastructure

The transportation system in Essex County is a complex network of arterial, collector and local roads, bikeways and trails. It links communities within the County of Essex and connects us to the City of Windsor / Michigan to the west, Chatham-Kent to the east, and Pelee Island to the south. Our road networks and associated facilities play an integral part of our Nation's supply chain.

Unspent amounts budgeted for roadway expansion projects will remain in reserve to provide funding as construction continues in 2023. Planning, design and goal alignment with local municipalities, and the region, is a priority for the department as we make recommendations to meet expectations and the system's capacity needs.

In 2022, IPS completed a full reconstruction of the South Branch Cedar Creek Bridge on County Road 23. Typically, our bridge projects involve rehabilitation work. The County had not completed a full replacement in more than 10 years. While there were a number of challenges to overcome along the way, the project was a success and within our projected budget. There are four bridge/culvert assets that were designed in 2022 and will carry forward to 2023 for construction. In terms of road work, the County rehabilitated over 40km of road network comprising CIREAM, asphalt overlay, and mill & pave operations.

The "Early Release Program", for paving and paved shoulder projects, resulted in favourable costs in the early tenders; however, higher than anticipated asphalt cement prices negatively impacted the final costs of our rehabilitation contracts.

In addition to the initiatives noted above, the Department is involved in numerous projects and undertakings with other agencies including the MTO, the City of Windsor, Chatham-Kent and our local municipalities.

A significant number of personnel changes occurred in 2022, including the retirement of: two members of our Teamsters group, the Manager of Design & Construction, and the Manager of Maintenance Operations.

Our Roads division was able to maintain the County road network to the Minimum Maintenance Standards for Municipal Highways through the winter control season while being short-staffed. It took a tremendous effort from all personnel with extra shifts and longer plow routes to serve the residents of the County of Essex. A total of 1,468 service requests from the CityWorks

system were addressed along with routine maintenance of pavement, shoulders and ditches.

### Facilities

Facility Management continued to expand service to other County owned or operated buildings creating over 1600 labour hours. Additional work orders were received from EMS, Roads depots, EWSWA, Sun Parlour Home and Library. IPS expects these numbers to rise for 2023 as we will undertake a preventative maintenance program with the Road depots starting with quarterly HVAC items, and bi-weekly general reviews. In addition to regular maintenance and custodial duties, more than 2300 hours from work orders within the Civic Centre building alone were addressed in 2022.

Hands free exterior entrance doors were installed at the north, east and west entrances of the Civic Centre. Resurfacing of the east entrance was also completed with fresh epoxy and additional grit for an improved anti-slip surface.

With the lifting of restrictions from the pandemic, our Facilities division gradually reopened the Civic Centre to the public. Improvements made during the pandemic, to the building environment, will be maintained such as upgrades to air exchangers from MERV 8 to MERV 13 filters. MERV (Minimum Efficiency Rating Value) is a standard for filter manufacturing. Facilities will also maintain a high level of "Touch Point" disinfection throughout the building.

Our Facilities division supported and moved staff in preparation for the main floor renovations. Human Resources and Finance were moved from the Administration Offices to the vacant, former, Health Unit suite. New power runs, network cabling, added door security and much of the furniture was moved.

### Planning

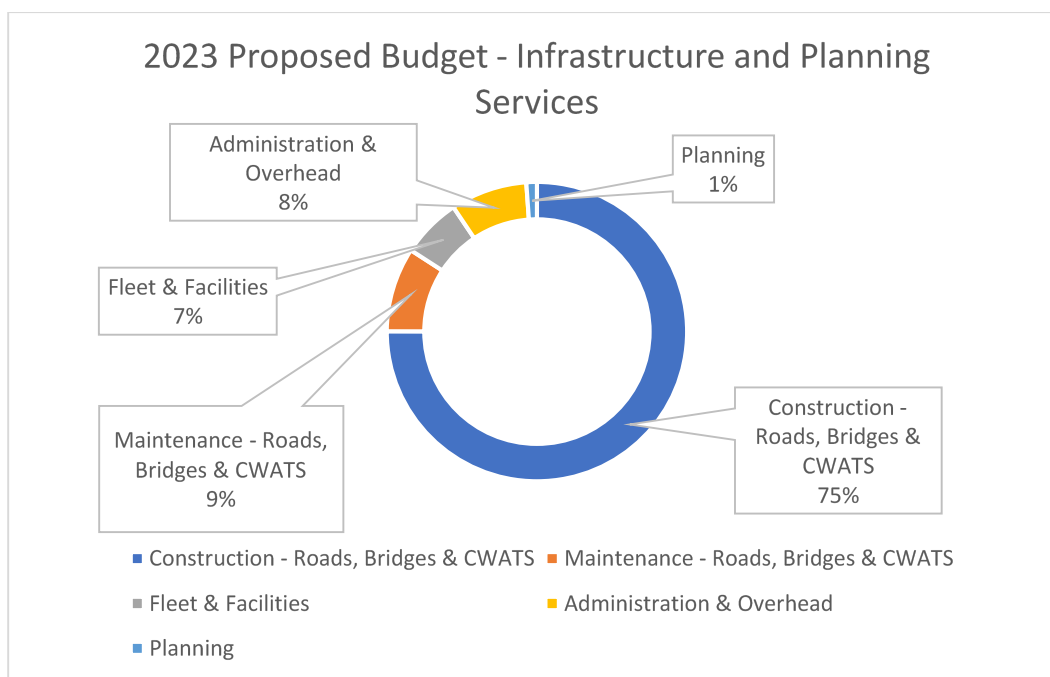
This past year represented a year of continued noteworthy growth and development activity across the County. The number of subdivisions and condominium approvals is at an all time high with residential development equally spread amongst all seven municipalities. Planning continues to work closely with the local municipalities on expediting development approvals as appropriate. Planning is presently advising developers and municipalities on process and requirements for over one hundred subdivision and condominium applications. The County is experiencing residential intensification, affordable housing projects and developments for the aged. Therefore, the Planning division continues to focus strategic planning efforts

on policies and methods for supporting affordable and equitable housing supply in the County.

Phase 1 of the County Official Plan review is complete, and informed by robust Council, stakeholder and community consultation that identified opportunities, challenges and issues facing the region. Consultations also helped focus what priorities the new County Official Plan review will need to address. Background report No. 1, summarizes the outcomes from the County Council and stakeholder workshops and recommends next steps in the OP Review process. Also, as part of the Phase 1 work, the County retained a consultant to provide new 30-year County and local municipal population, household and employment forecasts. This technical report is complete, providing ranges of low, medium and high growth scenarios. The final technical report will be provided to County Council in the new year to be received, and used during subsequent phases of the OP Review.

### Infrastructure & Planning Services

The graph below illustrates the key areas of spending in IPS for this past year (projected to December 31, 2022).



## Opportunities, Challenges and Risks for 2023

### Key Problems Affecting Infrastructure & Planning Services

- Projected population and job growth rates, and the corresponding pace of development;
- Shortages within the labour force;
- Potential changes from Bill 23, More Homes Built Faster Act;
- Increased operating and construction costs due to the economy;
- Transportation management is growing in terms of technology, software and applications;
- Service level expectations and the ability to keep up with day to day maintenance demands at appropriate service levels for the road network and facilities;
- The current and projected funding gap for renewals and replacements; and
- Emerging demands and ability to apply Corridor Management strategies while supporting local development.

### Infrastructure Objectives

The Infrastructure side of the division will continue or initiate various studies, designs and construction in support of the County's strategic plans. Included in our objectives are:

- CWATS Master Plan Update  
Started in 2021, this update to the CWATS Master Plan 2012 is now complete and will be presented to Council in 2023 for approval.
- Transportation Master Plan Update  
Terms of Reference are being finalized and drafted into a request for proposal document for consulting services to complete an update to the most recent plan adopted by Council in 2005.
- Road Rationalization  
An initiative of Council to rationalize a County road network, and realize a framework, and policy to establish, and maintain that network.
- County Road 19 from CR 22 to just south of Jamsyl Drive  
Construction to improve operation of the intersection by way of additional lanes and storm water infrastructure southerly to Jamsyl Drive.

- **County Road 46 Environmental Assessment**  
Continued development of industrial lands in the Town of Tecumseh and the City of Windsor, the introduction of the regional hospital and projected growth rates, support the need for improvements to County Road 46 from the City of Windsor limits, easterly to County Road 19.
- **County Rd 19 – Jamsyl Drive to 401 EA Addendum**  
The 2008 County Road 19 & County Road 22 Improvements EA provided recommendations for improvement to the roadway, but not the storm water management systems. This project will address the storm water management requirements to complete the construction.
- **County Road 42/43 Phase 1 Construction**  
Construction of underground works (storm sewers, sanitary sewers and watermain) to accommodate the widening of CR 42 from CR 19 to just west of CR43, and roundabouts at the intersections of CR42/43 and CR 19/42.

### Design & Construction

Typically, 40km of existing roadway are rehabilitated by way of Cold In-Place Recycling with Expanded Asphalt Mix (CIREAM), overlays, or milling & paving projects. Aging infrastructure and the cost of materials challenge our ability to balance service levels with affordability. Our Asset Management Plan (AMP) will speak to the requirement for a robust 25-year asset management plan.

The division continues to explore opportunities to design, operate and maintain accessible infrastructure. Meeting and exceeding these accessibility standards to provide mobility options for everyone, is an evolving practice.

The proposed budget includes the largest bridge rehabilitation program in recent history with an estimated budget of over \$5,000,000. The work includes a complete replacement of the bridge superstructure and improvements to the intersection alignment at the intersection of CR9 and CR10. Our road program continues in 2023 with over 35km of road rehabilitation work integrated with a collection of initiatives to improve delivery, efficiency and the overall end product, both from an engineering perspective and that of the businesses and residents.

More active transportation facilities, traffic signal control, and projects to address competing demands for the right-of-way are proposed.

Population growth, ageing infrastructure, rising congestion, and increasing concerns for road safety are putting pressure on existing land transportation networks, challenging road authorities.

As the number of users and trips in the network continue to grow and the desired levels of service increase, the demand for expansion and maintenance intensifies.

### Transportation Planning and Development

Requests for improvement in road safety for all road users, especially pedestrians, children in school zones, older adults and cyclists have increased and will require countermeasures that reduce aggressive and distracted driving. The division is a member of the Windsor Essex Road Safety Group and collaborates on policies and initiatives to make the entire road network safer.

Cost-effective safety interventions and investment will form a substantial component within new projects, maintenance and reconstruction works.

### Planning Objectives

County Planning will be issuing a Request for Proposal seeking a multi-disciplinary consulting firm to complete the Phase 2 and Phase 3 work of the Official Plan Update. During Phase 2 which will be initiated in January of 2023, additional technical and background studies will be prepared addressing key issues, challenges and opportunities identified during the Phase 1 work program. Phase 2 will also include the Land Needs Analysis which will assess the future urban land requirements County wide. The Technical Planning Advisory Committee will form an important partner in reviewing the County wide urban land needs during development. A Policy Options and Key Directions Report will also be prepared as one of the deliverables during Phase 2 and prior to the development of the new Official Plan policies. Local municipal councils, Indigenous communities, senior planning administrators and community stakeholders will be consulted during the Phase 2 work program and offered to provide feedback on the technical background reports prior to finalization.

The Planning division will continue to complete updates to the Community Improvement Plan policies in the County Official Plan for the purposes of allowing the County to participate in grant programs of lower-tier Community Improvement plans specific to attracting large scale industrial development. County Planning will be advancing an Official Plan Amendment that will allow for the County to provide matching municipal tax increment rebates for large scale industrial investments where local Community Improvement Plans are in place and provide for the same type of incentives. Due to the recent announcement regarding the Stellantis/LG Battery Plant, Essex County is poised to attract similar companies or large-scale feeder plants and enhance local synergies within the automotive sector. County

Planning will be retaining consulting services to advance this Official Plan Amendment in the short-term to ensure the County has the appropriate policies in place to support local and regional major economic development opportunities.

### Proposed 2023 Budget Plan

The 2023 Budget, net of recoveries, totals \$49,316,740 (an increase of \$4,971,640 (11.2%) over the 2022 Budget of \$44,345,100). A strong focus is placed on successful completion of expansionary roadwork projects, with only inflationary increases in most other areas.

The Departmental gross expenditures of \$92,939,300 are summarized as follows:

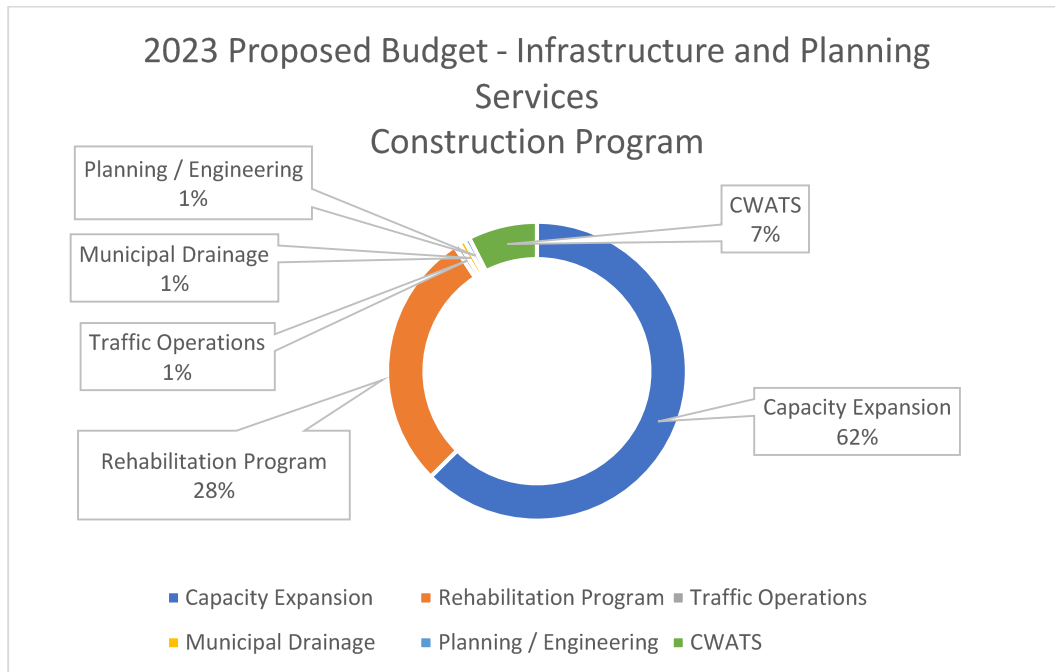
#### **Operating Expenditures:**

Maintenance – Roads, Bridges & CWATS	\$8,471,000
Administration & Facility Operations	\$7,669,400
Planning Services	\$1,054,000

#### **Capital Expenditures:**

Construction – Roads, Bridges & CWATS (reference Appendix C, D, E and F for budget details and maps)	\$69,736,900
Fleet & Facilities	\$ 6,008,000

The graph below illustrates the key areas of proposed 2023 Budget spending in Infrastructure and Planning Services:



### Roads Maintenance and Operations Program

This program consists of sub programs with a total expenditure of \$8,471,000. The following are the sub programs and corresponding expenditure levels:

Summer (roadside, pavement, drainage, bridge/culvert)	\$3,670,000
Winter (patrol, ploughing, salting)	\$2,750,000
Traffic/safety devices	\$1,011,000
Equipment Maintenance	\$1,040,000



Regular roadside maintenance activities include:

- Mowing/brushing, tree trimming, ditching, surface sweeping & grading of shoulders
- Pot hole patching and spray patching, which helps eliminate minor imperfections in the road surface to improve life cycle
- Guidepost installation and maintenance
- Centerline Marking/Painting
- Sign/Signal Maintenance



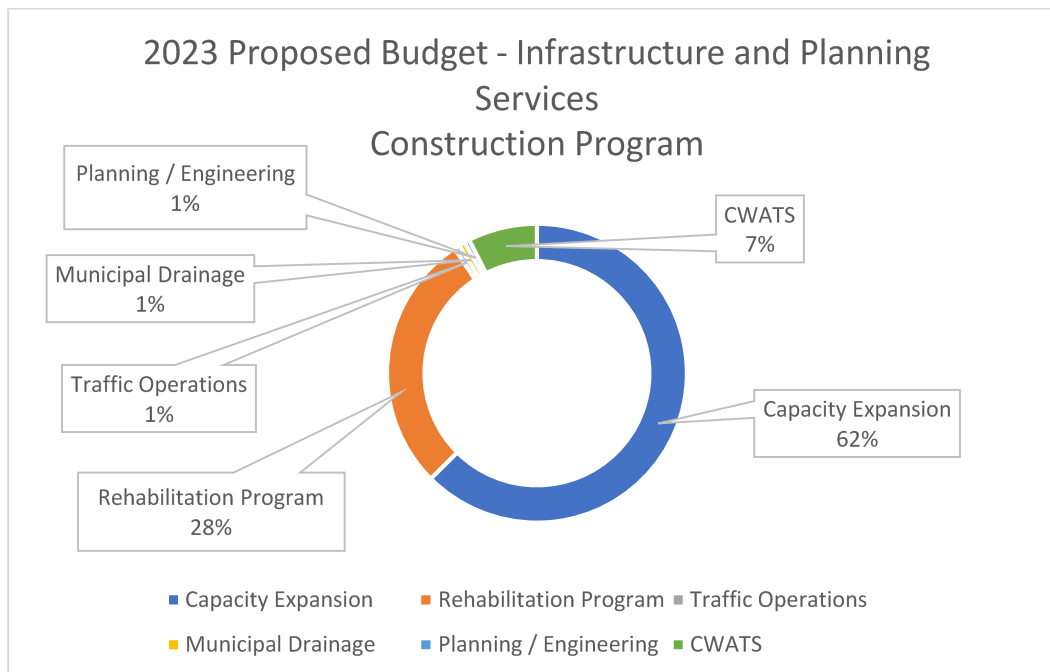
Winter maintenance standards establish levels of service for snow and ice control across the County, for various classes and priorities of roadways and paths, to ensure the safe and efficient movement of people, goods and services, throughout the community. These levels of service recognize the difference in traffic conditions and associated required risk management, on various classes of roadways and paths. The County utilizes the Minimum Maintenance Standards for Municipal Highways as a framework and benchmark for determining level of service standards.



### Construction Capital Program

The program consists of six sub programs with a total expenditure level of \$69,736,900. The following are the sub programs and corresponding expenditure levels:

Capacity Expansion	\$ 43,605,000
Rehabilitation	\$ 19,676,300
Traffic Operations	\$ 415,600
Municipal Drainage	\$ 450,000
Planning/Engineering	\$ 390,000
CWATS	\$ 5,200,000



The program includes environmental assessments, engineering studies, preliminary and detailed design assignments.

The 2023 Annual Capital Budget represents new capital projects and increases to previously approved capital projects that have been prioritized through the capital budget process based on various factors, including funding availability, readiness to proceed and the County's capacity to deliver. The Multi-Year Capital Budget represents the aggregate of all approved multi-year capital project budgets. A revised strategy may be required when the Transportation Master Plan update is complete. Work plans also include data collection and analysis to assist with road network management. Construction projects related to highway capacity expansion, rehabilitation, municipal drains, County Connecting Links and intersection improvements are supported through this program.

The Rehabilitation program was developed in consideration of the pavement condition survey and our Asset Management Plan. An early release program is presented to Council ahead of budget deliberations allowing for secure contracts and the best possible pricing.

A significant sub-program is the delivery of the annual CWATS program including construction projects, educational initiatives and monitoring activities.

Traffic Signal Operations provide guidance on various signal operations practices to promote consistent, safe, and efficient control of traffic signals within the County for all road users. Traffic Operations is responsible for:

- Operation of the County's traffic control systems
- Implementation of signal timing changes; and
- Signal coordination, modifications, construction timings and special event timings

Traffic Signals/Safety Devices includes road signs, guiderails and posts. Some initiatives aimed at creating efficiencies include the full conversion of street lights to LED on all road projects. The County has moved away from loop detectors and video control that tracked cars and trucks, to the GRIDSMART system that tracks all road users: pedestrians, cyclists, cars and trucks. This system provides comprehensive control and data acquisition improving operations and planning.

#### **Fleet & Facilities Capital**

This program consists of sub programs with a total expenditure of \$6,008,000. The following are the sub programs and corresponding expenditure levels:

Fleet/Equipment	\$1,758,600
Facility Renewal	\$4,250,000

The program was developed with consideration of key cost drivers to maintain current service levels, recommended service changes to achieve budget targets as well as recommended service priorities to meet outcomes.

Facilities Management provides custodial, security, building maintenance, energy and construction services to County facilities. The division continues to invest in tools and technology to improve and address an increasing amount of work orders annually.

Work orders will continue to increase as Facilities Management implements a comprehensive preventative maintenance program across its asset base. Opportunities for modernization and continuous improvement initiatives, including the integration of appropriate technology to enhance security, are identified for some facilities.

Included in the 2023 budget is the demolition and construction of much of the remaining office areas on the main floor of the Civic Centre, excluding the offices of the Solid Waste Authority. These offices have remained virtually unchanged for many years and can no longer appropriately support the staff and demands of the departments located there. The renovations will allow for more efficient use of the floor space, better utilization of

available storage and meeting space as well as address employee safety, security and access. It is intended to also improve the air handling and lighting systems to bring them up to modern standards that complement the heavy computer-based work performed by the staff. Work on the main floor has been divided into two phases. The first phase will see renovation of the County of Essex offices in the south half, former Engineering offices and General Government. A second phase will see renovation of the former Health Unit suite and the cafeteria.



The Roads division continues to direct the lifecycle management of the County's fleet including the acquisition, maintenance and disposal of vehicles and equipment while ensuring compliance with Provincial legislation. Fleet Services will continue to pursue ways to offset budget pressures through the development of preventative maintenance programs. As per the AMP, the estimates include:

- Replacement of five fleet (various pickup trucks and upgrade to a panel van)
- Replacement of one piece of equipment (mini excavator);
- Replacement of two tandem cab & chassis;
- Retrofit of two cab & chassis with plow and salter (2 cab & chassis purchased in 2022); and

- The purchase of a new grader

## Planning

Planning anticipates an increase in revenues associated with subdivision/condominium application fees due to the number of developments in the pre-consultation phase. The increase in revenue will offset operational costs and continue to fund the Official Plan Review Reserve.

The 2023 Budget proposes the continuation of the County Official Plan Review work with \$200,000 allocated to engage a consultant in the preparation of technical reports including a Regional Economic Development and Employment Land Strategy and Key Policy Options Report all funded from the Official Plan reserve.

The County has applied for grant funding under the Flood Hazard Identification and Mapping Program (FHIMP) to initiate updates to the region's coastal flood hazard mapping. The Planning Division has carried forward \$200,000 from previously approved budgets to be utilized for this undertaking along with matching grant funding.

The Planning division budget also includes \$100,000 toward implementation projects associated with the Regional Energy Plan which may be used to leverage funding support from upper levels of government and confirm stakeholder project partnerships. Regional Energy Plan work is proposed to be funded from the Rate Stabilization Reserve.

The Budget no longer maintains a provision for legal expenses in the event of appeals to the Local Planning Appeal Tribunal (LPAT) of decisions as the approval authority, or to protect the County's interest in appeals of decisions at the local level. The County Solicitor will provide this service.