**GOALS AND OBJECTIVES**

To improve safety and deliver the services budgeted by the Board of County Commissioners in the most efficient and economic manner possible.

 **ROAD AND BRIDGE DESIGN AND CONSTRUCTION**

 It is the responsibility of this office to maintain and repair the road and bridge transportation system in the County to meet the needs of the public.  The work area continues to grow with increased Local Bridge Future Needs (LBFN) funding, Transportation Trust Fund (TTF), State Aid, Federal Aid, etc.

* Maintain complete records of all road and bridge improvements.
* Develop evaluation criteria and schedules for the improvement of all roads and bridges.
* Prepare a 5-year capital improvement plan.
* Prepare surveys, designs, contract documents, bids, and inspections of projects.
* Prepare and administer all consultant contracts.
* Obtain all necessary appraisals and negotiate for the acquisition of rights-of-way and/or easements.
* Coordinate funding sources.
* Increase productivity by implementing the latest computer, hardware & software, computer aided design & drafting (CADD) and equipment technology.

TRAFFIC ENGINEERING AND HIGHWAY SAFETY

Traffic engineering and highway safety are increasingly high priorities.  This program seeks to improve the level of service and safety along our highway system by applying sound engineering techniques and principles including American Association of State Highway and Transportation Officials (AASHTO) and Manual of Uniform Traffic Control and Design (MUTCD) Standards.  The NJDOT no longer provides traffic engineering assistance for most County programs.  This work must now be done by the County.

Conduct Traffic Engineering Investigation to include:

        A.      No Passing Zone Surveys

        B.      Speed Limit Surveys

        C.      Geometric Safety Surveys

        D.      Intersection Surveys

        E.      Weight Restriction Evaluations

        F.      Traffic Signal Warrants

        G.      Channelization Warrants

        H.      Pavement Marking and Signing Requirements

        I.       Highway Capacity Analysis

Work with the municipalities on parking restrictions, pedestrian facilities, school‑related signing and improvements.

* Implement approved Signing and Striping Programs.
* Collect and maintain data files on traffic volumes, road conditions, and accident frequencies.
* Investigate accident causes and recommend remedial actions.
* Prepare interrogatories and engineering reports for accident cases and lawsuits, defend and testify for the County.
* Manage and maintain an adequate highway lighting system.
* Coordinate with the New Jersey Department of Transportation the design and installation of traffic signals and all necessary agreements.
* Prepare necessary surveys, designs, and contract documents for all traffic engineering improvements.
* Coordinate construction, contractors, and approvals to complete traffic improvements.
* Work with the Planning Department to develop necessary transportation plans.
* Revise transportation, development, driveway and road opening standards, as required.

**PROGRAM:  DEPARTMENT OF PUBLIC WORKS (ROAD AND BRIDGE DEPARTMENTS) COORDINATION AND TECHNICAL ASSISTANCE**

**DESCRIPTION**

The Assistant County Engineer is responsible for coordination and technical assistance to the Road and Bridge Departments.  The day-to-day operations of the Bridge Department are supervised by the Superintendent of Bridges working closely with the Assistant County Engineer.

**OBJECTIVES**

* Provide technical assistance, material requirements and specification functions.
* Provide survey, engineering, design, and contracting as needed.
* The Bridge Department maintains and reconstructs bridges and culverts with the assistance of the Engineering Department, which cannot be improved under other programs.

**PROGRAM:  BRIDGE INSPECTION PROGRAM, PRIORITY REPAIR AND REPLACEMENT SCHEDULE**

**DESCRIPTION**

All County bridges with a clear span in excess of 20 feet must be inspected every two years with special and interim inspections for load posted bridges, fracture critical bridges and scour critical bridges. All smaller bridges and culverts are inspected through an NJDOT program using State funds.  Warren County has inspection responsibilities for 140 structures (an additional 4 structures are co-owned with Morris County and an additional 8 structures are co-owned with Hunterdon County) with a 20 foot span and approximately 800 smaller minor bridges and culverts.

**OBJECTIVES**

* Provide bridge data and information, review bridge inspection conditions.
* Review bridge inspection reports as required.
* Inspect bridges and culverts as necessary due to storms, accidents, etc.
* Coordinate with NJDOT on inspection program requirements, priority repairs, scour inspections, bridge/culvert recordkeeping, training courses, etc.
* Schedule priority repairs, corrective actions, maintenance, repairs and replacements.

**PROGRAM:  DEVELOPMENT REVIEW AND ASSISTANCE**

**DESCRIPTION**

All development work must be properly reviewed and approved in compliance with County standards. Assistance is provided during all phases of the approval, permitting, and construction process to ensure orderly development and a progressive economic development program.

**OBJECTIVES**

* Provide assistance and data to the general public, surveyors, engineers, planners, and developers regarding road, bridge, and property records.
* Refer inquiries to the appropriate county, state, or federal agency.
* Review all subdivision and site plans to ensure compliance with current county development standards.
* Negotiate with developers appropriate on-site and off-site improvements which mitigate development impacts.
* Review and issue driveway and road opening permits.  Coordinate and manage fee and escrow accounts, inspections, testing and permit enforcement.
* Coordinate with the utility companies work affecting county roads and bridges.

**PROGRAM:  FUNDING AND GRANT ACQUISITION**

**DESCRIPTION**

It is essential that the County maximize the use of all available funding sources and actively seek additional funding sources.

**OBJECTIVES**

* Investigate and pursue appropriate federal and state funding sources.
* Prepare necessary grant applications.
* Assist consultants preparing applications for county and municipal grants.
* Administer the grant program when necessary, including coordinating audits, certifications, and invoicing.
* Coordinate and work closely with the New Jersey Department of Transportation Bureau of Local Aid for Transportation Grants.

Coordinate and work with the Planning Department implementing the subregional and other transportation planning grants.

  **PROGRAM:  DEPARTMENT OF PUBLIC WORKS (BUILDINGS AND GROUNDS) DESIGN AND CONSTRUCTION**

**DESCRIPTION**

The County Engineer's Office assists the Department of Public Works (Buildings and Grounds) in the design and construction of major capital programs.

* Maintain records of building improvement projects.
* Work with the Planning Department and Buildings and Grounds Department to develop short and long-range building improvement plans.
* Assist in the selection of responsible consultants to complete the necessary work.
* Administer major design and construction contracts when requested.

**PROGRAM:  ADMINISTRATION AND GENERAL ASSISTANCE**

The County Engineer's Office provides general assistance and guidance to County departments, municipalities, and the general public's referral needs.

* To provide engineering information and assistance to citizens, municipalities, contractors, developers, and county departments.
* Provide survey, engineering, design and materials contracting assistance to the Road Department and Buildings and Grounds Department.
* Provide assistance to the Mosquito Extermination Commission on drainage, stream clearing and de-snagging problems.
* Provide representation on and/or assistance to the Projects Committee, Safety Coalition, Construction Board of Appeals, Planning Board, Commissioner Board.
* Provide all necessary functions required of the Emergency Management Engineering Coordinator, Public Works Coordinator, and Damage Assessment Coordinator.
* Review and comment on open space applications/acquisitions as requested by the Department of Land Preservation.
* Review and comment on septic system applications as requested by the Department of Health