

**U.S. DEPARTMENT OF ENERGY
OFFICE OF CIVILIAN RADIOACTIVE WASTE MANAGEMENT**

**PRESENTATION TO
THE NUCLEAR WASTE TECHNICAL REVIEW BOARD**

**SUBJECT: ONGOING SOCIOECONOMIC
PROGRAM ACTIVITIES**

PRESENTER: JOHN CARLSON

**PRESENTER'S TITLE
AND ORGANIZATION: ECONOMIST/PRINCIPAL INVESTIGATOR
TECHNICAL & MANAGEMENT SUPPORT SERVICES
SCIENCE APPLICATIONS INTERNATIONAL CORPORATION
LAS VEGAS, NEVADA**

**PRESENTER'S
TELEPHONE NUMBER: (702) 794-7875**

OCTOBER 16, 1990

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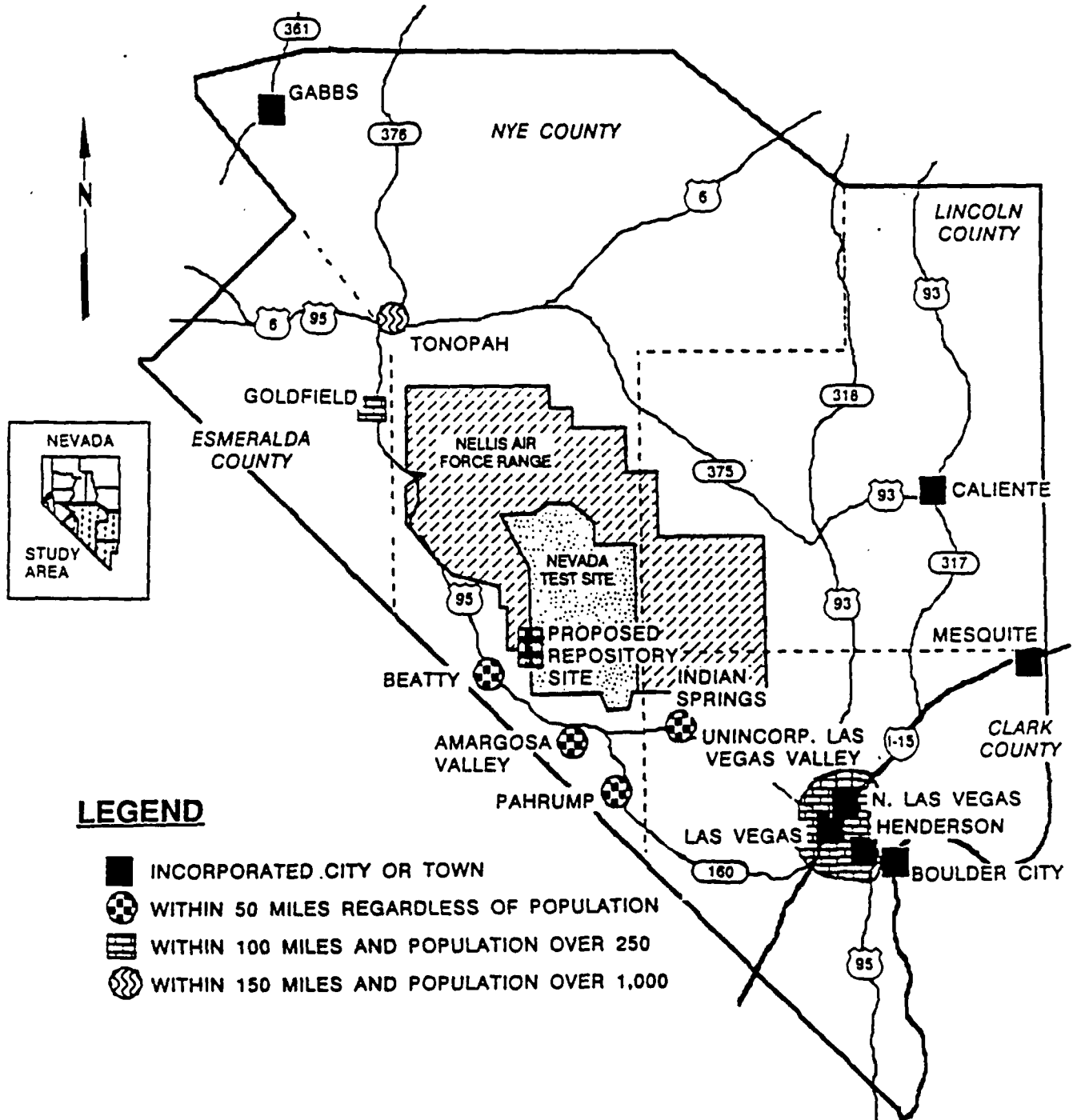
SOCIOECONOMIC ACTIVITIES

- **CHARACTERISTICS OF SOUTHERN NEVADA**
- **REQUIREMENTS OF YUCCA MOUNTAIN PROJECT**
- **PROCESS TO ADDRESS REQUIREMENTS**

SOCIOECONOMIC CHARACTERISTICS

- **GEOGRAPHY**
- **DEMOGRAPHICS**
- **ECONOMICS**

GEOGRAPHY OF SOUTHERN NEVADA



GEOGRAPHY

SOUTHERN NEVADA - CLARK, LINCOLN AND NYE COUNTIES

- **CLARK COUNTY - 8,084 SQUARE MILES**
 - **95% FEDERALLY OWNED
(MAJORITY IS BLM)**
 - **URBANIZED CENTRAL CITY
(CONCENTRATED POPULATION IN ~400 SQUARE MILES)**
 - **SUBSTANTIAL SOCIOECONOMIC DATA BASE**

- **NYE, LINCOLN COUNTIES 18,064 AND 10,650 SQUARE MILES, RESPECTIVELY**
 - **74% AND 94% FEDERALLY OWNED
(MAJORITY IS BLM, NAFR)**
 - **ONE INCORPORATED PLACE IN EACH COUNTY**
 - **LIMITED SOCIOECONOMIC DATA BASE**

DEMOGRAPHICS

- **CLARK COUNTY - 735,892 PEOPLE
(1990 PRELIMINARY COUNT)**
 - 62% OF STATE POPULATION
 - RAPIDLY GROWING AREA (6,000/MONTH EST.)
 - POPULATION DENSITY 91.0 PERSONS PER SQUARE MILE

- **NYE COUNTY - 17,722 PEOPLE
(1990 PRELIMINARY COUNT)**
 - HAS NEARLY DOUBLED IN POPULATION SINCE 1980
 - POPULATION DENSITY .98 PERSONS PER SQUARE MILE

- **LINCOLN COUNTY - 3,762 PEOPLE
(1990 PRELIMINARY COUNT)**
 - HAS INCREASED BY 30 PEOPLE SINCE 1980
 - POPULATION DENSITY .35 PERSONS PER SQUARE MILE

ECONOMICS

- **CLARK COUNTY - TOTAL EMPLOYMENT 340,000**
 - **UNIQUELY DIVERSIFIED ECONOMIC STRUCTURE**
 - **46% SERVICES (NATIONALLY 26%)**
 - **LESS THAN 3% MANUFACTURING (NATIONALLY 15%)**
(EFFECT ON TRADITIONAL E-D MODELS)

- **NYE COUNTY - TOTAL EMPLOYMENT 11,000**
 - **43% AT NEVADA TEST SITE**
 - * **OF WHICH ~75% LIVE IN CLARK COUNTY**
 - **REMAINDER PRIMARILY MINING, SERVICES AND GOVERNMENT**

- **LINCOLN COUNTY - TOTAL EMPLOYMENT 2,000**
 - **70% SERVICES AND RETAIL**
(EFFECT ON TRADITIONAL E-D MODELS)

SOCIOECONOMIC REQUIREMENTS

● MONITORING

- CHARACTERISTICS OF PROJECT WORK FORCE**
- COMMUNITY BASED ECONOMIC/DEMOGRAPHIC CHARACTERISTICS**
- SERVICES AND FACILITIES**
- GRID BASED ECONOMIC/DEMOGRAPHIC CHARACTERISTICS (RADIOLOGICAL MONITORING PROGRAM - RMP)**

● FORECASTING

- SHORT TERM - 3 TO 5 YEARS (SMP)**
- LONG TERM - LIFE OF PROJECT PLUS 100 YEARS (RMP)**

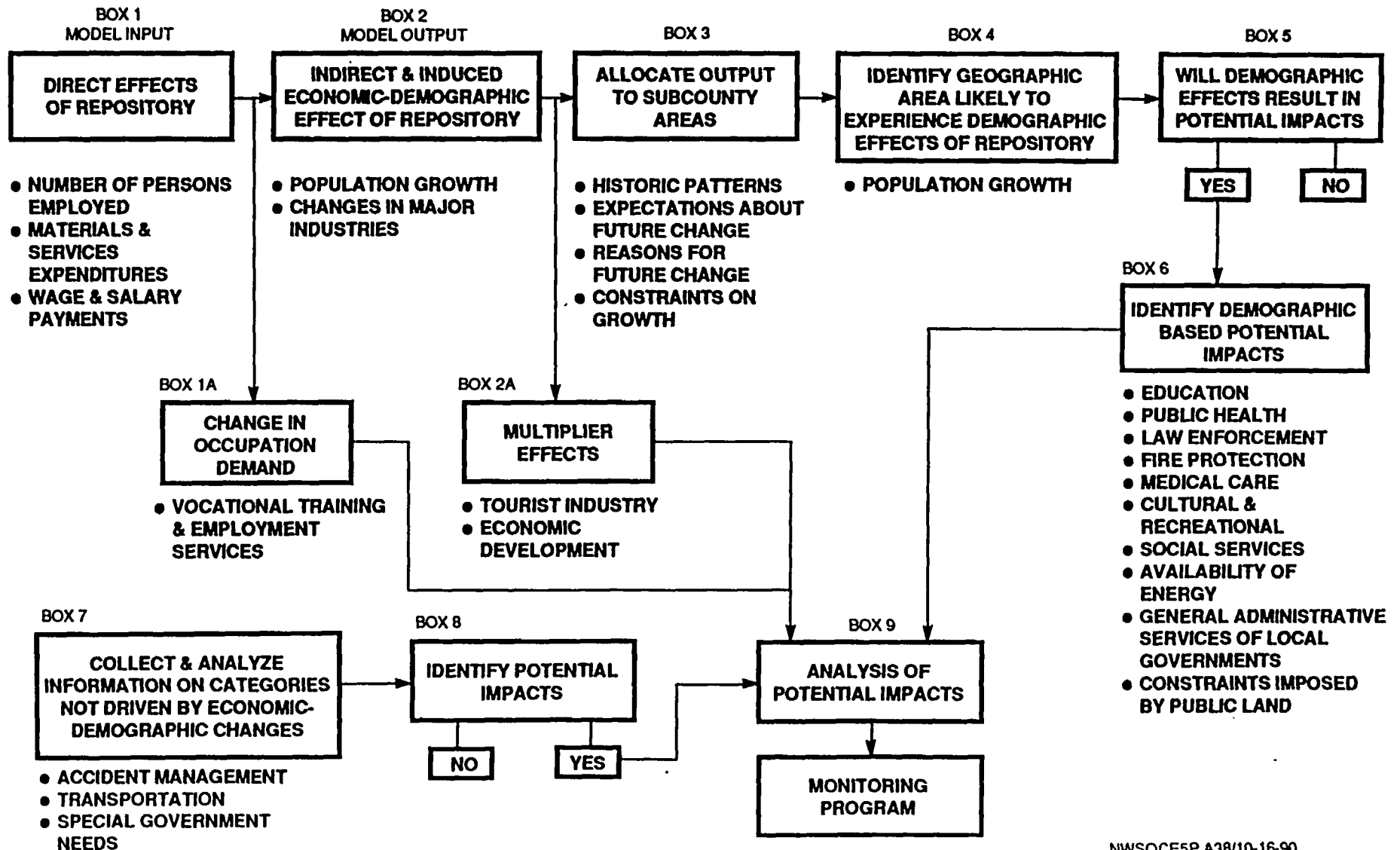
● IMPACT ASSESSMENT

- AVAILABLE SERVICE/FACILITY CAPACITY**
- EVALUATION OF POTENTIAL IMPACTS**

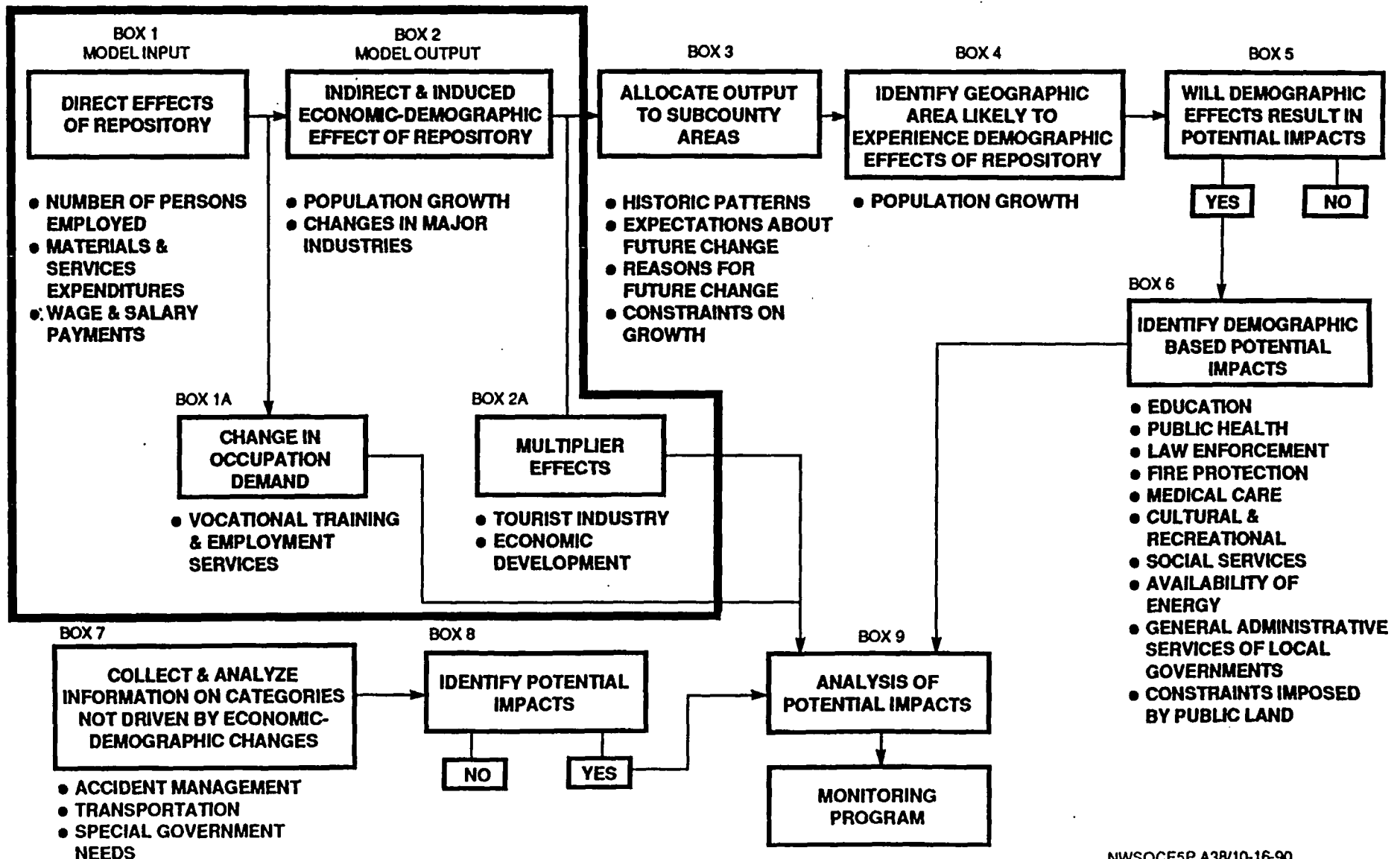
THE DIVERSITY OF THE PLANNING REGION AND THE COMPLEXITY OF THE FORECASTING REQUIREMENTS

- **TWO DISTINCTIVELY DIFFERENT GEOGRAPHIES**
- **TWO DISTINCTIVELY DIFFERENT DATA BASES**
- **THREE DISTINCTIVELY DIFFERENT FORECASTING
REQUIREMENTS**
- **INTERACTION WITH STATE AND LOCAL GOVERNMENTS**

GENERAL APPROACH FOR ADDRESSING POTENTIAL EFFECTS

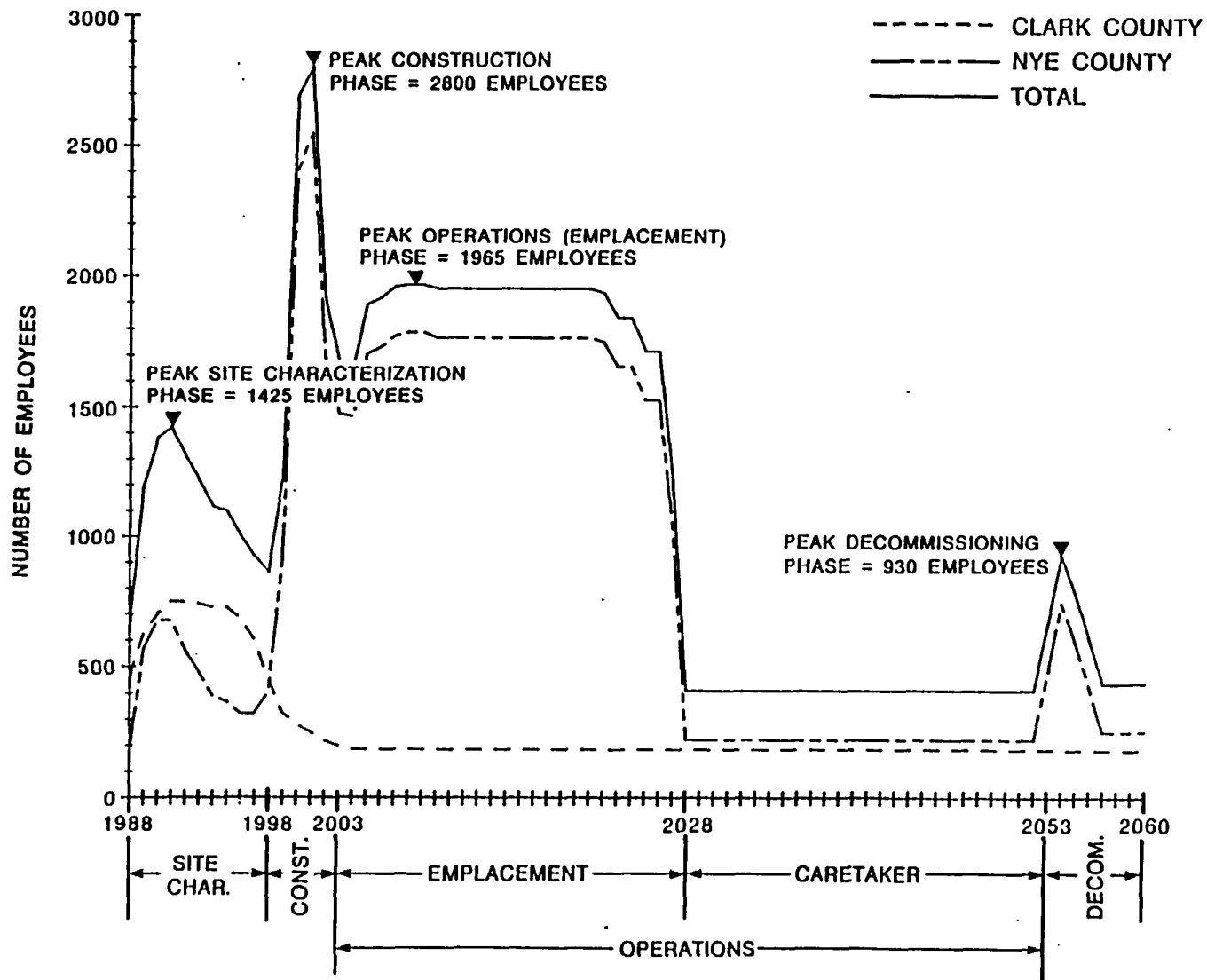


GENERAL APPROACH FOR ADDRESSING POTENTIAL EFFECTS



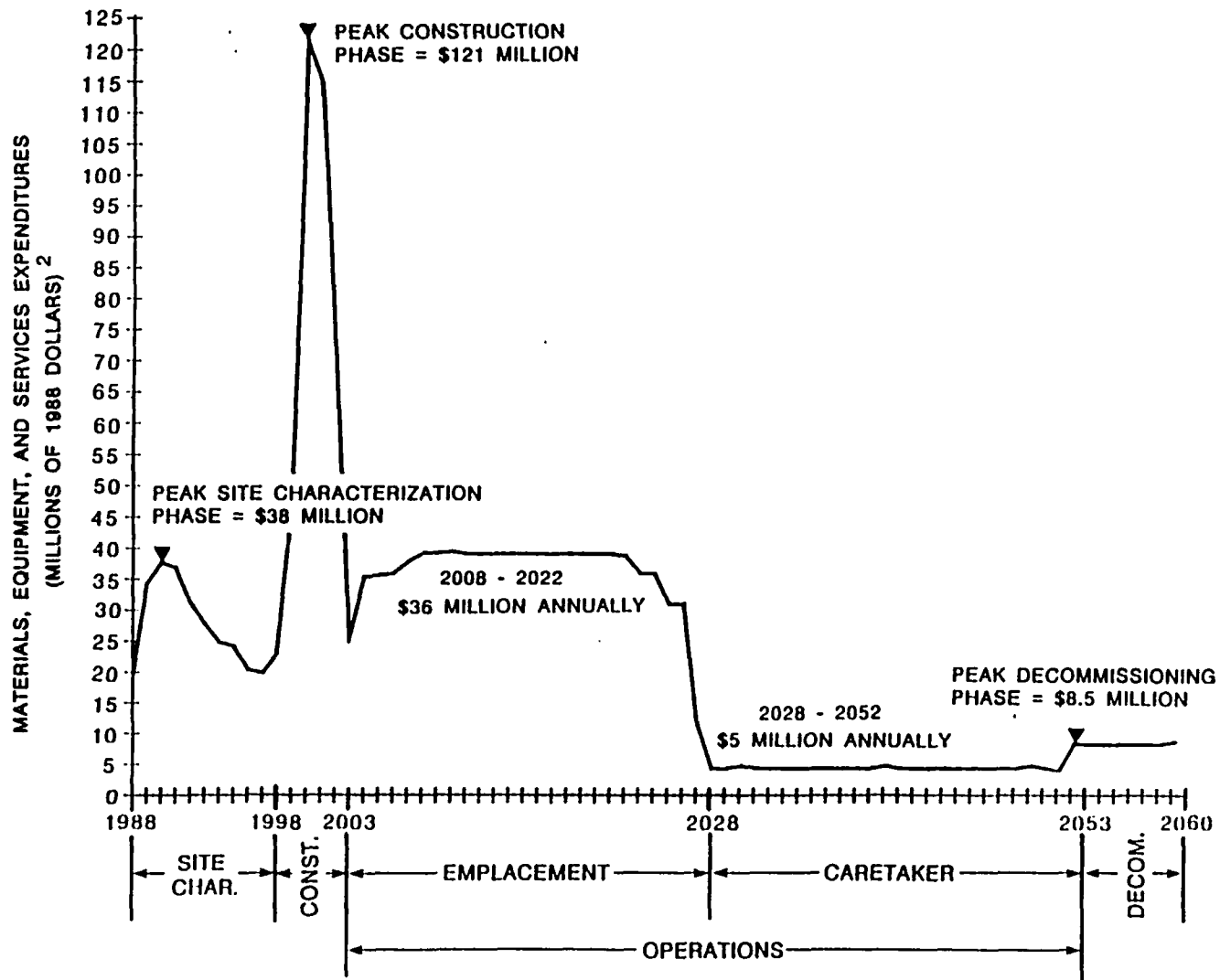
SECTION 175 REPORT

DIRECT REPOSITORY EMPLOYMENT (FTE) PROJECTIONS BY JOB LOCATION IN NEVADA, 1988-2060



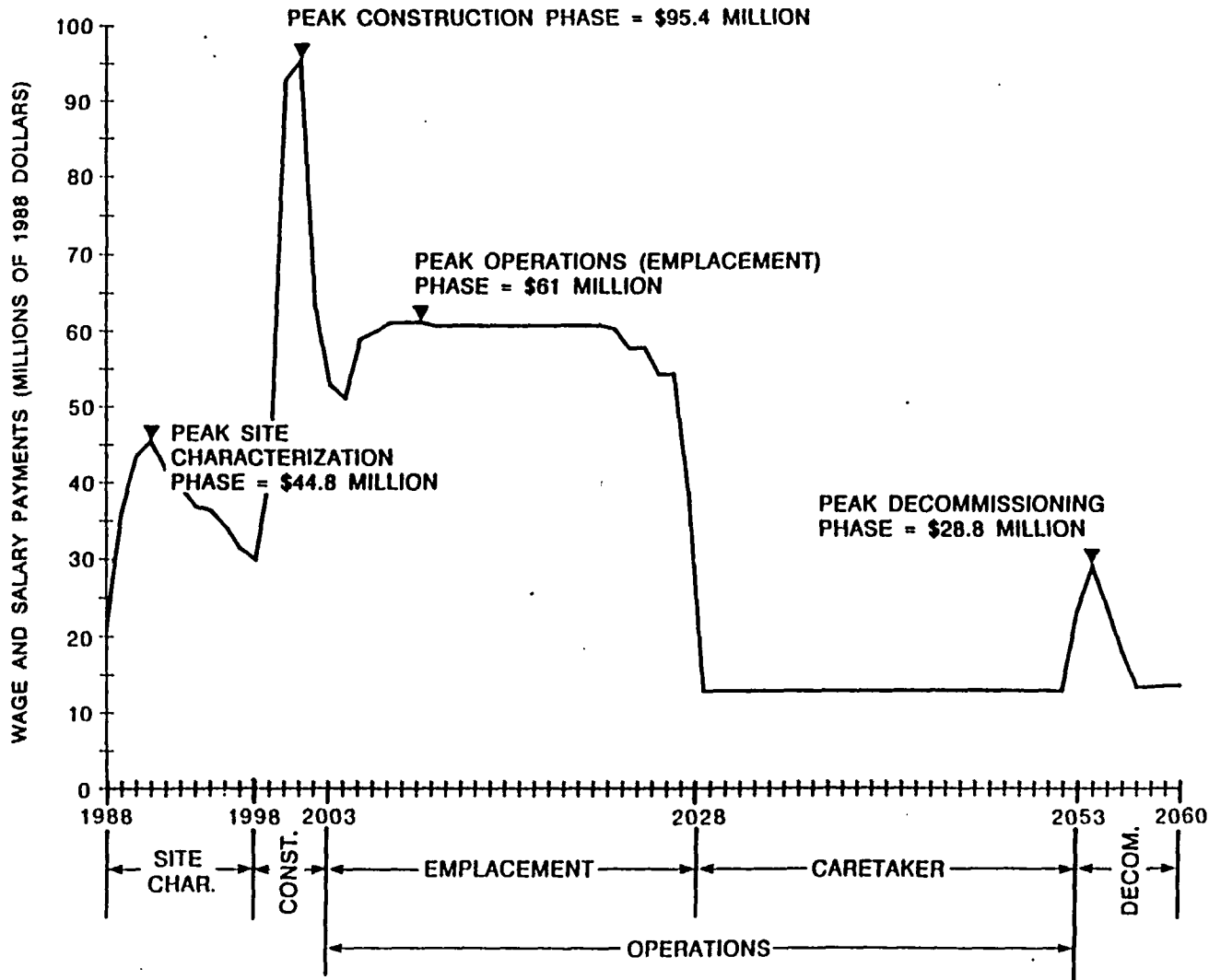
SECTION 175 REPORT

PROJECTED ANNUAL REPOSITORY EXPENDITURES FOR MATERIALS, EQUIPMENT, AND SERVICES TO BE USED IN NEVADA, 1988-2060

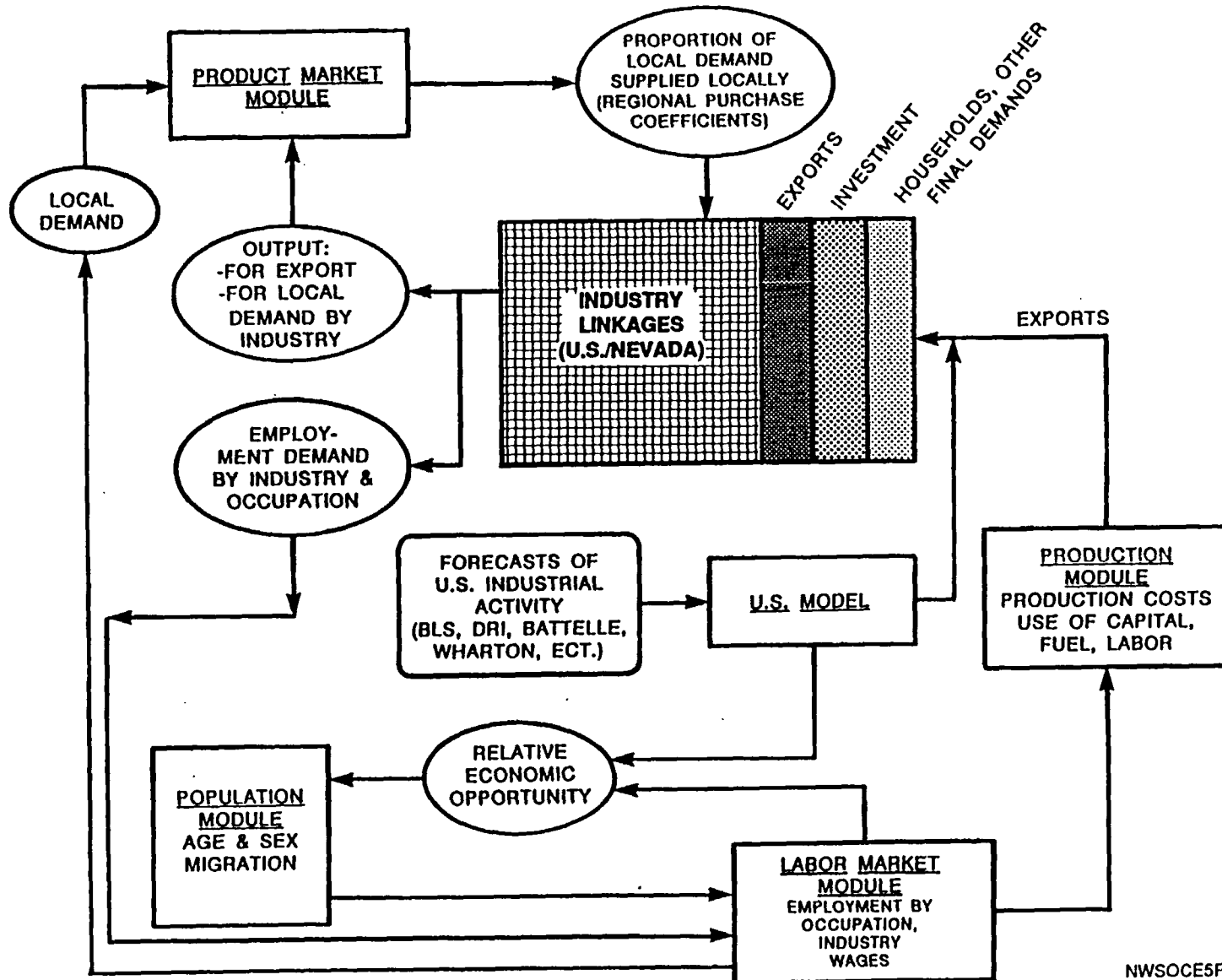


SECTION 175 REPORT

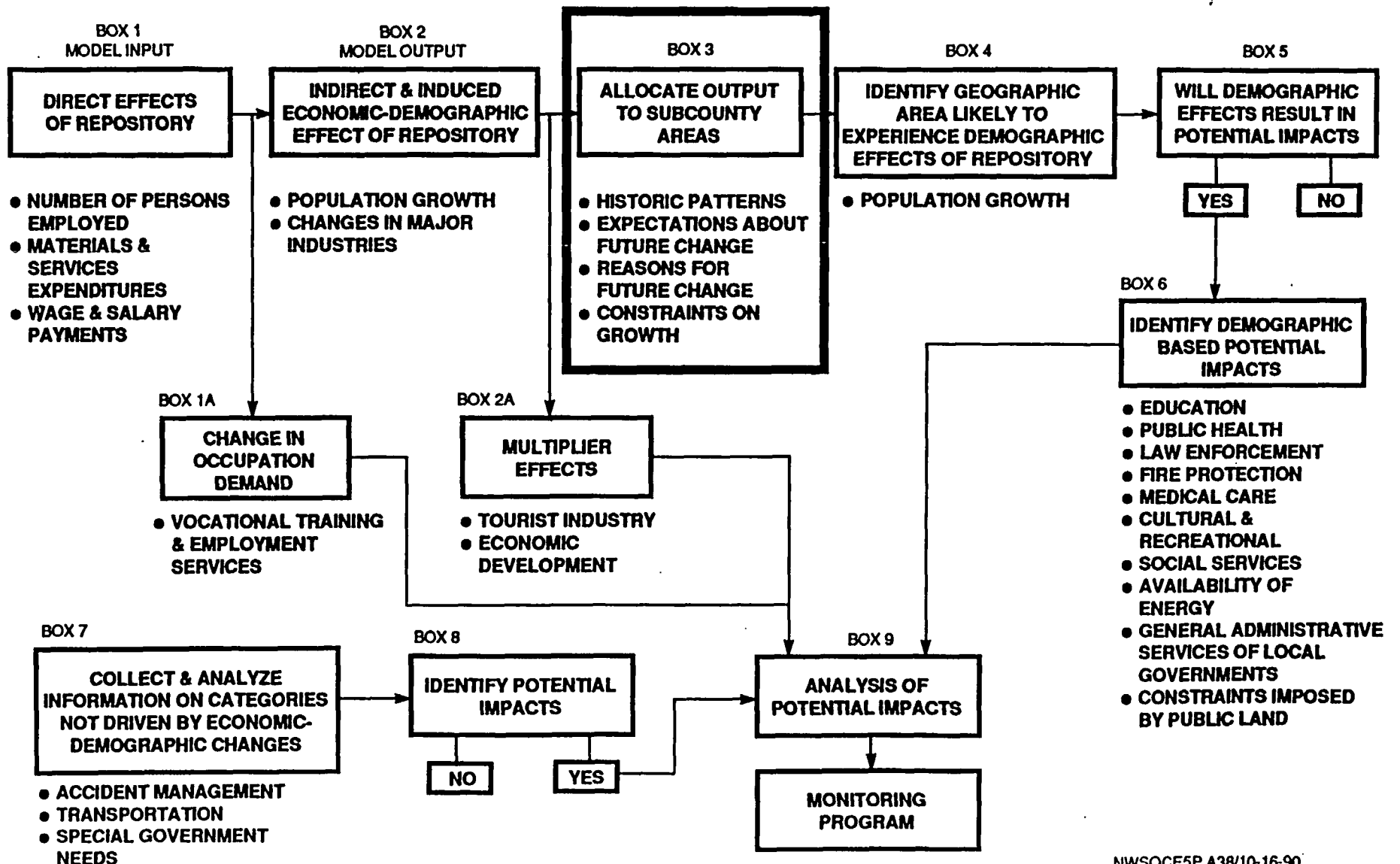
TOTAL ANNUAL REPOSITORY WAGE AND SALARY PROJECTIONS FOR NEVADA WORKERS, 1988-2060



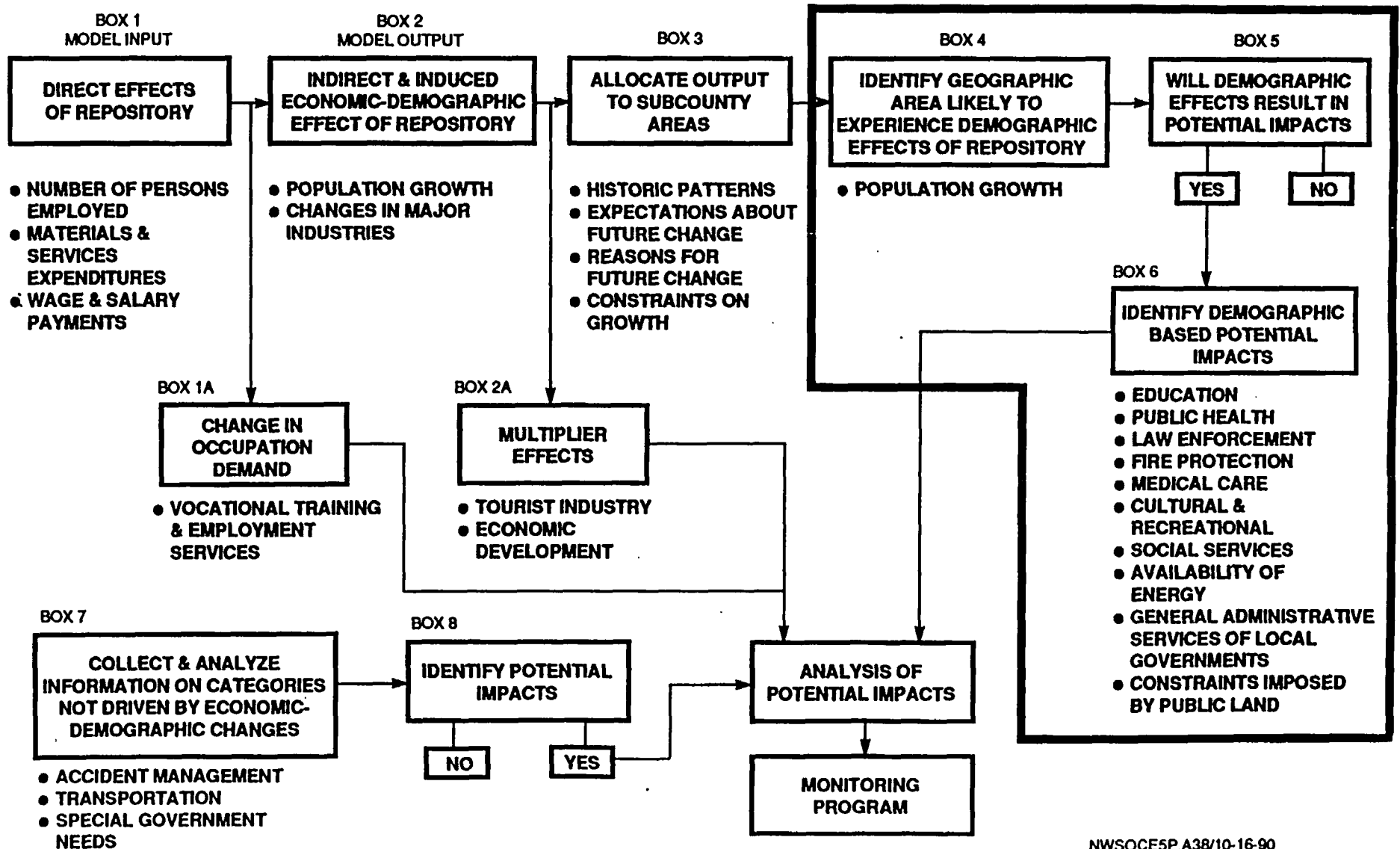
FLOW DIAGRAM FOR THE REMI MODEL OF NEVADA (FOUR NEVADA REGIONS)



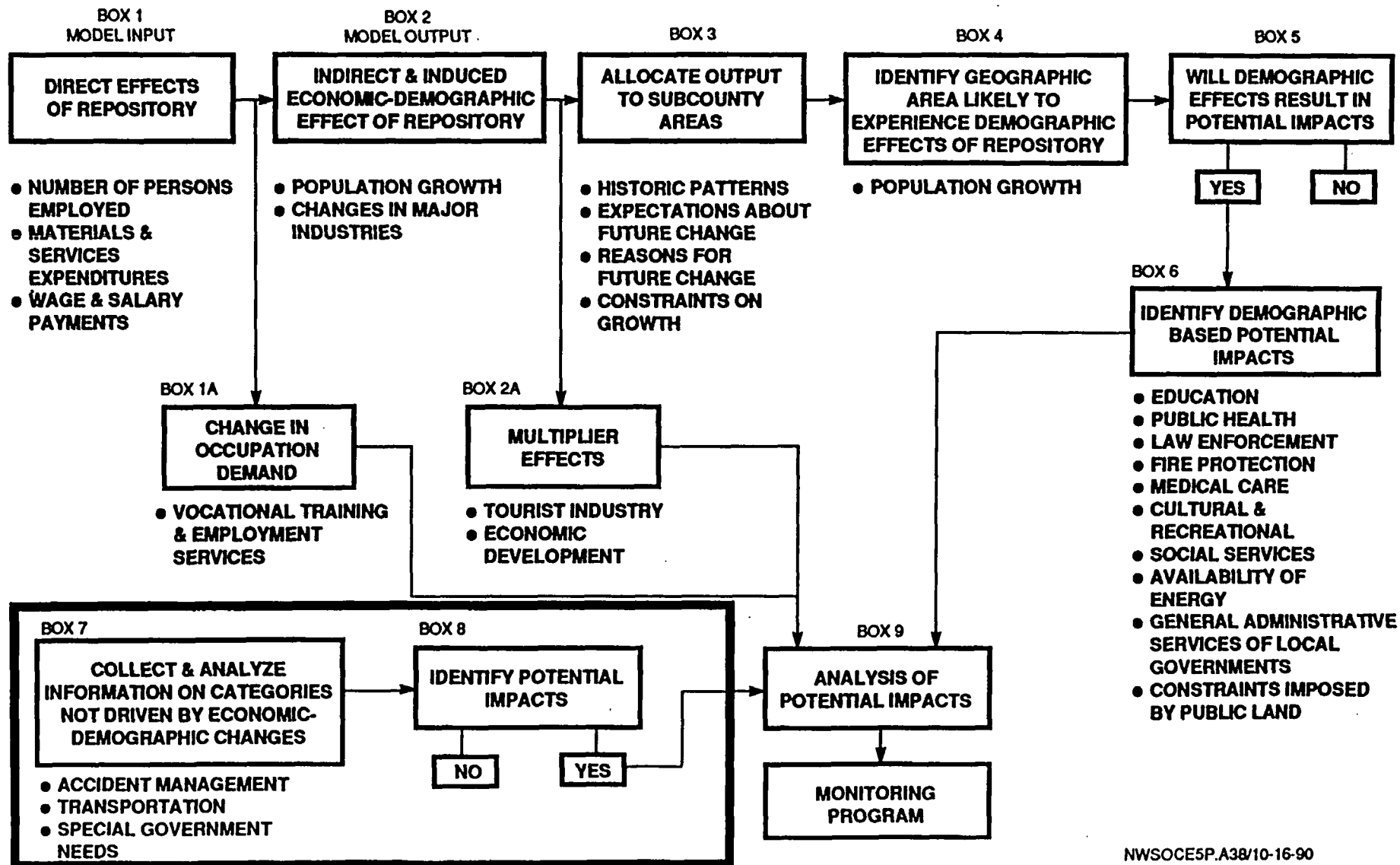
GENERAL APPROACH FOR ADDRESSING POTENTIAL EFFECTS



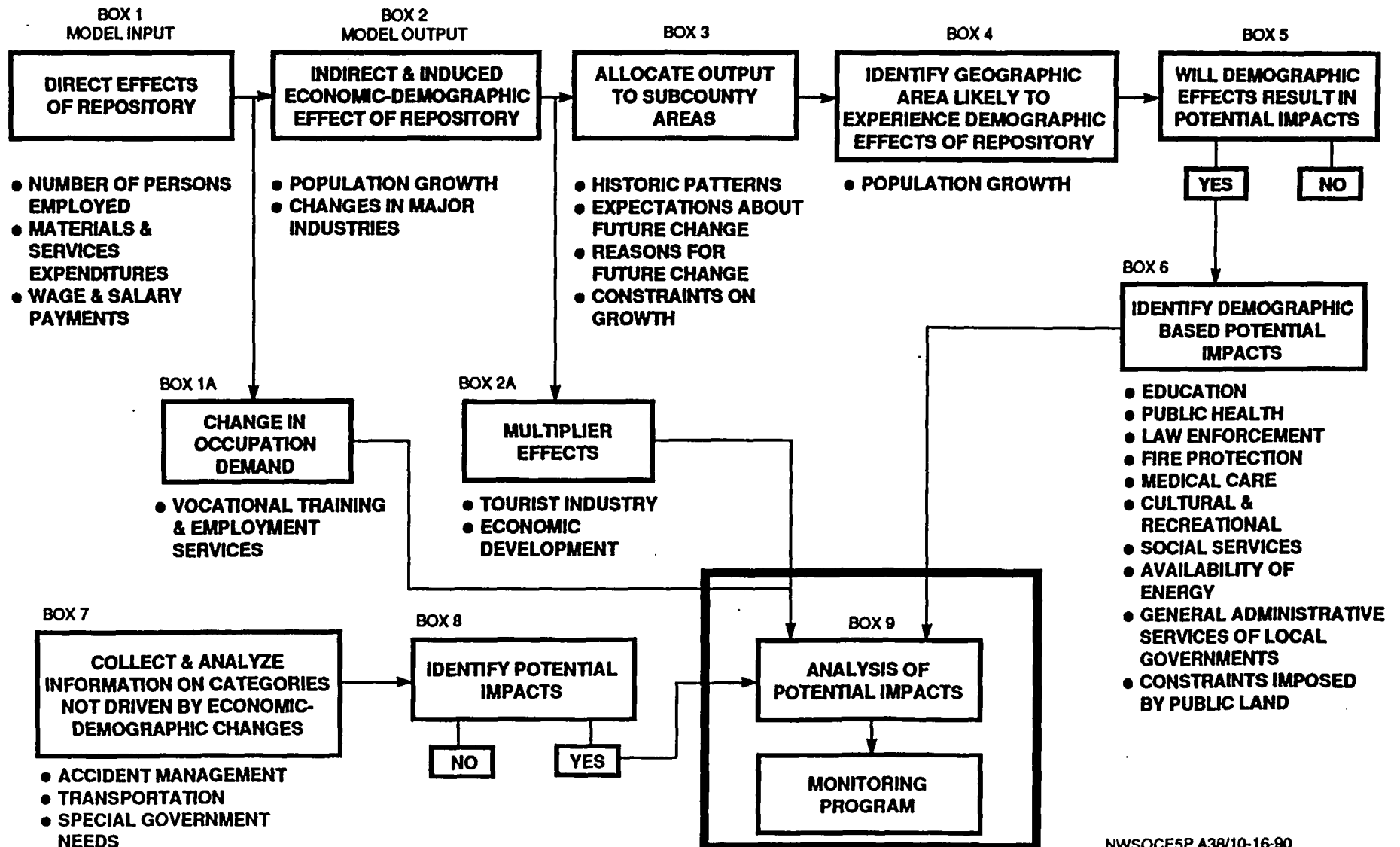
GENERAL APPROACH FOR ADDRESSING POTENTIAL EFFECTS



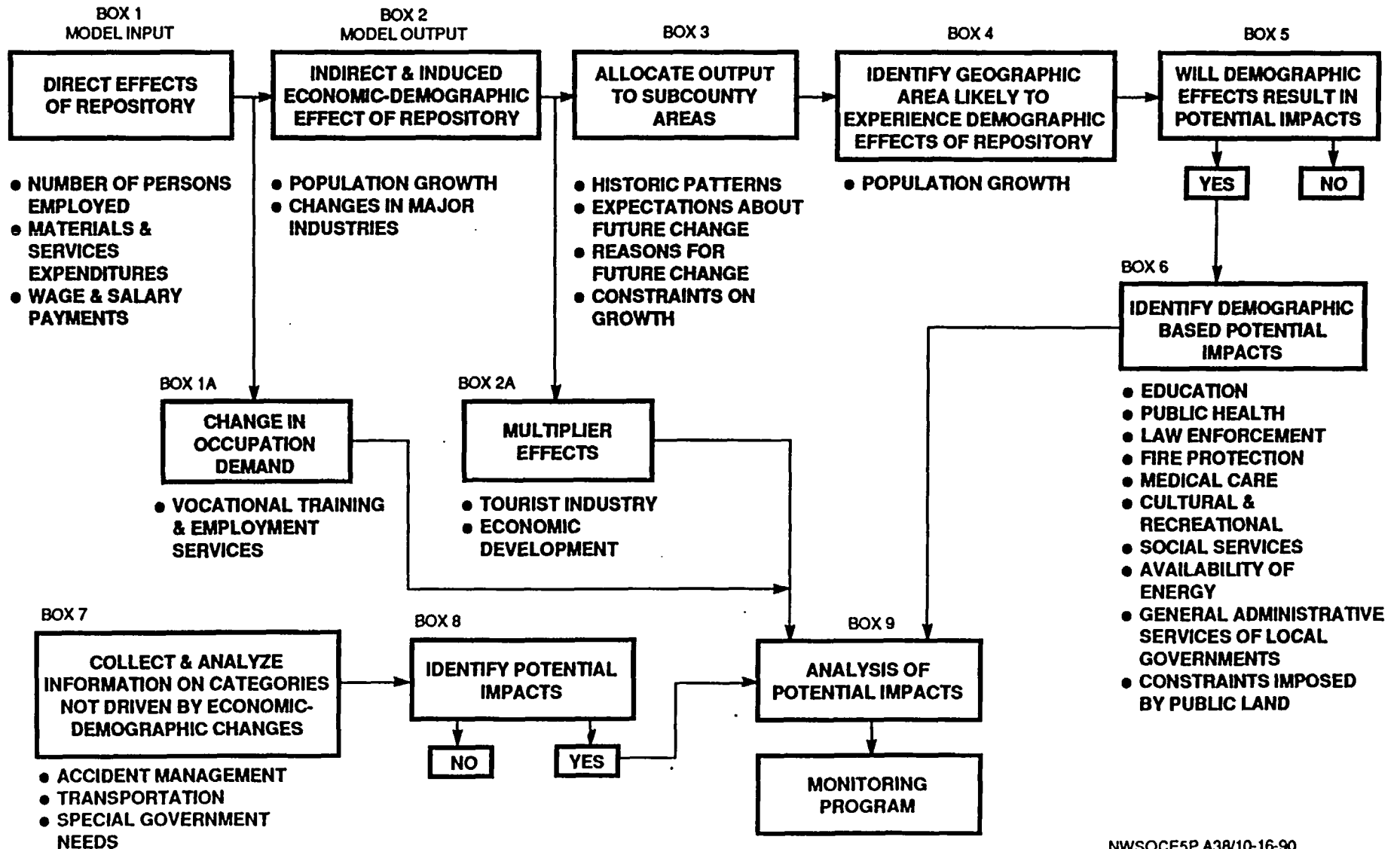
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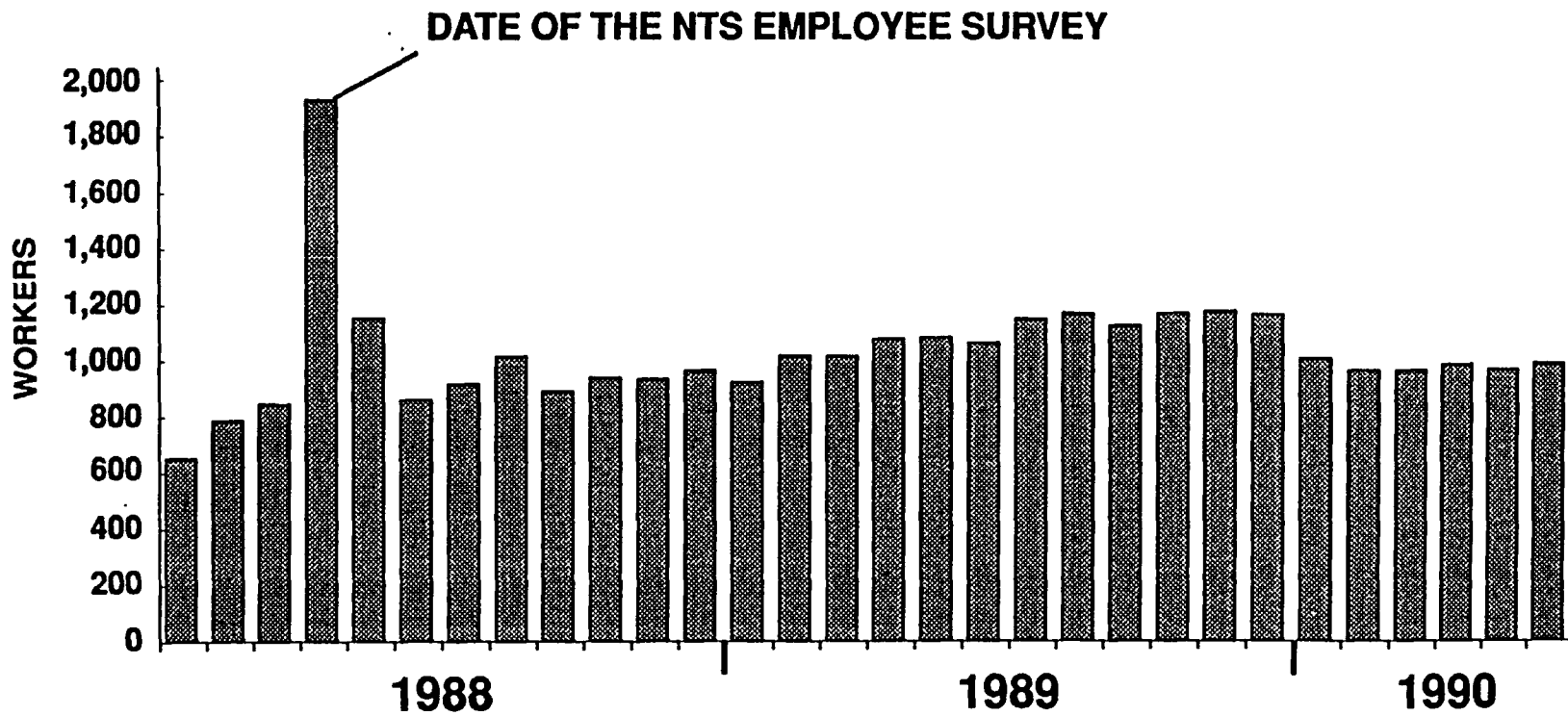


GENERAL APPROACH FOR ADDRESSING POTENTIAL EFFECTS



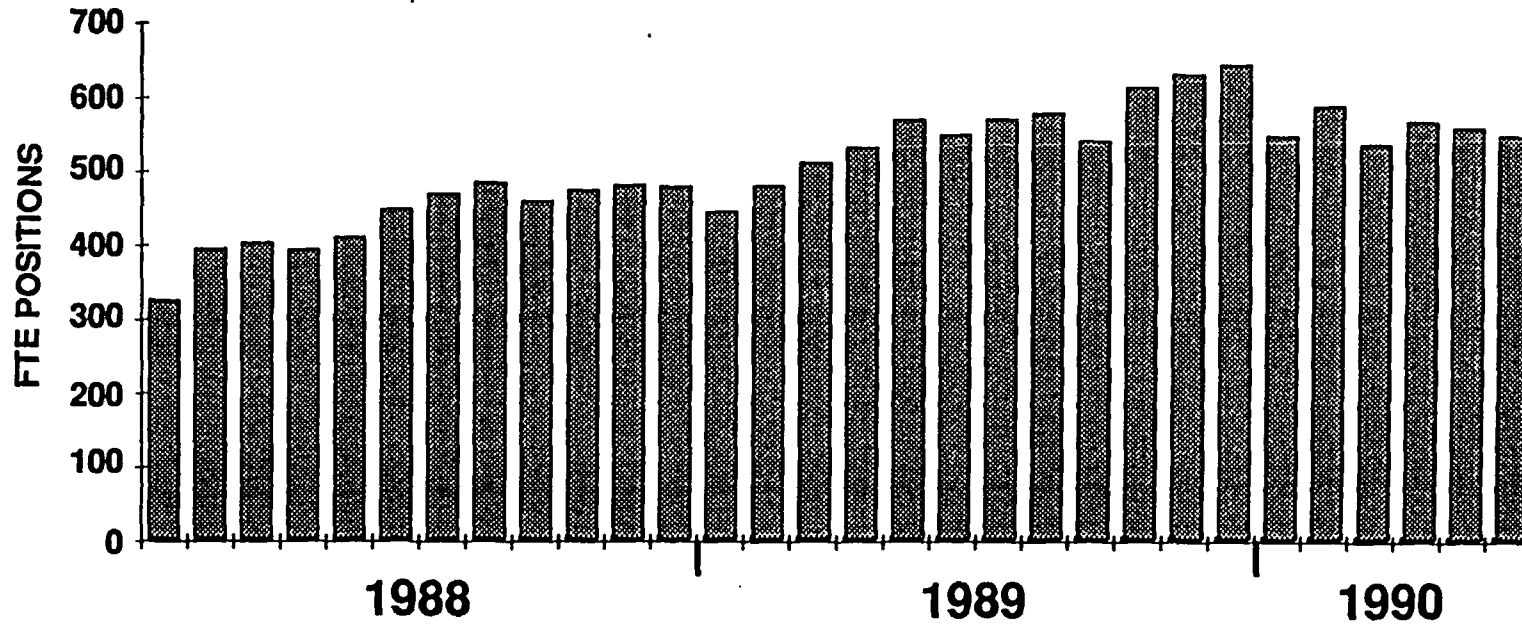
MONTHLY EMPLOYMENT IN NEVADA

(MONITORING PROGRAM DATA)



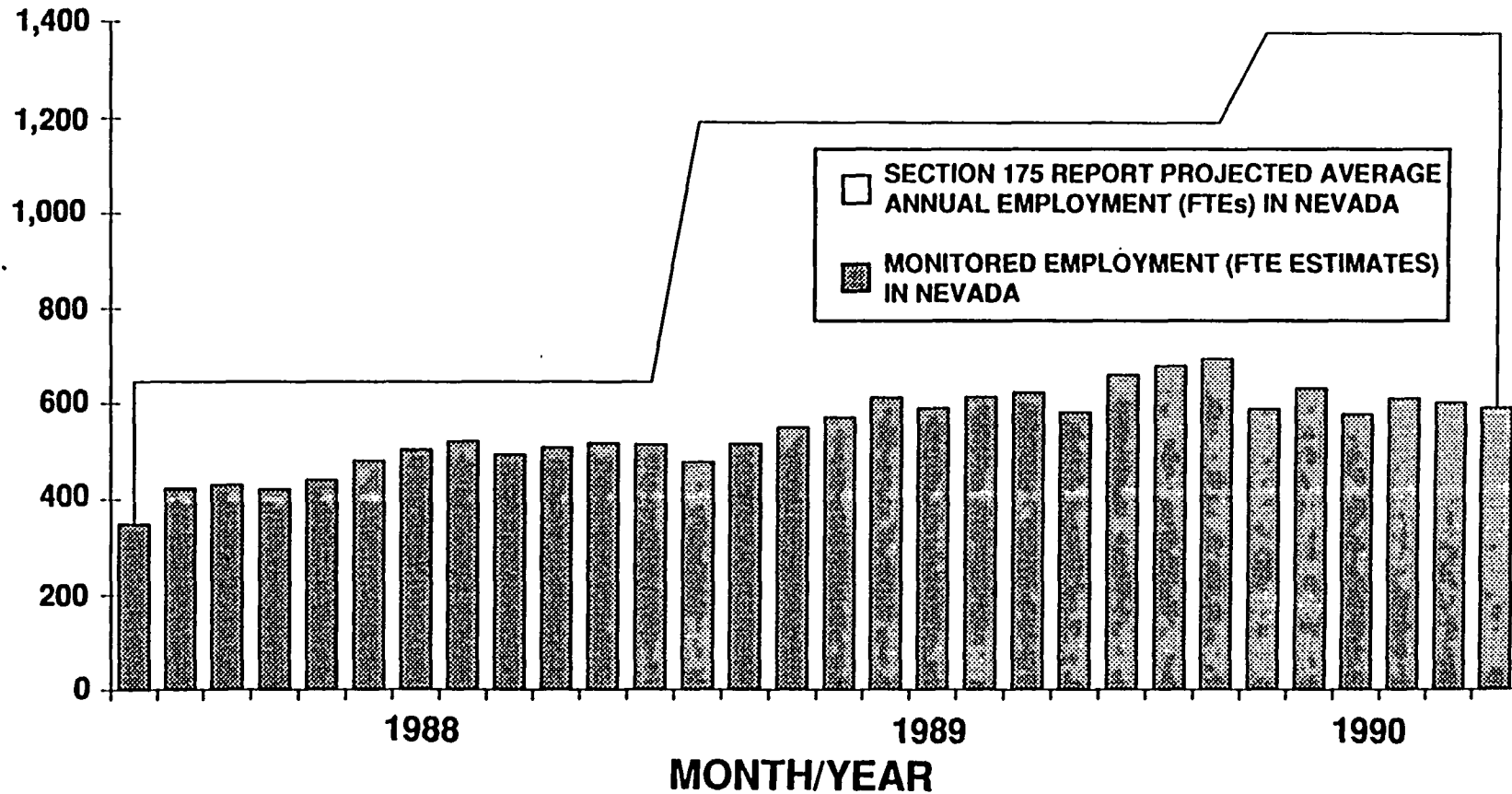
MONTHLY FULL TIME EQUIVALENTS IN NEVADA

(MONITORING PROGRAM ESTIMATES)



PROJECTED vs MONITORED EMPLOYMENT (FTE) IN NEVADA

(FULL TIME EQUIVALENTS)



EVOLUTION OF SOCIOECONOMIC ACTIVITIES

- **UNIQUE CHARACTERISTICS**
- **LIMITATION OF METHODOLOGIES**
- **PROGRAM REQUIREMENTS**
- **EVOLVING TECHNICAL PROGRAM**