



The Fort Benning Regional Growth Management Plan is funded by a grant from the Department of Defense, Office of Economic Adjustment; an agency charged with helping BRAC-affected communities adjust to the impacts of mission changes at military installations

# Fort Benning

## REGIONAL GROWTH MANAGEMENT PLAN

# Utilities and Infrastructure Task Force Meeting

September 10, 2008



In association with:

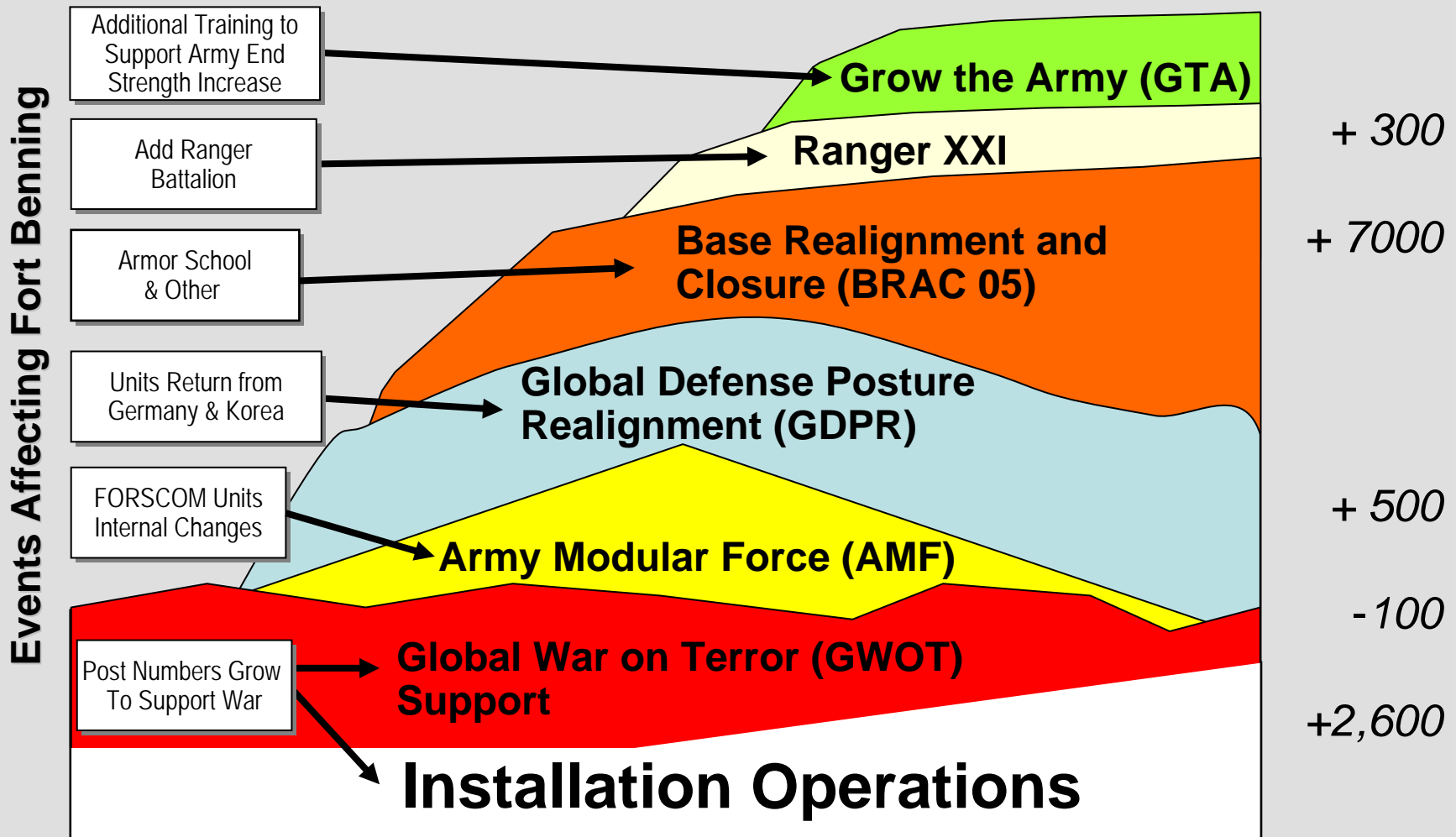


# Regionalism is the Key

*"Coordination and Synchronization Continue To Be Our Greatest Strengths"*  
Major General Walter Wojdakowski  
Commanding General, Fort Benning, Alabama and Georgia



# Fort Benning Transformation



# Project Purpose

RGMP Study Area:  
(10 Counties – 35 Mile Radius)

## Ten County Study Area:

### Georgia

- Columbus - Muscogee
- Cusseta - Chattahoochee
- Harris
- Marion
- Talbot
- Taylor
- Stewart

### Alabama

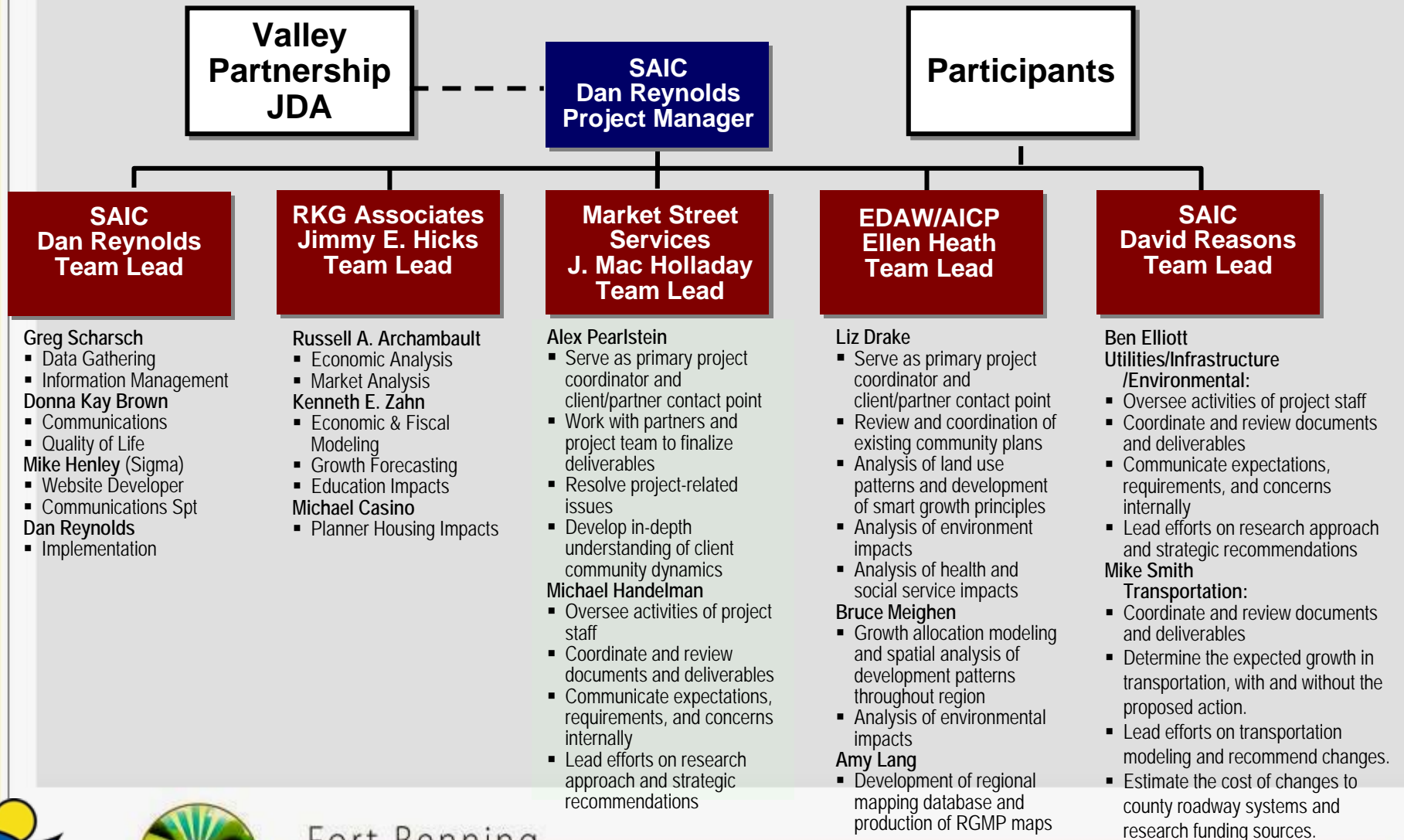
- Barbour
- Lee
- Russell



## Identify:

- What growth will occur?
- Where will it occur?
- Impacts to local communities
- Action plans to prepare

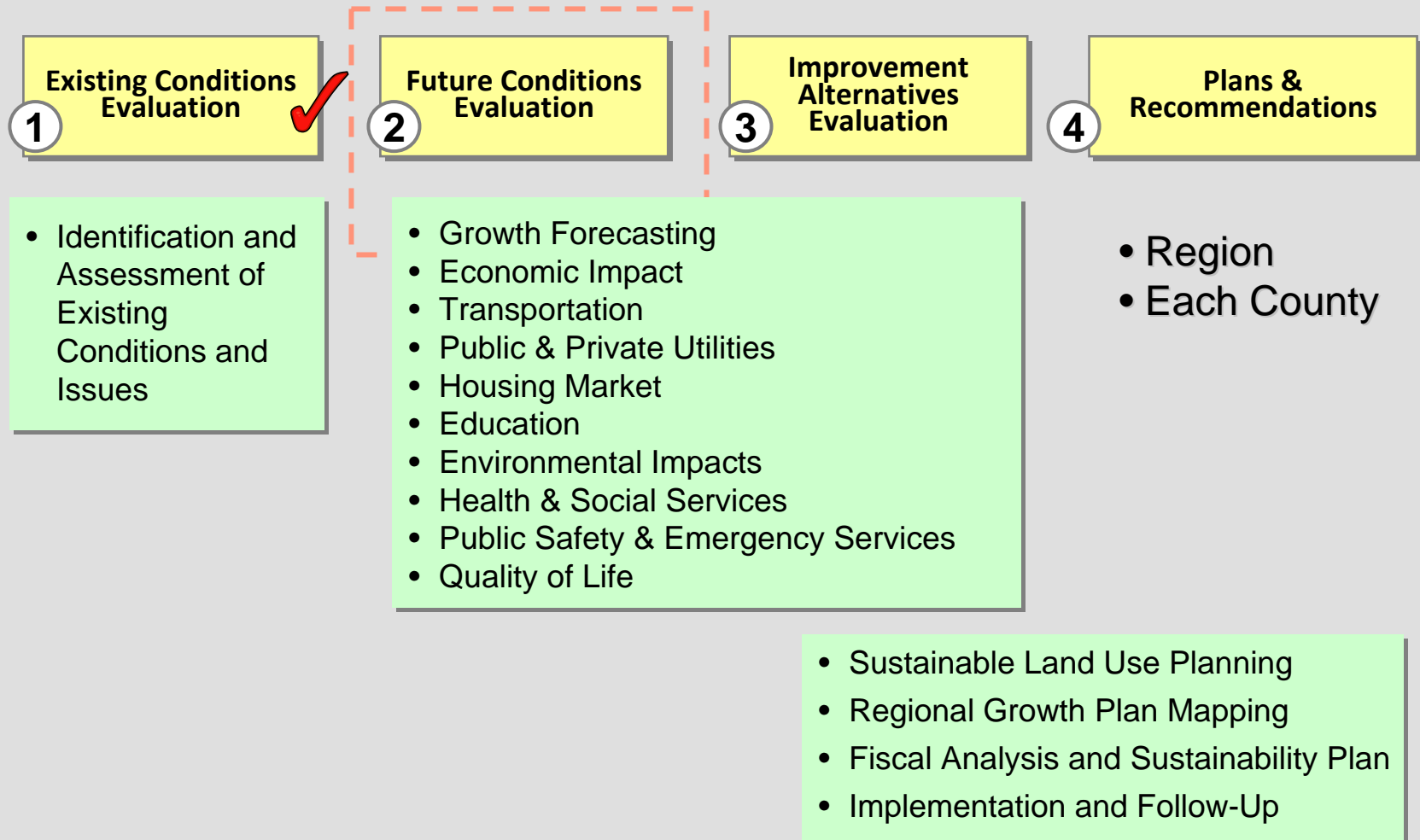
# Project Team Organization



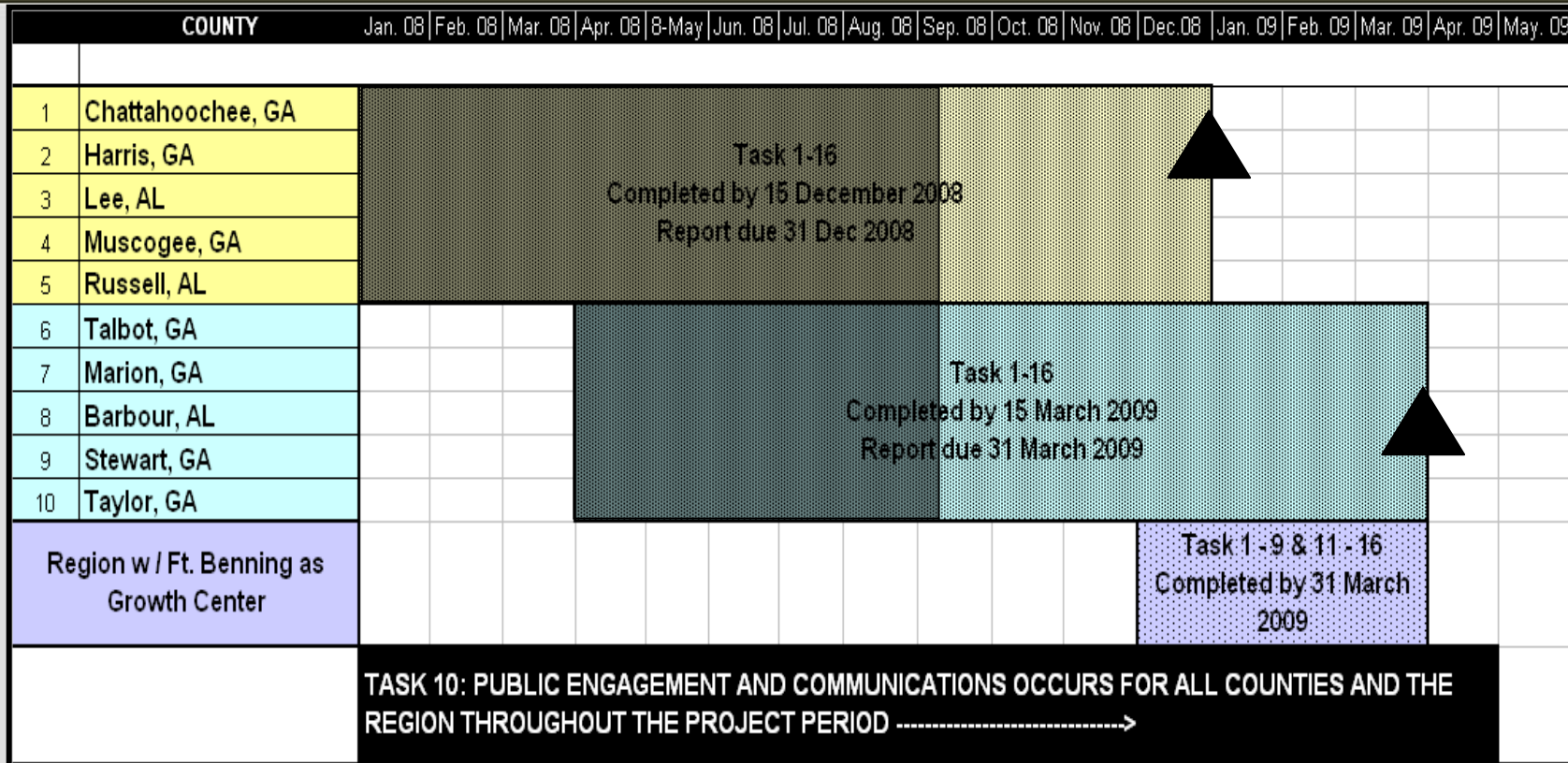
# Scope (Tasks)

| #  | TASK  | LEAD   |
|----|---|--------|
| 1  | Identification and Assessment of Existing Conditions and Issues | SAIC   |
| 2  | Growth Forecasting and Modeling                                 | RKG    |
| 3  | Economic Impact Analysis  | RKG    |
| 4  | Transportation  | SAIC   |
| 5  | Public and Private Utilities                                    | SAIC   |
| 6  | Housing Market Analysis   | MKT ST |
| 7  | Education   | RKG    |
| 8  | Sustainable Land Use Planning                                   | EDAW   |
| 9  | Regional Growth Plan Mapping                                    | EDAW   |
| 10 | Public Engagement and Communications                            | SAIC   |
| 11 | Environmental Impacts   | SAIC   |
| 12 | Health and Social Services                                      | EDAW   |
| 13 | Public Safety and Emergency Services                            | MKT ST |
| 14 | Quality of Life   | SAIC   |
| 15 | Fiscal Analysis and Sustainability Plan                         | RKG    |
| 16 | Implementation and Follow-Up                                    | SAIC   |

# Project Process



# Schedule (County View)



- First five county plans (Tier 1) completed Dec 2008
- Remaining counties (Tier 2) and regional plans completed Apr 2009

# Stakeholder Task Forces

## TASK FORCES

1. Economic Impact
2. Education
3. Funding for Region
4. Health Care & Social Services
5. Housing
6. Infrastructure & Land Use
7. Public Services
8. Quality of Life
9. Strategic Communications
10. Transportation
11. Workforce

### Task Force Meeting # 1

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- Presentation of initial findings
- Discussion

### Task Force Meeting # 2

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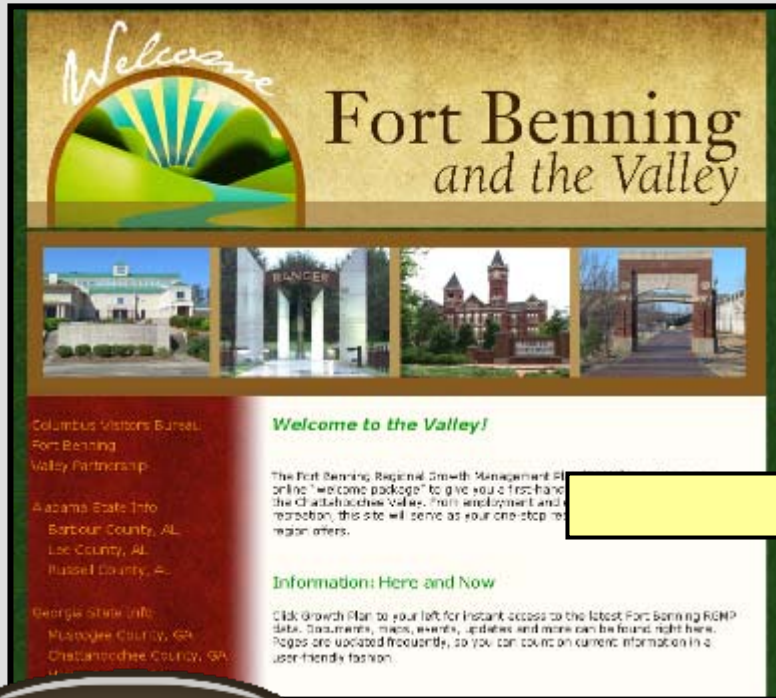
- Presentation and discussion of strategies/recommendations
- Implementation strategies

# *Task Force Responsibilities*

- 1) Review task, scope and methodology
- 2) Confirm existing conditions and known issues
- 3) Establish points of contact for data collection
- 4) Review findings and recommendations
- 5) Communicate with community regarding actions and status of Plan
- 6) Provide guidance in Plan implementation

# Project Website

- [www.fortbenningandthevalley.com](http://www.fortbenningandthevalley.com)



Growth Plan

Click the Growth Plan Button

- *Schedule of Upcoming Events*
- *Documents & Maps*
- *Newsletters*

# *Task Force Meeting Objectives*

- Kick-Off Task Force Process
- Review Task Methodology
- Review Existing Conditions & Issues
- Discuss and Confirm Way Ahead

# Agenda

1. Task Description
2. Regional Emerging Results
3. Population Growth Projections
4. Water Supply & Quality
5. Wastewater & Storm Water
6. Solid Waste Management
7. Electrical Energy
8. Petroleum Energy
9. Telecommunications
10. Wrap up discussions & Q/A



# *Task 5 – Utilities & Infrastructure*

## **TASK OVERVIEW:**

- Inventory of existing utilities and infrastructure.
- Estimates established for population changes in each of the counties were evaluated to help identify estimates for drivers on utility demand increases in each county.
- Demand increases are compared to current and planned supplies (where available) to determine any shortfalls and opportunities for new infrastructure investments.
- Estimates on increased demand will evolve as the results from modeling and land use iterations resolve into the final outcomes for each county.
- Initial results presented...

# *Task 5 – Utilities & Infrastructure*

## **EMERGING RESULTS:**

- Private utility providers are generally confident in meeting new demands. This needs to be confirmed with the Task Forces.
- High level county-region assessment summary based on available data.

# Task 5 – Utilities & Infrastructure

## EMERGING RESULTS:

Color Key

|            |                                       |
|------------|---------------------------------------|
|            | No current issue                      |
|            | Longer term issue                     |
|            | Short term issue                      |
| TBD        | Not addressed yet                     |
| 120,000    | Estimated from primary data           |
| 14,151,780 | Estimated from factors and population |

Summary of Utility Supply-Demand Congruence for 2013 Demand Based on CY2008 Supply Capacity and REMI.

|                       | Potable Water<br>(% Capacity Consumed) | Wastewater<br>(% Capacity Consumed) | Municipal Solid Waste (Years Remaining) | Electrical Energy<br>(% Local Plant Capacity) | Natural Gas | Propane | Telecommunications |
|-----------------------|--|-------------------------------------|---|---|-------------|---------|--------------------|
| Columbus-Muscogee     | 33%                                    | 27%                                 | 19                                      | 41%   | TBD         | TBD     | TBD                |
| Phenix-Russell        | 46%                                    | 55%                                 | 62                                      |   | TBD         | TBD     | TBD                |
| Opelika-Lee           | 59%                                    | 80%                                 |   |   | TBD         | TBD     | TBD                |
| Harris                | 92%                                    | Septic                              | 7                                       |   | TBD         | TBD     | TBD                |
| Cusseta-Chattahoochee | 38%                                    | Septic                              | 10                                      |   | TBD         | TBD     | TBD                |
| Talbot                | 69%                                    | Septic                              | TBD                                     |   | TBD         | TBD     | TBD                |
| Taylor                | 44%                                    | 35%                                 | TBD                                     |   | TBD         | TBD     | TBD                |
| Stewart               | 68%                                    | 28%                                 | TBD                                     |   | TBD         | TBD     | TBD                |
| Marion                | 88%                                    | 92%                                 | TBD                                     |   | TBD         | TBD     | TBD                |
| Barbour               | TBD                                    | TBD                                 | TBD                                     |   | TBD         | TBD     | TBD                |

# Task 5 – Utilities & Infrastructure

## EMERGING RESULTS:

Current Utility Capacity Estimates CY2008 (with units) based on Reported System Data

|                   | Potable Water Supply (MGD) | Wastewater Capacity (MGD) | Municipal Solid Waste (TPY) | Electrical Energy from Local Plants (MW-hrs/YR) |
|-------------------|----------------------------|---------------------------|-----------------------------|---|
| Columbus-Muscogee | 90.0                       | 84.0                      | 120,000                     | 14,151,780                                      |
| Russell           | 13.0                       | 7.75                      | 133,333                     |   |
| Lee               | 10.0                       | 5.5                       |                             |   |
| Harris            | 3.0                        | Septic                    | 22,000                      |   |
| Chattahoochee     | 0.8                        | Septic                    | 13,500                      |   |
| Talbot            | 0.69                       | 0.1                       | 146,000                     |   |
| Taylor            | 1.4                        | 0.2                       | TBD                         |   |
| Stewart           | 0.3                        | 0.2                       | TBD                         |   |
| Marion            | 1                          | 0.25                      | TBD                         |   |
| Barbour           | TBD                        | TBD                       | TBD                         |   |

# Task 5 – Utilities & Infrastructure

## ISSUES:

- Assessment of capacity versus demand can be performed based on County population growth estimates. Specific requirements and costs will be reconciled with Land Use Model (Quality/Smart Growth Measures and geographical distribution of growth)
- Mapping Data for Utilities has proven difficult to collect. Will attempt to utilize the Infrastructure Task Force to facilitate the personal contacts required to explain the need, obtain the release, and complete transfer of this data.

# *Task 5 – Utilities & Infrastructure*

## WAY AHEAD:

- Formalize issues and recommendations once modeled population increased and anticipated location development impacts are finalized
- Make use of Infrastructure Task Force work session and contacts to continue collection of missing information

# Water Supply & Quality Short Term

## Short Term (0 - 5 years)

- Many of the local planning documents within the region identify the provision of **adequate water pressure** and access to **fire hydrants** as a concern for existing developments in older or more rural areas. Ongoing and planned efforts to address these concerns should take priority over projects to extend utility services to new development areas in the short-term.
- Although growth modeling predictions for **Talbot and Taylor counties** show the projected population increases to be small the current **demand for water** in these counties is **nearing current capacity limits**. Any additional growth in the area may exceed the capacity of the suppliers to meet the counties water needs.

# Water Supply & Quality Mid to Long Term

## Mid Term (5 – 10 years)

- Opportunities still exist for **supplementing local water** resources in rural areas with backup **emergency supplies** from more abundant surface water resources. **Potable and non-potable options** should be explored for existing developed areas lacking in sufficient supplies for **fire protection**.

## Longer Term (10 – 20 years)

- Potential policy changes associated with water supply reservoirs, **intrabasin and interbasin transfers** coupled with regional supply and demand drivers **may impact local hydroelectric power plants** and should be further evaluated with respect to both state's energy plans and the potential impact on local electricity rates.
- Potential policy changes associated with water demand management and **use of reclaimed water** may open investment opportunities for offsetting consumptive water uses from **irrigation and industrial water consumers** currently using drinking water supplies.

# Wastewater & Storm Water Short Term

## Short Term (0 – 5 years)

- Any outstanding projects regarding **elimination of combined sewers** in the region? Other **MS4 permit issues** that need to be addressed? Funding resources issues?
- Options for both **centralized and decentralized wastewater treatment** need to be comparatively explored in **rural areas of Harris County** and **Columbus-Muscogee County GA**, and **Russell County AL** in the event that denser development may need to occur in those areas than the present soil conditions would allow based on **health department requirements for on-site (septic) treatment**.

# Wastewater & Storm Water Mid to Long Term

## Mid Term (5 – 10 years)

- Options for both **centralized and decentralized wastewater treatment** need to be comparatively explored in **rural areas of Harris County** and **Columbus-Muscogee County GA**, and **Russell County AL** in the event that denser development may need to occur in those areas than the present soil conditions would allow based on **health department requirements for on-site (septic) treatment**.

## Longer Term (10 – 20 years)

- Potential **policy changes** associated with **water quantity management** (e.g. conservation, water reuse, **water return**) may **impact development options** in currently rural areas on the verge of development **regarding on-site (septic) wastewater treatment**.

# *Solid Waste Management Short Term*

## Short Term (0 – 5 years)

- The combined impact of the growth associated with the Kia Plant and growth anticipated from Fort Benning on the **City of LaGrange Landfill (141-013D)** currently supporting **Harris (and Troup) counties needs to be further evaluated** so that the terms of future arrangements for municipal solid waste management in Harris county can be confirmed.
- The current **study focusing on waste minimization, energy recovery, and sustainability issues at Fort Benning** will help reduce the impact of ongoing construction, increased student loads, and revitalization of post housing areas. Implementation of the study's recommendations should have positive benefits to the surrounding counties based on potential for reduced waste loading on surrounding landfills and from reducing the number of trucks on regional roads transporting this waste.

# *Solid Waste Management Mid to Long Term*

## Mid Term (5 – 10 years)

- Evaluate needs for **waste disposal contract** re-negotiations for **Harris, Taylor, and Marion Counties** regarding increased access to local landfills.

## Longer Term (10 – 20 years)

- The **life cycle of the Pine Grove Landfill** servicing the Columbus-Muscogee County area will be **reduced** by higher than planned loading rates; however, the useful life remaining considering anticipated growth is still greater than 20 years. Existing **minimization and recycling programs need continued investment** to extend the life time of this landfill.
- The **life cycle of the Salem Waste Disposal Center** (Waste Away Group, Inc.) servicing Barbour, Lee, and Russell Counties in AL and Harris, Columbus-Muscogee (and Fort Benning), and Troup Counties in GA will be **reduced** by higher than planned loading rates; however, the useful life remaining considering anticipated growth is still greater than 20 years. Existing **minimization and recycling programs need continued investment** to extend the life time of this landfill.

# *Energy Short, Mid, and Long Term*

## Short Term (0 – 5 years)

- Regional electrical, natural gas, and propane **infrastructure, supplies and pricing are dictated by market forces**. However, the **10 county Fort Benning RGMP study area is well positioned** to receive adequate energy supplies in the short-term and well into the future.

(Source: Energy Information Administration 2006 data accessed from EIA website in 2008)

## Mid Term (5 – 10 years)

- Private sector **infrastructure developers and utility investors** obtain market information regarding current and future conditions and choose to construct new utility supply capacity or upgrade existing infrastructure, **contingent that these projects are feasible and profitable**.
- **Development** of energy infrastructure in new areas can be **managed by state and local policies and incentive programs**.

## Longer Term (10 – 20 years)

- National issues related to future energy policies and programs

# Telecommunications Short Term

## Short Term (0 – 5 years)

- Many of the local planning documents within the region identify **upgrades to the existing 800-megahertz emergency radio system and 911 systems** as a concern and identified projects to address these issues. Implementation of these **system upgrades need to be completed** in the short-term so that adequate emergency services communications can be provided throughout the area.
- **Extension of 911 services** to all rural areas within the region should be a short-term goal and an **area for regional coordination**.
- Many of the local planning documents within the region identify the provision of **high speed internet access** as a concern for existing developments in older or more rural areas. Ongoing and planned efforts to address these concerns should take priority over projects to extend utility services to new development areas in the short-term.

# *Telecommunications Mid to Long Term*

## Mid Term (5 – 10 years)

- Private sector **infrastructure developers and utility investors** obtain market information regarding current and future conditions and choose to construct new utility supply capacity or upgrade existing infrastructure, **contingent that these projects are feasible and profitable.**
- **Development** of telecommunications infrastructure in new areas can be **managed by state and local policies and incentive programs.**

## Longer Term (10 – 20 years)

- National issues related to future communication policies and programs

# *Wrap up discussions & Q/A*

- Wrap up discussions & Q/A

# Closing Remarks

## THIS MEETING:

- Overview
- Methodology
- Conditions & Issues
- Discussions



## NEXT MEETING

- November 2008
- Draft Findings/Recommendations



# Contact Information



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Fort Benning

REGIONAL GROWTH MANAGEMENT PLAN

Task Force Meeting – September 2008