PINELLAS COUNTY POST-DISASTER REDEVELOPMENT PLAN

June 2012

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POST-DISASTER REDEVELOPMENT PLAN GLOSSARY
CHAPTER 1
INTRODUCTION

A. Purpose and Objectives

The purpose of the *Post-Disaster Redevelopment Plan* (PDRP) is to provide Pinellas County and other local governments with a county-wide reference for guiding local action and decision making, during the difficult disaster recovery period, as well as detailing actions that can be taken before a disaster strikes to speed the recovery process and make the community more disaster-resilient. It will address disaster recovery and redevelopment issues with long-term implications. It will not address immediate response and emergency operations as those are already covered by the Comprehensive Emergency Management Plan (CEMP).

The PDRP is designed to be an action-oriented plan outlining, where appropriate and applicable, a countywide implementation approach. Through a Steering Group representing county, municipal, non-profit and private stakeholders and a flexible Work Group structure, Action Plans were developed for different subject areas that can be implemented, as needed. The various Action Plans are integrated into an overall PDRP that will be adopted by the Board of County Commissioners (Board). Pinellas County has developed a Countywide Disaster Housing Plan and Action Plans for land use, housing and mitigation; construction, permitting and historic preservation; economic redevelopment; environmental restoration and infrastructure restoration. The PDRP also includes Action Plans for health and human services, public outreach and financial administration.

One of the major tasks of the Steering Group was to update and further develop the County’s 1994 Post-disaster Redevelopment Plan for submittal to the Board for adoption. Unlike a hurricane evacuation or recovery implementation guide, a post-disaster redevelopment plan is concerned with how Pinellas County would recover, rebuild and redevelop following a disaster. This Plan would provide the Board with a process for managing the period of short-range recovery to long-range redevelopment and reconstruction. Adoption of a redevelopment plan prior to the disaster puts in place a set of policies, procedures and planning instruments which facilitates post-storm decision making.

The project objectives are to address key issues and identify implementation strategies for the comprehensive, actionable, multijurisdictional *Pinellas County Post-disaster Redevelopment Plan* (PDRP). The Plan builds on Pinellas County’s current documents.
and PDRP guidance, incorporates “best policies and practices” as reflected in local, state and federal statutes and guidelines, and contains language that links with (or can be integrated into) other relevant county and municipal plans and programs. This project will permit the county to identify innovative mitigation solutions and strategies and address multi-jurisdictional issues to build consensus on how to proceed toward the goal of disaster resiliency by reducing vulnerability to natural disasters both before and after a storm. The PDRP provides Pinellas County with a process for managing the period of short-range recovery to long-range redevelopment and reconstruction after a natural disaster, and for coordinating with municipalities, public agencies, and various service providers during this time.

B. Scope

The plan was developed to cover the unincorporated areas of Pinellas County, although portions of the plan describe and provide information on the (24) incorporated jurisdictions within the county. It is hoped that the PDRP will serve as guidance for local jurisdictions as they address their recovery planning.

In fashioning a PDRP that best achieves the objectives of Pinellas County and its Comprehensive Plan, the following considerations warranted special attention:

- The Plan should convey both:
  - A comprehensive policy document to provide overall guidance
  - A streamlined decision/ action support document (Action Plans by subject area)
- Compliance with federal, state and local statutes and optimal adherence to relevant federal, state and local planning guidelines
- Language linking the Plan with other relevant planning documents such as local comprehensive plans, the Comprehensive Emergency Management Plan (CEMP), Local Mitigation Strategy (LMS), Recovery Implementation Guide, etc.
- Inclusion of specific guidance for Plan activation (trigger conditions, steps, responsibilities, etc.)
- Inclusion of recommended practices and procedures for plan monitoring, review, and revision
- Develop a Plan for Pinellas County with a multi-jurisdictional perspective so that it can serve as a model for the municipalities and public agencies as they develop their PDRPs
- Efforts to appropriately involve the public in the planning process
C. Authority

Coastal counties in Florida are required by state law to include in their Comprehensive Plan’s Coastal Element a policy which states the intent of the jurisdiction to develop a Post-disaster Redevelopment Plan (Rule 9J-5.012(3)(b)(8) F.A.C.).

The Pinellas County Comprehensive Plan states the following:

Coastal Management Element, Goal 1, Objective 1.1
“Pinellas County shall continue to implement, and update and revise, as necessary, its Post-disaster Redevelopment Plan, as approved by the Pinellas County Board of County Commissioners, as part of the Pinellas County Comprehensive Emergency Management Plan, and shall continue to implement hazard mitigation measures to reduce the exposure of human life and public and private property to natural hazards.” Objectives 1.1.1 – 1.1.13 further define the scope and strategies of the PDRP.

Other state statutes and rules regarding post-disaster redevelopment plans are as follows:

Florida Statutes 163.3178(2) Each coastal management element required by s. 163.3177(6)(g) shall be based on studies, surveys, and data; be consistent with coastal resource plans prepared and adopted pursuant to general or special law; and contain:

(f) A redevelopment component which outlines the principles which shall be used to eliminate inappropriate and unsafe development in the coastal areas when opportunities arise.

Florida Statutes 163.3177(7)(l) Local governments that are not required to prepare coastal management elements under s. 163.3178 are encouraged to adopt hazard mitigation/post-disaster redevelopment plans. These plans should, at a minimum, establish long-term policies regarding redevelopment, infrastructure, densities, nonconforming uses, and future land use patterns. Grants to assist local governments in the preparation of these hazard mitigation/post-disaster redevelopment plans shall be available through the Emergency Management Preparedness and Assistance Account in the Grants and Donations Trust Fund administered by the department, if such account is created by law. The plans must be in compliance with the requirements of this act and chapter 252.

F.A.C. 9J-5.012 (2) Coastal Management Data and Analysis Requirements. The element shall be based upon the following data and analyses requirements pursuant to subsection 9J-5.005(2), F.A.C.
(e) The following natural disaster planning concerns shall be inventoryied or analyzed:

2. Post-disaster redevelopment including: existing and proposed land use in coastal high-hazard areas; structures with a history of repeated damage in coastal storms; coastal or shore protection structures; infrastructure in coastal high-hazard areas; and beach and dune conditions. Measures which could be used to reduce exposure to hazards shall be analyzed, including relocation, structural modification, and public acquisition.

3. Coastal high-hazard areas shall be identified and the infrastructure within the coastal high-hazard area shall be inventoried. The potential for relocating threatened infrastructure shall be analyzed.

F.A.C. 9J-5.012 (3)(b)(8) Prepare post-disaster redevelopment plans which will reduce or eliminate the exposure of human life and public and private property to natural hazards;

F.A.C. 9J-5.012 (3)(c)(5) Post-disaster redevelopment including policies to: distinguish between immediate repair and cleanup actions needed to protect public health and safety and long-term repair and redevelopment activities; address the removal, relocation, or structural modification of damaged infrastructure as determined appropriate by the local government but consistent with federal funding provisions and unsafe structures; limiting redevelopment in areas of repeated damage; and, policies for incorporating the recommendations of interagency hazard mitigation reports, as deemed appropriate by the local government, into the local government’s comprehensive plan when the plan is revised during the evaluation and appraisal process;

F.A.C. 9J-5.012 (3)(c)(6) Identifying areas needing redevelopment, including eliminating unsafe conditions and inappropriate uses as opportunities arise; ... 

State statutes and rules as well as the county comprehensive plan were used in the development of the new Post-disaster Redevelopment Plan.

D. Planning Assumptions

The Pinellas County Recovery Annex of the Comprehensive Emergency Management Plan does designate three overlapping periods of recovery; the Immediate Emergency Period, the Short Term Restoration Period, and the Long Term Reconstruction Period. Each one is listed below along with an estimated length of time and a description of anticipated actions and activities. The length of time for each of these periods will vary depending upon the severity of the disaster and the local capacity for recovery.
1. **Phases of Disaster Response and Recovery**

**Immediate Emergency Period:** This period begins immediately following the emergency and extends up to one week depending on the extent of impact. Operations focus on actions which protect public health and safety, including, but not limited to, search and rescue, immediate debris clearance, security, medical care of injured, restoration of services; emergency transportation, shelter and mass feeding, inter-governmental resource distribution; proposed building moratorium (of adopted), and the activation of the Post-disaster Redevelopment Task Force.

**Short Range Restoration Period:** This period commences shortly after the emergency and may continue for several weeks. Operations focus on actions which will return the County to a relative state of normalcy, including, but not limited to, damage assessment, request for Presidential Disaster Declaration, establishment of disaster assistance programs, and repair to slight and moderate damaged structures.

**Long Range Reconstruction Period:** This period also begins shortly after the disaster and extends until all physical property and social/economic processes return to a stable acceptable pre-disaster level. Actions occurring during the redevelopment period normally include, but are not necessarily limited to, reconstruction of destroyed structures; repair of major damaged structures; evaluation of existing hazard mitigation methods and alternatives. Evaluation of public infrastructure redevelopment, restoration of other services, acquisition of damaged/destroyed property, evaluation of County resources, implementation of economic recovery strategies, continuation of temporary building moratoria if deemed appropriate, issuance of findings and recommendations of the Post-disaster Redevelopment Task Force to the Board of County Commissioners, and continuation of work by Post-disaster Redevelopment Task Force, if deemed appropriate.

Most efforts and attention are focused on the actual emergency period of the Disaster Risk Management Cycle. While it is very important to plan for this phase, and the decisions made during this time can have an impact on future recovery efforts, Figure 1.1 illustrates the complexity of issues during the recovery period. Unfortunately, the recovery period does not receive as much attention until communities are forced to face these decisions in an ad hoc manner. Pre-planning during the normal state, or “blue skies” is critical to wise decision-making during the recovery period that implements the overall vision for the community.
Figure 1.1 Disaster Risk Management Cycle

The DISASTER RISK MANAGEMENT CYCLE (DRMC)

Source: Polk County PDRP, 2010

Figure 1.2 Potential Timeline for A Major Disaster Scenario

Adapted from: Southern California Earthquake Preparedness Project, 1991
2. Milestones for Transitioning Between Post-Disaster Phases

Probable Post-disaster Phased Activity for a Major Disaster Scenario. The length of time of the various post-disaster phases will vary with each disaster. This may be due to the variations between disaster impacts or the circumstances of the community at the time the disaster hit. For instance, during an economic recession, a physical disaster would take a longer time to recover than if the economy was very strong at the time of the disaster. In addition, the phases overlap each other and there is no clear distinction when one phase ends and another begins. This is especially the case when the jurisdiction is in the midst of recovery efforts.

There are many activities associated with the PDRP that must be prepared for or considered in the early months after a disaster occurs or opportunities could be lost for long-term redevelopment. Even within the long-term redevelopment phase there are going to be transitions that should be identified because they demonstrate progress toward a return to normalcy. The following defines the different phases and gives examples of milestones within each phase to help in determining the transitions between phases.

Emergency Response
As discussed, the Emergency Response period includes activities that address the immediate and short-term effects of an emergency or disaster. Response activities are contained within the Emergency Support Functions of the Comprehensive Emergency Management Plan and include immediate actions to save lives, protect property, meet basic human needs, and begin to restore water, sewer, and other essential services.

During the Response period, a determination of whether the PDRP should be activated will be the only implementation activity.

Milestones that typically mark the end of the Response period include:
- Major streets are cleared of debris to allow for restricted travel;
- Reentry is allowed or at least temporary reentry of the public to assess damage to their personal property; and
- Curfews are reduced or lifted (if a minor disaster).

Short-term Recovery
As presented, the Short-term Recovery period encompasses such activities as damage assessments, public information, transition from shelters to temporary housing, utility restoration, and debris clearance. Short-term recovery does not include the redevelopment of the built environment, economic sector, or normal social networks. Emergency repairs and minor reconstruction, however, will occur during this phase as well as decisions that may affect long-term redevelopment. Long-term implications are where the PDRP plays an important role during short-term recovery. Many of the
decisions that will shape how long-term redevelopment occurs must be made during this period.

A short-term recovery milestone that is important for the PDRP will be the availability of the results of damage assessments. The PDRP staff and stakeholders will want to review these to assist in making decisions about how to proceed with PDRP implementation. For instance, damage assessment reports will be necessary in identifying candidate properties for acquisition.

Milestones that may mark the end of the Short-term Recovery period include:

- Power and water is restored to all but the destroyed structures;
- Schools are reopened or temporarily relocated; and
- Most of the road network and traffic signalization is operational.

Long-term Redevelopment
There are three major components to the Long-term Redevelopment period:

1. **Reconstruction** – The long-term process of rebuilding a community’s destroyed or damaged housing stock, commercial and industrial buildings, public facilities, and infrastructure to similar levels and standards as existed before the disaster.

2. **Holistic Long-term Recovery** – The recovery of the economy and quality of life factors within the community, including such things as employment opportunities, social networks, cultural events, environmental quality, and educational and recreational opportunities.

3. **Community Enhancement** – The process of going beyond restoring all aspects of the community to normal functions by creating conditions improved over those that existed before the disaster. Community enhancement is characterized by activities such as implementing hazard mitigation projects during rebuilding, strengthening building codes, changing land use and zoning designations, improving transportation corridors, building more affordable housing, and developing new economic opportunities.

The PDRP plays an integral role in all of these components and is the lead document for guiding these efforts. Part of the communication strategy of the PDRP should be to track recovery progress during the post-disaster, long-term phase using indicators that can be tied to projected milestones or goals. This will assist staff and stakeholders in assessing the appropriate timeframe for post-disaster implementation activities within each disaster phase.
Milestones that may show a successful completion of the Long-term Redevelopment period include:

- Replacement of housing stock adequate for the post-disaster population resulting in ability to remove temporary housing;
- Economic indicators show unemployment has stabilized at a rate near pre-disaster levels or comparative to other similar locations;
- 70% or more of businesses have reopened, remained in business for at least 3 months or have been replaced; and
- Percent of population dependent on disaster assistance and social assistance programs decreased to near pre-disaster levels.

3. **Post-Disaster Deactivation**

The length of time for which plan activation is needed will depend on the level of the disaster. The PDRP staff and/or stakeholder leaders should recommend deactivation to their County Commission and/or municipal councils based on their combined expertise and training pertaining to redevelopment and the ongoing evaluation of redevelopment progress with which they are charged. Considerations for deactivation should include whether the PDRP actions for post-disaster implementation, or new ones determined after the event, have been accomplished satisfactorily or if redevelopment has reached an acceptable milestone and can be continued without the oversight of the PDRP staff and designated stakeholder leadership.

Figure 1.3 also illustrates the disaster management cycle focusing on the inter-relationship of Pre-Disaster Mitigation and Preparedness, Emergency Response, Short-term Recovery and Long-term Redevelopment.
The disaster management cycle has overlapping phases with imprecise transition periods. Long-term, post-disaster redevelopment occurs between short-term recovery and the return to “blue skies”. The PDRP is implemented in more than just this phase of the cycle though. During blue skies, the Plan is prepared and exercised and pre-disaster actions are implemented. After a disaster, the Plan is activated and actions related to guiding short-term recovery outcomes and transitioning to long-term redevelopment are implemented during the Emergency Management phase.

4. Multi-Jurisdictional Approach

Critical for the success of the Pinellas PDRP is the recognition of the 24 municipalities within the county and the need for collaboration and coordination with these independent entities. Successful implementation will rely on the ability to make decisions in the post-disaster environment and communication between and among different levels of government as well as the citizens.

Municipal, regional and county-wide entities were represented on the Steering Committee and Working Groups. Although the scope of the project was focused on unincorporated Pinellas County, the intent was to provide a county-wide guidance for municipalities and therefore, that input was essential. Each community brings similarities as well as a unique agenda to the planning process, so it was incumbent upon the Steering Committee and Work Groups to address all concerns and seek consensus among the participants.

5. Integration with Other Plans

The objective of the PDRP is to guide the redevelopment decision-making process in a manner consistent with the local government comprehensive plans, the Local Mitigation Strategy (LMS), and the Comprehensive Emergency Management Plan (CEMP). Other plans such as “Pinellas by Design”, Pinellas County’s Economic Redevelopment Plan, the MPO Long-Range Transportation Plan and local community redevelopment plans also provide guidance and vision for the future of the county. Relevant land development codes and ordinances including zoning codes, building codes, floodplain management regulations will have a significant impact on post-disaster redevelopment decisions. Therefore, it is essential that the PDRP planning process provides an opportunity to examine how local plans and codes will impact redevelopment and to recommend changes, where necessary that could result in a faster or more sustainable recovery.

Figure 1.4 below identifies the implementation of existing plans and the PDRP in the Disaster Cycle Phases and the inter-relationship of these plans.

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1 Post-disaster Redevelopment Planning: A Guide for Florida Communities, FDCA, FDEM, 2010
Figure 1.4 Inter-relationship of Local Plans with the Disaster Cycle Phases

Integrate Post–Disaster Redevelopment Issues into the Comprehensive Plan
Integrate the Post–Disaster Redevelopment Issues into the LMS
Expand the Recovery Annex of the CEMP to address Post –Disaster Redevelopment Issues

6. Sustainability and Quality of Life

Quality of Life, resiliency and sustainability factors encompass a myriad of topics that vary in every community. What is important to residents (current and future) would include the restoration of safer homes, more cohesive neighborhoods, first-rate schools and child care, attractive recreation and cultural activities, access to quality health care, resilient infrastructure and transportation systems all working together in a thoughtfully planned and designed community to provide for a health and safe environment. Restoring quality of life after a disaster is an imperative step to attract displaced residents, eventually revive population growth and rebuild social networks.

Incorporating these goals into redevelopment plans will provide opportunities to address inefficiencies and maximize mitigation (flood and wind) and economic redevelopment strategies. The PDRP is also a chance to look at opportunities to implement sustainability goals such as energy and water conservation critically important in the 21st century.

3 Post-disaster Redevelopment Planning: A Guide for Florida Communities, FDCA, FDEM, 2010
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A. Overview of Post-Disaster Redevelopment Planning

The Post-disaster Redevelopment Plan (PDRP) identifies policies, operational strategies, and roles and responsibilities that will guide decisions that affect long-term recovery and redevelopment of the community after a disaster. The plan emphasizes seizing opportunities for hazard mitigation and community improvement consistent with the goals of local comprehensive plans with participation of Pinellas County citizens. Recovery topics addressed in the plan include business resumption and economic redevelopment, housing repair and reconstruction, infrastructure restoration and mitigation, short-term recovery actions that affect long-term redevelopment, sustainable land use, environmental restoration, and financial considerations as well as other long-term recovery issues identified by the community.

B. Stakeholder Organization and Committee Structure

The PDRP is designed to be an action-oriented plan outlining, where appropriate and applicable, a countywide implementation approach. Through a Steering Group representing county, municipal, non-profit and private stakeholders and a flexible Work Group structure, Action Plans were developed for different subject areas that can be implemented, as needed. The various Action Plans were integrated into an overall PDRP which will be adopted by the Board of County Commissioners (Board). The Pinellas County PDRP includes Action Plans for land use and housing; construction and permitting; economic redevelopment; environmental restoration and infrastructure. The PDRP would also include Action Plans for health and human services, public outreach and financial administration. See Figure 2.1 for the PDRP Organizational Structure.
1. **PDRP Steering Group**

The PDRP Steering Group’s major responsibility is to provide direction to the work groups, as well as review the activities and reports of all work groups within the Task Force. The Steering Group will coordinate the preparation of a document that weaves together the work of all work groups into a well-integrated updated strategic plan known as the “*Pinellas County Post-Disaster Redevelopment Plan*” that will be presented to the Board for re-adoption. The Steering Group will also be responsible for the ongoing maintenance of the PDRP.
The PDRP Steering Group is composed of the following members or their representatives:

<table>
<thead>
<tr>
<th>Representative</th>
<th>PDRP Role</th>
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<tbody>
<tr>
<td>Commissioner</td>
<td>Steering Group Chair</td>
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<tr>
<td>County Administrator</td>
<td>Steering Group</td>
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<tr>
<td>Emergency Management Director</td>
<td>Steering Group</td>
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<tr>
<td>County Attorney</td>
<td>Steering Group</td>
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<tr>
<td>Communications Director</td>
<td>Chair, Public Outreach Work Group and Project Support</td>
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<tr>
<td>Planning Department Director</td>
<td>Chair, Land Use, Housing and Mitigation Work Group</td>
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<td>Building and Development Review</td>
<td>Chair, Environmental Restoration</td>
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<tr>
<td>Services Director</td>
<td>Chair, Infrastructure Restoration</td>
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<tr>
<td>Community Development Director</td>
<td>Co-Chair, Construction, Permitting and Historic Preservation Work Group</td>
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<td>Office of Management and Budget</td>
<td>Chair, Financial Administration Work Group</td>
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<td>(OMB)</td>
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<tr>
<td>Dept. of Environmental and Infrastructure Director</td>
<td>Co-Chair, Infrastructure Restoration</td>
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<td>Utilities Director</td>
<td>Co-Chair, Infrastructure and Environmental Restoration Work Group</td>
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<td>Health &amp; Human Services Director</td>
<td>Chair, Health and Human Services Work Group</td>
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<td>Health &amp; Human Services Coordinating Council</td>
<td>Health and Human Services Work Group</td>
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<tr>
<td>Pinellas County Health Department Director</td>
<td>Co-Chair, Health and Human Services Work Group</td>
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<td>Economic Development Director</td>
<td>Chair, Economic Redevelopment Work Group</td>
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<tr>
<td>Property Appraiser</td>
<td>Steering Group</td>
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<tr>
<td>St. Pete/Clearwater Convention and Visitors Bureau</td>
<td>Steering Group</td>
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<tr>
<td>Chamber of Commerce Representative</td>
<td>Steering Group</td>
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<tr>
<td>City Managers Group Representative</td>
<td>Steering Group</td>
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</tbody>
</table>
2. Land Use, Housing and Mitigation Work Group

This Work group will provide recommendations to the Steering Group addressing issues related to rebuilding priorities, temporary building moratorium on building, reconstruction and repair, non-conforming use policy, County build-back policy, redevelopment in the coastal high hazard area, and mitigation before a disaster to reduce risk from future storms; the use and placement and removal of temporary direct disaster housing, land acquisition, redevelopment projects that support economic redevelopment, identification of priority redevelopment areas, neighborhood preservation and gentrification issues, affordable housing, historic structures, criteria for temporary uses to be consistent with current and future uses, private property rights, and landscape management. The Land Use Work Group includes, but is not limited to, the following members or their representatives:

- Planning Director, Chair
- Building and Development Review Services (BDRS) Director
- County Attorney
- Emergency Management Director
- Economic Development Director
- Community Development Director
- Environmental and Infrastructure Director
- Real Estate Management Director
- Risk Management Director
- Pinellas Planning Council (PPC)
- County Extension Services
- Representative(s) of the private sector
- Municipal Representatives
  - City of Seminole,
  - City of Dunedin
  - City of Pinellas Park
  - Town of Belleair
  - Town of Redington Shores
  - City of Indian Rocks Beach
  - City of Treasure Island
  - City of Belleair Beach
  - City of St. Pete Beach
  - City of Gulfport
  - City of Tarpon Springs
  - City of Clearwater
This Work group’s tasks would help to implement Policy 1.1.6., Policy 1.1.8., Policy 1.1.9., Policy 1.1.10., and Policy 1.1.11. of the Coastal Management Element of the Pinellas County Comprehensive Plan. (See Attachment 4-1)

3. Construction, Permitting and Mitigation Work Group

This group will provide recommendations to the Steering Group on the permitting of temporary housing, emergency repairs, repair and restoration of buildings in unincorporated Pinellas County following a major disaster. They will address issues regarding disaster permitting, temporary moratoria, temporary emergency repairs, contractor licensing, contractor fraud, adequate construction materials and available contractors and skilled construction workers, code enforcement, blight and abandoned homes, mitigation during rebuild and repair, and funding assistance and insurance problems. The Construction, Permitting and Mitigation Work Group includes, but is not limited to, the following members or their representatives:

- Community Development Director, Co-chair
- Building and Development Review Services Director, Co-chair
- Planning Department Director
- Emergency Management Director
- Real Estate Management Director
- Environmental Management –Code Enforcement Manager
- Pinellas County Construction and Licensing Board
- Justice and Consumer Services Director
- Representative of the Construction Industry
  - John Tillinghast Roofing
- Lending Industry
  - McCaughan Mortgage Co
- Florida Dept. of Financial Services
- Habitat for Humanity
- Municipal Representatives
- Pinellas County Historic Preservation Board representative

This Work group’s tasks would help to implement Policy 1.1.5. Policy 1.1.6., and Policy 1.1.8. of the Coastal Management Element of the Pinellas County Comprehensive Plan. (See Attachment 4-2.)
4. Health & Human Services Work Group

This Work group would make recommendations to the Steering Group for the provision of essential services to disaster victims and emergency support personnel. Issues to be considered by the health subcommittee include public health, continuity of medical care through hospitals, clinics and medical office restoration, temporary housing permitting issues, and coordination of emergency response and support personnel, adult living facilities and nursing home safety, Special Needs long-term assistance, and the retention and recruitment of medical personnel.

The social services subcommittee will address issues related to behavioral/mental health assistance, low income assistance, public transportation restoration/ improvement, homeless programs, public safety service levels re-established, children/family services, daycare/after-school program restoration, schools opened, recreation/cultural activities restored, coordination/assistance for non-governmental organizations (NGOs) and volunteers, and Unmet Needs (Long Term Recovery Organization). The Health and Human Services Work Group includes, but is not limited to, the following members or their representatives:

- Health and Human Services Director, Chair
- Health & Human Services Coordinating Council/ Disaster Recovery Leadership Network (DRLN)
- American Red Cross Representative
- Pinellas County Justice and Consumer Services
- Representatives from COAD: Community Based NGOs (United Way, Catholic Charities, Salvation Army)
  - Central Florida Behavioral Health Network
  - Early Learning Coalition
  - Salvation Army
- Community Development Director
- Pinellas County Health Department Director
- MMRS Representative
- Hospital Representative
- Pinellas County Emergency Management
- 211 Tampa Bay Cares
- United Way of Tampa Bay
5. Economic Redevelopment Work Group

This Work Group provides recommendations to the Steering Group/Task Force regarding the quick and orderly recovery of the County’s business community, business retention, small business assistance, business attraction/ incentives to replace failed businesses, temporary business space, workforce on-site temporary housing, economic diversification, priority industries/employers, employment assistance and job training, tourism renewal, community redevelopment and other economic/multi-use redevelopment projects, and use of local businesses and workers in recovery operations. The economic redevelopment Work group includes, but is not limited to the following members or their representatives:

- Economic Development Director, Chair
- Convention and Visitors Bureau Director
- Planning Department Director
- Tampa Bay Regional Planning Council
- St. Petersburg-Clearwater International Airport Director
- Chambers of Commerce Representatives
  - Clearwater Beach
  - Clearwater Regional

It is envisioned that this Work group will focus on Health and Human Services as interrelated, but separate components.
6. Infrastructure Restoration Work Group

This Work Group makes recommendations to the Steering Group regarding infrastructure restoration. The Infrastructure subcommittee addresses infrastructure priority and repair/mitigation/improvement, including transportation, commercial transport restoration (rail and bus), airport restoration, potable water, sewer, stormwater repair/mitigation/improvement, coordination with power, natural gas and telecom company restoration efforts, solid waste, debris management, and public facility repair/mitigation. The Infrastructure
Restoration Work Group includes, but is not limited to, the following representatives:

- Planning Department Director, Chair
- Public Works and Transportation
  - Public Works
  - Highway
  - Transportation
  - Airport
  - Utilities – Solid Waste
  - Utilities - Water
- Emergency Management Director
- Real Estate Management Director
- St. Petersburg-Clearwater Airport Director
- Business Technology Director
- FDOT District VII
- Progress Energy
- Pinellas Suncoast Transit Authority (PSTA)
- SWFWMD
- TECO Energy
- Tampa Bay Water
- Brighthouse Networks
- Verizon

This Work Group’s task would help to implement Policy 1.1.4., Policy 1.1.5., Policy 1.1.7., Policy 1.1.9., and Policy 1.1.10 of the Coastal Management Element. (See Attachment 4-2)

7. **Environment Restoration Work Group**

This Work Group makes recommendations to the Steering Group regarding environmental restoration. The Environmental subcommittee addresses coastal/waterway debris removal, potential contamination and pollution, hazardous materials/debris contaminates, wetland/beach restoration, environmental review of temporary housing or debris sites, post-disaster mitigation of natural resource loss and the restoration of recreation/cultural activities in the Pinellas community.
The Environmental Restoration Work Group includes, but is not limited to, the following representatives:

- Planning Department Director, Chair
- Environmental and Infrastructure Director
  - Environmental Management Services
  - Utilities – Water
  - Utilities - Solid Waste
- Pinellas County Health Department
- Cooperative Extension Services
- Public Safety Services - Fire (for Hazmat)
- Audubon
- TBRPC Agency on Bay Management (ABM)
- SWFWMD
- FWC
- Tampa Bay NEP
- DEP
- Big C
- US Coast Guard
- Suncoast Sierra Club
- Animal Services Director

8. Financial Administration Work Group

This Work group would make recommendations to the Steering Group for development of pre-established methods regarding the coordination of private and public funding, projected revenue shortfalls, pre-developed options for sustainability by cutting services or finding other revenue sources, and retention of high bond ratings. The Financial Administration Work Group includes, but is not limited to, the following representatives:

- Office of Management & Budget Director, Chair
- Fiscal Representatives from All County Departments
- Risk Management Department
- Economic Development Director
- Emergency Management Director
- PROUD: Representatives from Community Based NGOs (Red Cross, United Way, Catholic Charities, Salvation Army)
- Long Term Recovery Committee Fiduciary Agent (dealing with Unmet Needs)
9. The Public Outreach Work Group

This Work Group will make recommendations to the Steering Group for the development of pre-established messages and outreach for effective communication of recovery status/available assistance, population return and transparency in recovery decisions. It is recognized that this will be a significant challenge and the county must insure the capability to communicate the intricacies of recovery operations and post-disaster redevelopment in the aftermath of a major disaster. When the situation is tense, communication and infrastructure compromised, resources limited, the information will need to be clear, concise and consistent to foster confidence in the government and the overall recovery of the community.

This work group also worked with the Steering Committee and its Work Groups to ensure public participation in the planning process through the websites, newsletters and email outreach.

The Public Outreach Work Group includes, but is not limited to, the following representatives:

- Communications Director, Chair
- Planning Department
- Emergency Management Department
- Economic Development Department
- PIO Regional Group

C. Public Participation and Outreach in the Planning Process

As with any project which has the potential to affect Pinellas County citizens, public outreach and participation in the process is essential. Engaging stakeholder and public participation in the PDRP is an integral component of the planning process. As the PDRP was developed, stakeholders including private sectors and non-governmental organizations were encouraged to participate in the work group discussions. In addition a website was developed (www.postdisasterplan.org) which captured the Work Group meeting schedules, agendas and minutes and draft documents as they were developed as well as the final Post-disaster Redevelopment Plan.
On the website, an introductory video was provided which explained the goals and objectives of the PDRP and the need for such planning to ensure Pinellas County will build back “safer, stronger and better” following a disaster. This video was presented at disaster preparedness, civic associations and council and city commission meetings.

The PDRP was also featured in County newsletters (County Connections and Emergency Management electronic newsletters and alerts). Citizens were driven to the website for more information and given contact information within the Planning Department. Other efforts to involve the public in the maintenance, evaluation and revision process will be made as necessary. These efforts may include:

- Advertising meetings of the PDRP Steering Committee or Work Groups in local broadcast media, newspapers, public bulletin boards and County office buildings/ libraries;
- Designating additional citizen volunteers and private sector representatives as official members;
- Utilizing the website to advertise any maintenance and/or periodic review activities taking place; and
- Keeping copies of the plan in public libraries.
CHAPTER 3
VULNERABILITY ANALYSIS

This section discusses the vulnerability of Pinellas County to natural and man-made hazards. It consists of the following four subsections:

- County Socio-Economic Profile
- Hazard Risk Overview
- Scenario-based Vulnerability Analyses
- Quantifying Vulnerabilities
  - Structures
  - Debris
  - Social Impacts
  - Economic Loss

The purpose of the vulnerability analysis is to provide estimations of disaster scenario impacts that would affect long-term redevelopment so that actions to address those impacts can be anticipated and included in the PDRP. Much of the data collection and vulnerability analysis is based upon the work conducted for other documents including the Comprehensive Emergency Management Plan (CEMP), the Local Mitigation Strategy (LMS), the Pinellas County Comprehensive Plan, the Tampa Bay Region Evacuation Study (Statewide Regional Evacuation Study for the Tampa Bay Region, 2010) and the Tampa Bay Catastrophic Plan. The hazard vulnerability analysis for the PDRP relied heavily upon these documents as well as the expertise of the stakeholders.

A. Pinellas County Socio-Economic Profile

Pinellas County is a peninsula located on the west central coast of Florida, bordered on the west by the Gulf of Mexico, and on the east and south, by Tampa Bay. It is the second smallest county in Florida, based on geographic size, with a land area of 280 square miles or 179,314 acres and is the most densely populated. Pinellas County has a total of 587.77 miles of coastline.

1. Natural Features:
The elevation of Pinellas County ranges from Mean Sea Level (MSL) to 97 feet. The County is divided into five different topographic features

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4 Pinellas County Local Mitigation Strategy, 2009
that also correspond to elevation: the ridge, which consists of gently rolling hills, with elevations between 40 and 97 feet; the transition area, with elevations between ten and 40 feet; the flood plain, with elevations between zero and ten feet; the barrier islands, with elevations between zero and ten feet; and the coastal filled areas, that have elevations between zero and five feet. The filling of selected waterfront areas in Pinellas County began in 1920, as a means of providing commercial and residential real estate for construction. Since that time, approximately 4,790 acres of water surrounding the Pinellas Peninsula have been filled. The most extensive filling was done in Boca Ciega Bay, where 25% of the Bay, or approximately 2,506 acres were filled. This practice has been discontinued.

2. **Rivers, Creeks and Lakes:**

Pinellas County has only one river, the Anclote. It exits into the Gulf of Mexico and is located in the extreme northern portion of the County, in the Tarpon Springs vicinity. There are numerous creeks and drainage channels in the county.

Lake Tarpon is the largest lake in the County, covering 2,534 acres. It is fed by groundwater and at the surface by Brooker Creek. Until 1967, the lake was connected hydrologically to Spring Bayou (eventually flowing into the Anclote River) but was subsequently dammed off by the US Army Corps of Engineers in order to control saltwater intrusion into Lake Tarpon. A controlled height canal is an outfall for the lake into Tampa Bay near the City of Safety Harbor and is used to maintain the water level at approximately 3.1 feet above mean sea level. Lake Seminole is 980 acres in surface area and was formerly an estuary at the end of Long Bayou. Only about five feet deep, many outfalls from the western shoreline empty into the lake. Lake Maggiore is 380 acres in size and ten feet deep. Other large lakes in the County include: Salt Lake, 220 acres; Lake Del Oro, 75 acres; Alligator Lake, 77 acres; Lake St. George and Lake Chautauqua, each about 50 acres.

3. **Islands:**

There are a series of barrier islands in close proximity to the mainland coast. These islands extend about 34 miles along the western coastline of the County. With the exception of Caladesi Island and Anclote Key, all barrier islands are connected to the mainland by a series of 14 causeways and bridges. With the exception of Honeymoon and Caladesi Islands, the barrier islands are densely populated and completely built out. Their population consists of
single-family houses, hotels/motels, condominiums and mobile home parks.

4. Climate:
The climate in Pinellas County is subtropical marine, characterized by long, humid summers and mild winters. Rainfall is abundant, especially during the summer months. The annual average rainfall is 51.9 inches, mostly occurring during August through September. The driest months of the year are May and November. Snowfall in Pinellas County is rare. The maximum recorded monthly accumulation of snow was two inches in January, 1977.

5. Population:
Pinellas County has the sixth largest population in Florida, with an estimated 916,542 permanent residents, 78,340 seasonal residents, and 90,225 tourists for a total of 1,085,107 persons. Pinellas County hosts an annual total of 5.3 million tourists throughout the year. The current population density is 3,347 persons per square mile. A large percentage of residents live in coastal communities. It is estimated that by the year 2030, the total county resident population will be 937,500-1,078,100.

6. Group Quarters Population:
In 2000, there were 22,880 Pinellas County residents living in group quarters (2.48% of the population); 13,514 of these were institutionalized in correctional facilities, nursing homes, and juvenile institutions, while the other 9,366 were in other group quarters, such as college dormitories, group homes and military quarters. The remaining 898,602 residents lived in households. In 2006, the group quarters population had increased slightly to 23,955 about 2.59% of the total.

7. Housing Units by Type:
Of the 481,573 housing units in Pinellas County at the time of the 2000 Census, 49.24% were single-family, 40.09% were multi-family, and the other 10.67% were mobile homes, boats, recreational vehicles (RVs) or others used as dwelling units. Of those units, 66,605 (13.83%) were vacant, with the highest vacancy rates found among multi-family buildings (condos, many of which are on the barrier

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5 2010 Census
6 2010 Census; Seasonal and Tourist Population Projections, Pinellas County Planning Dept. 2011
7 2009 BEBR
8 2009 BEBR
island) and among mobile homes. While significant in number, mobile homes, boats and RVs are a smaller component of the housing stock in Pinellas than in the State of Florida as a whole, where 12.0% of all units were classified in this category.

According to the 2009 ACS, the total number of housing units in the County increased by 17,989 while the number of vacant units rose to 105,120 (21% of the total). In the same period, the number of mobile homes, boats, recreational vehicles and other units declined slightly to 47,054 units (9.4% of the total).

8. Occupied Housing Units (Households):
There were 414,968 occupied housing units (households) in Pinellas County in 2000, 70.8% of which were occupied by owners and 29.2% by renters. By 2009 the number of occupied households had fallen to 395,295^9, and the proportion of owner occupancy fell slightly to 68.9%.

9. Household Size:
In 2000, the average household size (number of persons per occupied unit) in Pinellas County was 2.17, which was lower than the State of Florida average of 2.46. Renters, who are mostly concentrated in multi-family units, had a lower household size (2.02) than owners (2.23), who are more heavily concentrated in single-family units. The average household size rose slightly between 2000 and 2009 in Pinellas County to 2.15 while the State of Florida rose slightly to 2.49. The average size of renter households rose to 2.19 and in owner occupied housing remained at 2.23 in 2009.

10. Seasonal Dwelling Units:
In 2000 there were 37,029 vacant dwelling units in Pinellas County that were for seasonal, recreational or occasional use (Map H1), representing 7.7% of all units. By 2006 (ACS) this number had increased to 45,774 units (9.2%). Between 2005 and 2006, there was a significant increase in vacant rental units and the number of vacant units “for sale” almost doubled and “other vacant” increased from 5,493 in 2000 to 13,056 in 2006. It is assumed these fluctuations are a result of the “soft” real estate market rather than a shift in permanent/seasonal units. According to licensing records of the Florida Department of Business and Professional Regulation (DBPR), as of August 2011 there were 19,143 hotel/motel/ bed and breakfast inn rooms in Pinellas County. In addition there were an additional

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^9 American Community Survey, 2009
3,966 resort units. Together, these units house a seasonal population in addition to the permanent resident population estimated above. Considering that many of these units are in vulnerable areas, the proportion of seasonal units and hotel/motel units that are occupied at any point in time will have an important impact on the total population that may participate in an evacuation.

11. **Age Composition:**
In 2000, the population of Pinellas County included 208,183 people who were at least 65 years old, which represented 20.72% of the total population; this compared to 17.6% for the State of Florida as a whole. Almost a third of these elderly residents (65,857) lived alone, and many lived in coastal areas and mobile home communities. Moreover, 29,773 residents (3.23% of the total) were at least 85 years old. By 2009 (ACS), the elderly population had increased to 263,614 (21% of the total population) and 4% were at least 85 years old. The number of households with residents over the age of 65 living alone had decreased to 61,652. During the same period, 133,869 Pinellas County children were of school age (5 to 17 years old), up from 132,161 in 2000. In addition approximately 52,838 were enrolled in college or graduate school up 5% from 2006.

12. **Race / Ethnicity:**
The Hispanic or Latino population, which includes those born abroad as well as those born into Hispanic families in the United States, included 42,128, residents (4.6% of the total population) in 2000, and increased by another 19,519, to 61,647 (7.4%) of the total, in 2009. The Black or African American population also grew significantly, from 82,384 (8.94% of the total) in 2000 to 99,082 (10.9%) in 2009. Each of these two groups is projected to grow to about 24.14% of the County’s population in 2015, while the White, non-Hispanic population declines to 75.87%.

13. **Land Use:**
Pinellas County has approximately 22% land area in High Density Residential; 9% in Medium Density and 20% is considered Low Density. A relatively high percentage (13%) is held in Conservation (including Honeymoon Island and other County Parks) with 7% in Public / Government properties and 8% Recreational including the Pinellas Trail which will ultimately link the entire county in bike and pedestrian facilities. Approximately 5% is Commercial property and 6% Industrial.

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10 American Community Survey, 2009
### Table 3.1 Dwelling Unit, Population and Vehicle Estimates and Projections, 2006, 2010 and 2015

<table>
<thead>
<tr>
<th>Population and Vehicles by Type of Dwelling Unit</th>
<th>2006</th>
<th>2010</th>
<th>2015</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Site-Built Homes</strong></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Total Dwelling Unit Site-Built Homes - Total</td>
<td>494,501</td>
<td>503,690</td>
<td>515,445</td>
</tr>
<tr>
<td>Percent of Site-Built Homes Occupied during Hurricane Season - Total</td>
<td>86.1</td>
<td>86.0</td>
<td>86.0</td>
</tr>
<tr>
<td>Occupied Site-Built Homes - Total</td>
<td>425,852</td>
<td>433,344</td>
<td>443,295</td>
</tr>
<tr>
<td>Persons per Occupied Site-Built Home - Total</td>
<td>2.2</td>
<td>2.2</td>
<td>2.2</td>
</tr>
<tr>
<td>Population in Site-Built Homes - Total</td>
<td>922,734</td>
<td>944,342</td>
<td>971,631</td>
</tr>
<tr>
<td>Vehicles per Occupied Site-Built Home - Total</td>
<td>1.7</td>
<td>1.7</td>
<td>1.7</td>
</tr>
<tr>
<td>Vehicles in Site-Built Homes - Total</td>
<td>708,061</td>
<td>719,930</td>
<td>736,125</td>
</tr>
<tr>
<td><strong>Mobile Homes</strong></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Total Dwelling Unit Mobile Homes</td>
<td>48,089</td>
<td>48,035</td>
<td>48,035</td>
</tr>
<tr>
<td>Percent of Mobile Homes Occupied during Hurricane Season - Total</td>
<td>56.3</td>
<td>56.2</td>
<td>56.2</td>
</tr>
<tr>
<td>Occupied Mobile Homes</td>
<td>27,053</td>
<td>27,005</td>
<td>27,005</td>
</tr>
<tr>
<td>Persons per Occupied Mobile Home</td>
<td>1.6</td>
<td>1.6</td>
<td>1.6</td>
</tr>
<tr>
<td>Population in Mobile Homes</td>
<td>44,477</td>
<td>44,349</td>
<td>44,349</td>
</tr>
<tr>
<td>Vehicles per Occupied Mobile Home</td>
<td>1.1</td>
<td>1.1</td>
<td>1.1</td>
</tr>
<tr>
<td>Vehicles in Mobile Homes</td>
<td>29,172</td>
<td>29,070</td>
<td>29,070</td>
</tr>
<tr>
<td><strong>Hotel-Motel Units</strong></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Hotel-Motel Units</td>
<td>19,025</td>
<td>19,025</td>
<td>19,025</td>
</tr>
<tr>
<td>Hotel-Motel Occupancy Rates</td>
<td>79.0</td>
<td>79.0</td>
<td>79.0</td>
</tr>
<tr>
<td>Occupied Hotel-Motel Units</td>
<td>15,026</td>
<td>15,026</td>
<td>15,026</td>
</tr>
<tr>
<td>Persons per Occupied Hotel-Motel Unit</td>
<td>3.0</td>
<td>3.0</td>
<td>3.0</td>
</tr>
<tr>
<td>Population in Hotel-Motel Units</td>
<td>45,088</td>
<td>45,088</td>
<td>45,088</td>
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<tr>
<td>Vehicles per Hotel-Motel Unit</td>
<td>1.1</td>
<td>1.1</td>
<td>1.1</td>
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<tr>
<td>Vehicles in Hotel-Motel Units</td>
<td>15,786</td>
<td>15,786</td>
<td>15,786</td>
</tr>
<tr>
<td><strong>Group Quarters</strong></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Group Quarters Population</td>
<td>23,845</td>
<td>23,879</td>
<td>23,879</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Household Population</td>
<td>967,211</td>
<td>988,691</td>
<td>1,015,980</td>
</tr>
<tr>
<td>Group Quarters Population</td>
<td>23,845</td>
<td>23,879</td>
<td>23,879</td>
</tr>
<tr>
<td>Total Resident Population</td>
<td>991,056</td>
<td>1,012,570</td>
<td>1,039,859</td>
</tr>
<tr>
<td>Total Households</td>
<td>452,905</td>
<td>460,349</td>
<td>470,300</td>
</tr>
<tr>
<td>Total Vehicles</td>
<td>753,019</td>
<td>764,786</td>
<td>780,981</td>
</tr>
</tbody>
</table>

Source: Pinellas County Metropolitan Planning Organization; Florida DOT, District VII. Published in the *Statewide Regional Evacuation Study for the Tampa Bay Region*, August 2010
14. **Transportation:**
Pinellas County is serviced by five major highways: I-275, US Highway 19, US 19A, US 92, and Highway 60. Other major transportation routes are as follows: Tarpon Avenue/SR582, Tampa Road/752-SR584, Curlew Road/SR586, East Bay/SR686, Ulmerton Road/SR688, Park Boulevard/Gandy Boulevard, CR611, SR580, SR 693 and Gulf Boulevard/SR699.

**Airports** There are three airports located in Pinellas County: the St. Petersburg-Clearwater International Airport which houses the largest Coast Guard Air Station in the country, Albert Whitted Municipal Airport and the Clearwater Airpark. Additionally, in close proximity, in Hillsborough County, are Tampa International Airport and MacDill Air Force Base.

**Bus** There are two bus lines operating in Pinellas County. One bus line, the Pinellas Suncoast Transit Authority with a fleet of 143 buses, provides intra-county public transportation. The other bus line, Greyhound, provides inter-state service. Additionally, the Pinellas County School Board operates a fleet of 573 school buses for the movement of students.

**Railroad** CSX operates a single line freight rail service through mostly industrial areas in Pinellas County. Most of the railway in Pinellas County has been converted into the Pinellas Trail, a recreational thoroughfare that traverses the county.

**Waterways** Pinellas County has two ports: Port of St. Petersburg and Port Tarpon for shallow draft ships. Deep draft ships must use Port Tampa in Hillsborough County or Port Manatee in Manatee County. As Florida's largest, the Port of Tampa handles approximately 50 million tons of cargo per year. The Port of Tampa is also the largest economic engine in West Central Florida. It has an extensive array of terminal facilities encompassing container, bulk, break bulk, ro-ro, project cargoes and cruise passengers, with one million square feet of warehousing and cold storage facilities. There are several smaller ports and terminals throughout Tampa Bay.

The following are significant historical waterway accidents:
- 1980 USCGC Blackthorn and Capricorn both sunk,
- 1980 Summit Venture and the Skyway Bridge with major fatalities,
- 1993 three vessels collided which caused a significant oil spill.
- There have been several groundings with no pollution.
15. Economic Profile

**Labor Force**

<table>
<thead>
<tr>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Labor Force</td>
<td>442,483</td>
<td></td>
</tr>
<tr>
<td>Labor Force % of County Population</td>
<td>48.3</td>
<td></td>
</tr>
<tr>
<td>Number in County Unemployed</td>
<td>51,921</td>
<td></td>
</tr>
<tr>
<td>Unemployment Rate</td>
<td>11.7%</td>
<td></td>
</tr>
</tbody>
</table>

Monthly labor force data are available from the [Florida Agency for Workforce Innovation](https://www.florida.gov).

**Employment by Industry**

<table>
<thead>
<tr>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Natural Resources &amp; Mining</td>
<td>0.0%</td>
<td>1.3%</td>
</tr>
<tr>
<td>Construction</td>
<td>4.9%</td>
<td>5.5%</td>
</tr>
<tr>
<td>Manufacturing</td>
<td>8.2%</td>
<td>4.5%</td>
</tr>
<tr>
<td>Trade, Transportation and Utilities</td>
<td>17.4%</td>
<td>21.2%</td>
</tr>
<tr>
<td>Information</td>
<td>2.0%</td>
<td>2.0%</td>
</tr>
<tr>
<td>Financial Activities</td>
<td>7.4%</td>
<td>6.7%</td>
</tr>
<tr>
<td>Professional &amp; Business Services</td>
<td>17.5%</td>
<td>14.6%</td>
</tr>
<tr>
<td>Education &amp; Health Services</td>
<td>18.3%</td>
<td>21.5%</td>
</tr>
<tr>
<td>Leisure &amp; Hospitality</td>
<td>11.2%</td>
<td>12.9%</td>
</tr>
<tr>
<td>Other Services</td>
<td>2.9%</td>
<td>3.2%</td>
</tr>
<tr>
<td>Public administration</td>
<td>5.2%</td>
<td>6.5%</td>
</tr>
<tr>
<td>Unclassified</td>
<td>0.0%</td>
<td>0.0%</td>
</tr>
</tbody>
</table>

**Average Annual Wage**

<table>
<thead>
<tr>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>All Industries</td>
<td>$39,961</td>
<td></td>
</tr>
<tr>
<td>Construction</td>
<td>$40,344</td>
<td></td>
</tr>
<tr>
<td>Education &amp; Health Services</td>
<td>$43,220</td>
<td></td>
</tr>
<tr>
<td>Financial Activities</td>
<td>$51,542</td>
<td></td>
</tr>
<tr>
<td>Information</td>
<td>$51,601</td>
<td></td>
</tr>
<tr>
<td>Leisure &amp; Hospitality</td>
<td>$20,101</td>
<td></td>
</tr>
<tr>
<td>Manufacturing</td>
<td>$50,831</td>
<td></td>
</tr>
<tr>
<td>Natural Resources &amp; Mining</td>
<td>$23,845</td>
<td></td>
</tr>
<tr>
<td>Other Services</td>
<td>$28,717</td>
<td></td>
</tr>
<tr>
<td>Professional &amp; Business Services</td>
<td>$43,057</td>
<td></td>
</tr>
<tr>
<td>Public administration</td>
<td>$48,135</td>
<td></td>
</tr>
<tr>
<td>Trade, Transportation and Utilities</td>
<td>$34,451</td>
<td></td>
</tr>
<tr>
<td>Unclassified</td>
<td>$40,778</td>
<td></td>
</tr>
</tbody>
</table>

**Major Private Sector Employers**

- **Home Shopping Network**
  - Business Line: Television Broadcasting
  - Number of Employees: 4,000
- **Fidelity Information Svc.**
  - Business Line: Data Processing & Related Services
  - Number of Employees: 4,000
- **Nielsen Media Research**
  - Business Line: All Other Publisher
  - Number of Employees: 3,000
- **Raymond James Financial**
  - Business Line: Securities Brokerage
  - Number of Employees: 2,600
- **Tech Data Corp.**
  - Business Line: Computer & Software Merchant
  - Number of Employees: 2,500
- **Agora Marketing Solutions**
  - Business Line: Other Direct Selling Establishments
  - Number of Employees: 1,800
- **Jabil Circuit Inc.**
  - Business Line: Other Electronic Component Mfg.
  - Number of Employees: 1,700
- **Western Reserve Life Assur.**
  - Business Line: Insurance Agencies & Brokerage
  - Number of Employees: 1,500
- **Ceridian Benefits Services**
  - Business Line: Pension Fund
  - Number of Employees: 1,200
- **Franklin Templeton Invest.**
  - Business Line: Misc. Intermediation
  - Number of Employees: 1,200

---

## TRANSPORTATION

**Federal Interstates**
- I-275, I-175, I-375

**Federal Highways**

**State Highways**

**Railroads**
- CSX

**Nearest Airport with Scheduled Commercial Airline Service:**
- St. Petersburg-Clearwater International Airport

**# Runways**
- 4

**Longest Paved Runway(ft.)**
- 11000

**General Aviation Airports**
- St. Pete Albert Whitted, Clearwater Air Park

**Local Deep Water Port**
- Port of St. Petersburg, Port of Tampa

**Miles to Closest Port**
- 18

## COMMERCIAL/INDUSTRIAL SERVICES

**Electric Companies:**
- Progress Energy
- TECO (Tampa Electric Co.)

**Natural Gas Companies:**
- TECO/Peoples Gas System
- City of Clearwater Utilities

**Telephone Companies:**
- Verizon
- Knology
- Intermedia
- FTS
- Bright House Networks

**Water & Sewer Companies:**
- Pinellas County Utilities
- City of St. Petersburg
- City of Clearwater
- City of Largo
- City of Dunedin

**Existing Industrial Zoned Land**
- Yes
- Number of Acres: 5,299
- Largest Available Contiguous Parcel: 73

**Industrial Parks**
- Yes
- Number of Acres: 0
- Largest Available Contiguous Parcel: 0

**Foreign Trade Zones**
- Yes
- Zone Number(s): 193

## EDUCATION

<table>
<thead>
<tr>
<th>Public Schools</th>
<th>Teachers</th>
<th>Enrollments</th>
</tr>
</thead>
<tbody>
<tr>
<td>2</td>
<td>5,624</td>
<td>107,882</td>
</tr>
</tbody>
</table>

**Private Schools Available:** Yes

**POST SECONDARY EDUCATION SERVING THE COUNTY:**

**Colleges/Universities:**
- Florida Institute of Technology
- Eckerd College
- University of South Florida
- St. Petersburg College
- Stetson University College of Law

**Junior/Community Colleges:**
- Clearwater Christian College
- Remmington College
- Keiser College

**Technical Schools:**
- Pinellas Technical Education Center
- Tampa Technical Institute
- National Aviation Academy
- JobsCorp.
- ITT Technical Institute

**Other Schools:**
- Fortis College
- St. Petersburg Theological Seminary
- Schiller Academy
QUALITY OF LIFE

Cost of Living

<table>
<thead>
<tr>
<th>Price Level Index, (2007)</th>
<th>Sample</th>
</tr>
</thead>
<tbody>
<tr>
<td>Florida State Average = 100</td>
<td></td>
</tr>
<tr>
<td>Total</td>
<td>101.20</td>
</tr>
<tr>
<td>Food</td>
<td>100.00</td>
</tr>
<tr>
<td>Housing</td>
<td>102.00</td>
</tr>
<tr>
<td>Medical Care</td>
<td>96.00</td>
</tr>
<tr>
<td>Personal Goods and Services</td>
<td>103.00</td>
</tr>
<tr>
<td>Transportation</td>
<td>98.00</td>
</tr>
</tbody>
</table>

Medical Services:

- All Children's Hospital
- Bayfront Medical Center
- Largo Medical Center
- Morton-Plant Mease Hospital
- Palms of Pasadena Hospital
- St. Petersburg General Hospital
- Suncoast Hospital

Recreational Opportunities:

- 12 Artificial Reefs
- 250 Pinellas Parks, 17,500 Acres of Park & Reserves
- 35 Miles of Pinellas County Beaches
- 49 Golf Courses, 3 Pro Tours
- 51 Marinas and 27 Boat Ramps
- 55 Miles of Pinellas Bike/Walk Trail
- Grand Prix of St. Petersburg/Professional Sports NFL, MLB, NHL, AFL

Historical Points Of Interest:

- Fort DeSoto Park
- Herititage Park Museum
- Renaissance Vinoy Hotel
- Salvador Dali Museum
- St. Petersburg Pier
- Sunken Gardens
- Tarpon Springs Sponge Docks

Cultural Events/Festivals:

- Clearwater Jazz Festival
- Greek Wine & Food Festival
- Main Sail Arts Festival
- Regatta
- Springfest
- Tarpon Springs Art Festival
- Taste of Pinellas

Enterprise Florida, Inc. 800 North Magnolia Avenue, Suite 1100 Orlando, Florida 32803 Phone 407-956-5600 Fax(407)956-5599
Visit Enterprise Florida on the World Wide Web: http://www.eflorida.com
16. **Vulnerable Populations**

### Demographic Indicators

<table>
<thead>
<tr>
<th>Indicator</th>
<th>Number</th>
<th>Percentage of County</th>
<th>Percentage of State</th>
</tr>
</thead>
<tbody>
<tr>
<td>2009 Population</td>
<td>932,932</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Age 65-74 Population</td>
<td>91,875</td>
<td>9.8%</td>
<td>8.6%</td>
</tr>
<tr>
<td>Age 74+ Population</td>
<td>110,049</td>
<td>11.8%</td>
<td>9.0%</td>
</tr>
</tbody>
</table>

### Socioeconomic Indicators

<table>
<thead>
<tr>
<th></th>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Percent of total population below poverty level</td>
<td>10.0%</td>
<td>1</td>
<td>12.5%</td>
</tr>
<tr>
<td>Percent of families below poverty level</td>
<td>6.7%</td>
<td>1</td>
<td>9.0%</td>
</tr>
<tr>
<td>Percent of population under 18 below poverty level</td>
<td>14.3%</td>
<td>1</td>
<td>17.2%</td>
</tr>
<tr>
<td>Percent of civilian labor force which is unemployed</td>
<td>4.3%</td>
<td>1</td>
<td>5.6%</td>
</tr>
<tr>
<td>Median Household Income</td>
<td>37,111</td>
<td>3</td>
<td>38,819</td>
</tr>
<tr>
<td>Percent of population &gt; 25 with a high school diploma</td>
<td>84%</td>
<td>4</td>
<td>79.9%</td>
</tr>
<tr>
<td>Percent of population &gt; 5 that doesn’t speak English</td>
<td>0.3%</td>
<td>3</td>
<td>1.9%</td>
</tr>
</tbody>
</table>

### Vulnerability Indicators

<table>
<thead>
<tr>
<th>Indicator</th>
<th>Number</th>
</tr>
</thead>
<tbody>
<tr>
<td>Population with 1 or more disabilities</td>
<td>205,955</td>
</tr>
<tr>
<td>% of population with 1 or more disabilities</td>
<td>22%</td>
</tr>
<tr>
<td>Elders Living Alone</td>
<td>76,574</td>
</tr>
<tr>
<td>Estimated Homeless</td>
<td>4,680</td>
</tr>
<tr>
<td>Children in Foster Care</td>
<td>1,130</td>
</tr>
<tr>
<td>Developmentally Disabled</td>
<td>3,163</td>
</tr>
<tr>
<td>Seriously Mentally Ill Adults</td>
<td>41,198</td>
</tr>
</tbody>
</table>

---

12 Florida Department of Health, County Profile  
13 Data Source: Population Estimates form the Executive Office of the Governor  
14 US Census  
15 Florida Department of Health, 2010
## Vulnerability Indicators

<table>
<thead>
<tr>
<th>Indicator</th>
<th>Number</th>
</tr>
</thead>
<tbody>
<tr>
<td>Brain &amp;/or Spinal Cord Injured Clients</td>
<td>73</td>
</tr>
<tr>
<td>Estimated Oxygen Dependent Clients</td>
<td>17,292</td>
</tr>
<tr>
<td>Elders with Dementia</td>
<td>41,724</td>
</tr>
<tr>
<td>CMS Clients</td>
<td>2,415</td>
</tr>
<tr>
<td>Medical Foster Care Children</td>
<td>28</td>
</tr>
<tr>
<td>Dialysis Clients</td>
<td>891</td>
</tr>
<tr>
<td>Seriously Emotionally Disturbed Children</td>
<td>14,021</td>
</tr>
</tbody>
</table>

---

16 Florida Department of Health, 2010
B. Hazard Risk Overview

The Pinellas County Local Mitigation Strategy (2010) identified the major hazards facing the state and further focused on those hazards which had the potential for a major impact to Pinellas County and its municipalities. The hazards are identified below:

<table>
<thead>
<tr>
<th>Hazard</th>
<th>Methodology of Identification</th>
<th>Significant Concerns</th>
</tr>
</thead>
</table>
| 1 Hurricanes/Coastal Storms   | • Review of past disaster declarations.  
• Review of National Climatic Data Center (NCDC) Severe Storms Database.  
• National Oceanographic and Atmospheric Administration (NOAA) climatology data  
• Research including new media and the Internet | • Hurricanes and coastal storms affect Florida every year.  
• Hurricanes have caused extensive damage and loss of life across the state for the last 50 years.  
• 8 out of the last 10 federally declared disaster events in Florida were hurricanes. |
| 2 Severe Storms               | • Review of past disaster declarations.  
• Review of National Climatic Data Center (NCDC) Severe Storms Database.  
• National Weather Service input and data.  
• Public input including newspapers and media. | • Severe storms cause damage from rainfall and associated straight line winds, lightning, power outages and tornadoes.  
• Tampa Bay has more severe storms than anywhere else in the country; although the damage is typically minimal. |
| 3 Tornadoes                   | • Review of past disaster declarations.  
• Review of National Climatic Data Center (NCDC) Severe Storms Database.  
• National Weather Service input and data.  
• Public input including newspapers and media. | • Florida experiences a tornado nearly every year.  
• Tornadoes have caused extensive damage and loss of life to county residents.  
• The two most recent federally declared disaster event in Florida (Feb 8 and Feb 3 2007) were severe storms with tornadoes. |
| 4 Floods / Severe Rain Events | • Review of past disaster declarations  
• Review of Federal Flood Insurance Rate Maps (FIRMs)  
• Input from state floodplain manager.  
• Identification of NFIP repetitive loss properties in the state. | • Florida is affected by flooding nearly every year.  
• Floods have caused extensive damage and loss of life in the state in the past.  
• The most recent federally declared disaster event (2008) in Florida included flooding from Tropical Storm Faye; although this did not include Pinellas County. |
| 5 Coastal and Riverine Erosion| • Coordination with the Florida Department of Environmental Protection – Bureau of Beaches and Coastal systems.  
• SHMPAT interview and input.  
• Evaluation of Erosion Hazards, the report from the Heinz Center that was presented to FEMA in May 2000.  
• Public input including newspapers and media. | • Due to the gradual, long-term erosion, as many as one in four houses along the coast, could fall into the ocean in the next 60 years  
• 80 to 90 percent of the nation’s sandy beaches are facing erosion problems.  
• Significant economic impact for the state due to property damages, loss of actual beach front real estate and affects on Tourism |
| 6 Winter Storms and Freezes    | • Review of past disaster declarations.  
• Review of NCDC Severe Storms Database.  
• National Weather Service input and data.  
• Public input including newspapers and media. | • Florida is affected by winter storms cyclically  
• Significant freezes particularly during the 1980s that affected the citrus industry  
• 5 federally declared disasters since 1971  
• The population is unprepared for cold weather with many having inadequate heating capabilities. |
| 7 Drought & Extreme Heat      | • National Weather Service data.  
• National Oceanographic and Atmospheric Association (NOAA) paleoclimatology data.  
• The US Drought Monitor  
• Keech Byram Drought Index (KBDI)  
• Agricultural community throughout the state. | • Significant drought trends during the last 10 years including moderate and severe drought index conditions in 2007 for parts of the state.  
• Drought has a severe economic impact on the state due to the large amounts of citrus, agriculture and livestock. Pinellas County is less vulnerable as it has little citrus, agriculture or livestock. |

---

17 Pinellas County Local Mitigation Strategy, 2010
### Hazard: Sinkholes, Landslides and Seismic Events

**Methodology of Identification:**
- Coordination with the Florida Geographical Survey
- The Florida Sinkhole Database
- Coordination with the Florida Department of Transportation
- Input from the Central United States Earthquake Consortium
- USGS Landslide Hazard maps.

**Significant Concerns:**
- Sinkholes are a common feature of Florida’s landscape
- 2843 sinkholes have been reported in the state since the 1970s
- Growing issues as development continues in high risk areas
- Impact on the roads and physical infrastructure of the state
- The County is not vulnerable to landslides, earthquakes or other seismic events.

### Hazard: Wildfires

**Methodology of Identification:**
- Florida Division of Forestry statistics and input.
- USDA Forest Service Fire, fuel, and WUI mapping.
- Input from FL DEM about wildfires and the EOC activations.
- Public input including newspapers and media.

**Significant Concerns:**
- Florida experiences wildfires every year.
- Development in much of the state is occurring at the Wildland-Urban Interface (WUI).
- Cyclic drought patterns result in increases of brush and other dry materials. This increases the overall risk for significant fires.
- Fires in 2007 have been of significance due to the number and magnitude including closures to the interstate system.
- Pinellas County is less vulnerable than other areas of the state due to its urban development.

### Hazard: Tsunamis

**Methodology of Identification:**
- Input from the NOAA Center for Tsunami Research
- Coordination with the Florida Division of Emergency Management
- Input from the United States Geological Survey

**Significant Concerns:**
- Tsunamis are a common event that occur in large bodies of water
- Almost all perimeters of Florida’s boundaries are made up of large bodies of water
- Recent Tsunamis from around the world have caused widespread destruction
- Residential and commercial development along Florida’s coastlines are at risk to the effects of Tsunamis

### Hazard: Technological

**Methodology of Identification:**
- Coordination with the State Emergency Response Commission
- Interaction with the Local Emergency Planning Committees (LEPC)
- Coordination with the Nuclear Regulatory Commission (NRC)
- Communications with the FL Department of Environmental Protection

**Significant Concerns:**
- Numerous accidental hazardous material releases occur every year
- Potential for human and environmental impacts
- Threat of radiation from a nuclear related incident

### Hazard: Terrorism

**Methodology of Identification:**
- Coordination with FEMA and Department of Homeland Security
- Coordination with the Florida Department of Law Enforcement (FDLE)
- Interaction with local law enforcement agencies

**Significant Concerns:**
- National priority with federal government requirements
- Potential for devastating impacts to life and infrastructure
- Protection for the citizens of Florida and the USA

### Hazard: Mass Migration

**Methodology of Identification:**
- Coordination with the US Citizens and Immigration Service (USCIS)
- Data from local law enforcement

**Significant Concerns:**
- Historic precedence for migration to Florida by boat
- Large amounts of unpatrolled coastlines

---

Through the CEMP, LMS and the *Statewide Regional Evacuation Study for the Tampa Bay Region*, it was determined that tropical storm/hurricane events as well as flooding events pose the greatest risk to Pinellas County in terms of probability, extent of damage, vulnerability and impact and potential losses.

**1. Flooding Events**

Approximately 41.3% of the total acreage in Pinellas County or 73,967 acres is located within the designated 100-year floodplain. Given the climate and location of Pinellas County along the Gulf coast, flooding is a relatively common event. FEMA has identified site specific risk as follows:
Table 3.3 Definitions of Zones\textsuperscript{18}

<table>
<thead>
<tr>
<th>Zone</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>AE</td>
<td>Areas with a 1% annual chance of flooding. In most instances, base flood elevations (BFEs) derived from detailed analyses are shown at selected intervals within these zones.</td>
</tr>
<tr>
<td>X500</td>
<td>An area inundated by 500-year flooding; an area inundated by 100-year flooding with average depths of less than 1 foot or with drainage areas less than 1 square mile; or an area protected by levees from the 100-year flooding.</td>
</tr>
<tr>
<td>X</td>
<td>Areas outside the 1-percent annual chance floodplain, areas of 1% annual chance sheet flow flooding where average depths are less than 1 foot, areas of 1% annual chance stream flooding where the contributing drainage area is less than 1 square mile, or areas protected from the 1% annual chance flood by levees. No Base Flood Elevations or depths are shown within this zone. Insurance purchase is not required in these zones.</td>
</tr>
<tr>
<td>A</td>
<td>Flood zone area with a 1% annual chance of flooding and a 26% chance of flooding over the life of a 30-year mortgage. Because detailed analyses are not performed for such areas; no depths of base flood elevations are shown within these zones.</td>
</tr>
<tr>
<td>ANI</td>
<td>An area that is located within a community of county that is not mapped on any published FIRM.</td>
</tr>
<tr>
<td>IN</td>
<td>An area designated as within a “Special Flood Hazard Area” (SFHA) on a FIRM. This is an area inundated by 100-year flooding for which no BFEs or velocity may have been determined. No distinctions are made between the different flood hazard zones that may be included within the SFHA. These may include Zones A, AE, AO, AH, AR, A99, V, or VE.</td>
</tr>
<tr>
<td>VE</td>
<td>Coastal areas with a 1% or greater chance of flooding and an additional hazard associated with storm waves. These areas have a 26% chance of flooding over the life of a 30-year mortgage. Base flood elevations derived from detailed analyses are shown at selected intervals within these zones.</td>
</tr>
<tr>
<td>UNDES</td>
<td>A body of open water, such as a pond, lake, ocean, etc., located within a community’s jurisdictional limits that has no defined flood hazard.</td>
</tr>
<tr>
<td>AO</td>
<td>River or stream flood hazard areas, and areas with a 1% or greater chance of shallow flooding each year, usually in the form of sheet flow, with an average depth ranging from 1 to 3 feet. These areas have a 26% chance of flooding over the life of a 30-year mortgage. Average flood depths derived from detailed analyses are shown within these zones.</td>
</tr>
<tr>
<td>D</td>
<td>Areas with possible but undetermined flood hazards. No flood hazard analysis has been conducted. Flood insurance rates are commensurate with the uncertainty of the flood risk.</td>
</tr>
<tr>
<td>AH</td>
<td>Areas with a 1% annual chance of shallow flooding, usually in the form of a pond, with an average depth ranging from 1 to 3 feet. These areas have a 26% chance of flooding over the life of a 30-year mortgage. Base flood elevations derived from detailed analyses are shown at selected intervals within these zones.</td>
</tr>
<tr>
<td>V</td>
<td>Coastal areas with a 1% or greater chance of flooding and an additional hazard associated with storm waves. These areas have a 26% chance of flooding over the life of a 30-year mortgage. No base flood elevations are shown within these zones.</td>
</tr>
<tr>
<td>100IC</td>
<td>An area where the 100-year flooding is contained within the channel banks and the channel is too narrow to show to scale. An arbitrary channel width of 3 meters is shown. BFEs are not shown in this area, although they may be reflected on the corresponding profile.</td>
</tr>
</tbody>
</table>

\textsuperscript{18} National Flood Insurance Program (NFIP); Pinellas County Flood Mitigation Ordinance
Figure 3.1 Flood Zones in Pinellas County
Table 3.4
Population at Risk for FEMA FIRM Zones, Year 2000

<table>
<thead>
<tr>
<th>Zone</th>
<th>Total</th>
<th>Minority</th>
<th>Over 65</th>
<th>Disabled</th>
<th>Poverty</th>
<th>Language Isolation</th>
<th>Single Parent</th>
</tr>
</thead>
<tbody>
<tr>
<td>AE</td>
<td>203,888</td>
<td>20,517</td>
<td>45,001</td>
<td>71,859</td>
<td>15,924</td>
<td>2,361</td>
<td>10,783</td>
</tr>
<tr>
<td>X500</td>
<td>103,498</td>
<td>14,538</td>
<td>24,464</td>
<td>40,103</td>
<td>8,334</td>
<td>303</td>
<td>6,368</td>
</tr>
<tr>
<td>X</td>
<td>549,138</td>
<td>92,184</td>
<td>119,171</td>
<td>233,692</td>
<td>62,093</td>
<td>3,678</td>
<td>36,548</td>
</tr>
<tr>
<td>A</td>
<td>27,303</td>
<td>1,457</td>
<td>5,823</td>
<td>6,703</td>
<td>1,727</td>
<td>18</td>
<td>1,023</td>
</tr>
<tr>
<td>ANI</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
</tr>
<tr>
<td>IN</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
</tr>
<tr>
<td>VE</td>
<td>27,303</td>
<td>522</td>
<td>11,772</td>
<td>10,854</td>
<td>1,664</td>
<td>417</td>
<td>979</td>
</tr>
<tr>
<td>UNDES</td>
<td>7,068</td>
<td>538</td>
<td>1,493</td>
<td>2,954</td>
<td>590</td>
<td>1,766</td>
<td>365</td>
</tr>
<tr>
<td>AO</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
</tr>
<tr>
<td>D</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
</tr>
<tr>
<td>AH</td>
<td>3,284</td>
<td>354</td>
<td>459</td>
<td>1675</td>
<td>282</td>
<td>0</td>
<td>284</td>
</tr>
<tr>
<td>V</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
</tr>
<tr>
<td>100IC</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
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</tr>
</tbody>
</table>

Source: 2000 Census, MEMPHIS Model 2010

Table 3.5
Structures at risk for FEMA FIRM Zones, Year 2000

<table>
<thead>
<tr>
<th>Zone</th>
<th>Total</th>
<th>SF Res</th>
<th>Mobile Home</th>
<th>MF Res</th>
<th>Commercial</th>
<th>Agriculture</th>
<th>Gov/Institution</th>
</tr>
</thead>
<tbody>
<tr>
<td>AE</td>
<td>117,680</td>
<td>54,076</td>
<td>100,45</td>
<td>37,918</td>
<td>13,626</td>
<td>1607</td>
<td>408</td>
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<tr>
<td>X500</td>
<td>37,811</td>
<td>21,934</td>
<td>4,236</td>
<td>7,297</td>
<td>3,778</td>
<td>488</td>
<td>78</td>
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<tr>
<td>X</td>
<td>208,534</td>
<td>143,678</td>
<td>9,738</td>
<td>44,819</td>
<td>7,899</td>
<td>2,290</td>
<td>110</td>
</tr>
<tr>
<td>A</td>
<td>6,122</td>
<td>4,582</td>
<td>85</td>
<td>1,332</td>
<td>83</td>
<td>30</td>
<td>10</td>
</tr>
<tr>
<td>ANI</td>
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<td>0</td>
<td>1522</td>
<td>153</td>
<td>662</td>
<td>75</td>
<td>15</td>
</tr>
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<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
</tr>
<tr>
<td>VE</td>
<td>63,610</td>
<td>10,045</td>
<td>37,918</td>
<td>13,626</td>
<td>1,607</td>
<td>408</td>
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<td>4,236</td>
<td>7,297</td>
<td>3,778</td>
<td>488</td>
<td>78</td>
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<td>110</td>
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<tr>
<td>D</td>
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<td>85</td>
<td>1,332</td>
<td>83</td>
<td>30</td>
<td>10</td>
<td>0</td>
</tr>
<tr>
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<td>153</td>
<td>662</td>
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<td>0</td>
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<td>0</td>
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</table>

Source: 2000 Census, MEMPHIS Model 2010
### Table 3.6
Value of Structures by DOR Use for FEMA FIRM Zones, Year 2000

<table>
<thead>
<tr>
<th>Zone</th>
<th>Total</th>
<th>SF Res</th>
<th>Mobile Home</th>
<th>MF Res</th>
<th>Commercial</th>
<th>Agriculture</th>
<th>Gov/Institution</th>
</tr>
</thead>
<tbody>
<tr>
<td>AE</td>
<td>$52.07 BI</td>
<td>$18.83 BI</td>
<td>$3.55 BI</td>
<td>$14.63 BI</td>
<td>$10.39 BI</td>
<td>$3.49 BI</td>
<td>$1.19 BI</td>
</tr>
<tr>
<td>X500</td>
<td>$13.63 BI</td>
<td>$6.30 BI</td>
<td>$1.37 BI</td>
<td>$2.11 BI</td>
<td>$2.62 BI</td>
<td>$1.02 BI</td>
<td>$209.29 MI</td>
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<tr>
<td>X</td>
<td>$73.88 BI</td>
<td>$39.31 BI</td>
<td>$80.06 MI</td>
<td>$12.82 BI</td>
<td>$12.24 BI</td>
<td>$8.74 BI</td>
<td>$196.80 MI</td>
</tr>
<tr>
<td>A</td>
<td>$3.07 BI</td>
<td>$2.37 BI</td>
<td>$10.27 MI</td>
<td>$376.18 MI</td>
<td>$151.90 MI</td>
<td>$133.57 MI</td>
<td>$31.61 MI</td>
</tr>
<tr>
<td>ANI</td>
<td>$626.21 MI</td>
<td>$0.00</td>
<td>$291.97 MI</td>
<td>$7.36 MI</td>
<td>$193.23 MI</td>
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<td>$0.00</td>
</tr>
<tr>
<td>VE</td>
<td>$33.25 BI</td>
<td>$3.55 BI</td>
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<td>$10.39 BI</td>
<td>$3.49 BI</td>
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<td>$10.33 MI</td>
</tr>
<tr>
<td>UNDES</td>
<td>$7.33 BI</td>
<td>$1.37 BI</td>
<td>$2.11 BI</td>
<td>$2.62 BI</td>
<td>$1.02 BI</td>
<td>$209.29 MI</td>
<td>$0.00</td>
</tr>
<tr>
<td>AO</td>
<td>$34.57 BI</td>
<td>$80.06 MI</td>
<td>$12.82 BI</td>
<td>$12.24 BI</td>
<td>$8.74 BI</td>
<td>$196.80 MI</td>
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<tr>
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<tr>
<td>AH</td>
<td>$626.21 MI</td>
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<td>$7.36 MI</td>
<td>$193.23 MI</td>
<td>$65.92 MI</td>
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<td>$0.00</td>
<td>$0.00</td>
</tr>
<tr>
<td>100IC</td>
<td>$29.71 BI</td>
<td>$14.63 BI</td>
<td>$10.39 BI</td>
<td>$3.49 BI</td>
<td>$1.19 BI</td>
<td>$10.33 MI</td>
<td>$0.00</td>
</tr>
</tbody>
</table>

Source: 2000 Census, MEMPHIS Model 2010

**Repetitive Loss**

The location of repetitive loss structures also identifies specific areas in the community where flooding continues to be a problem and where mitigation efforts should be concentrated. For many of these coastal areas, mitigation will involve significant property owner investment and will probably be delayed until redevelopment/reconstruction occurs. New construction or significant remodeling will require adherence to current floodplain management regulations.
### Table 3.7
Repetitive Loss Properties

<table>
<thead>
<tr>
<th>Community Name</th>
<th>Repetitive Loss Structures</th>
<th>SF 2-4 Family</th>
<th>Other Res</th>
<th>Condo Assoc.</th>
<th>Non-Res.</th>
</tr>
</thead>
<tbody>
<tr>
<td>Belleair</td>
<td>7</td>
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<td>0</td>
<td>0</td>
<td>0</td>
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<tr>
<td>Belleair Beach</td>
<td>60</td>
<td>23</td>
<td>8</td>
<td>15</td>
<td>10</td>
</tr>
<tr>
<td>Belleair Bluffs</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
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<tr>
<td>Belleair Shore</td>
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<td>Clearwater</td>
<td>86</td>
<td>63</td>
<td>2</td>
<td>8</td>
<td>5</td>
</tr>
<tr>
<td>Dunedin</td>
<td>99</td>
<td>97</td>
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<td>1</td>
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<tr>
<td>Gulfport</td>
<td>14</td>
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<td>3</td>
<td>1</td>
<td>2</td>
</tr>
<tr>
<td>Indian Rocks Beach</td>
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<td>30</td>
<td>9</td>
<td>0</td>
<td>0</td>
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<td>Indian Shores</td>
<td>18</td>
<td>5</td>
<td>4</td>
<td>7</td>
<td>1</td>
</tr>
<tr>
<td>Kenneth City</td>
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<td>0</td>
<td>0</td>
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<tr>
<td>Largo</td>
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<td>1</td>
<td>0</td>
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<td>3</td>
<td>2</td>
</tr>
<tr>
<td>North Redington Beach</td>
<td>6</td>
<td>3</td>
<td>0</td>
<td>1</td>
<td>1</td>
</tr>
<tr>
<td>Oldsmar</td>
<td>5</td>
<td>4</td>
<td>1</td>
<td>0</td>
<td>0</td>
</tr>
<tr>
<td>Pinellas County (unincorporated)</td>
<td>121</td>
<td>102</td>
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<td>3</td>
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<td>Pinellas Park</td>
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<td>Safety Harbor</td>
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</tr>
<tr>
<td>Seminole</td>
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<td>0</td>
<td>0</td>
</tr>
<tr>
<td>South Pasadena</td>
<td>4</td>
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<td>0</td>
<td>0</td>
</tr>
<tr>
<td>St. Pete Beach</td>
<td>76</td>
<td>43</td>
<td>7</td>
<td>6</td>
<td>3</td>
</tr>
<tr>
<td>St. Petersburg</td>
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<td>372</td>
<td>4</td>
<td>3</td>
<td>3</td>
</tr>
<tr>
<td>Tarpon Springs</td>
<td>69</td>
<td>55</td>
<td>6</td>
<td>0</td>
<td>1</td>
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<tr>
<td>Treasure Island</td>
<td>140</td>
<td>77</td>
<td>36</td>
<td>10</td>
<td>4</td>
</tr>
</tbody>
</table>

*Source: FEMA, Repetitive Loss Listing 12-23-2010*

The following is the county profile from the NOAA Coastal Services which quantifies the flood risk in regard to population including special needs populations, critical facilities and development growth in the floodplains.
Hazard Exposure Information for
Pinellas County, Florida

People + Floodplains = Not Good
High-Risk Populations + Floodplains = Even Worse
The more homes and people located in a floodplain, the greater the potential for harm from flooding. Impacts are likely to be even greater when additional risk factors (age, income, capabilities) are involved, since people at greatest flood risk may have difficulty evacuating or taking action to reduce potential damage.

Population
Total: 921,482

- Population in FEMA Floodplain: 291,000 (32%)
- Population Outside FEMA Floodplain: 630,482 (68%)

Population in Poverty
Total: 90,059

- Population in FEMA Floodplain: 23,233 (26%)
- Population Outside FEMA Floodplain: 66,826 (74%)

Population over 65
Total: 208,183

- Population in FEMA Floodplain: 70,683 (34%)
- Population Outside FEMA Floodplain: 137,600 (66%)

Based on 2000 U.S. Census records.

Community Infrastructure + Floodplains = Bad News
20% of critical facilities and 28% of road miles (1421 miles) in Pinellas County are within the floodplain.

Hospitals, Roads, Schools, Shelters. These facilities play a central role in disaster response and recovery. Understanding which facilities are exposed, and the degree of that exposure, can help reduce or eliminate service interruptions and costly redevelopment. Incorporating this information into development planning helps communities get back on their feet faster.

Based on Critical Facilities from FEMA HAZUS database.

Critical Facilities in FEMA Floodplain

<table>
<thead>
<tr>
<th>Facility</th>
<th>In FEMA Floodplain</th>
<th>Outside FEMA Floodplain</th>
</tr>
</thead>
<tbody>
<tr>
<td>Schools</td>
<td>35</td>
<td>185</td>
</tr>
</tbody>
</table>

Increasing Development in Floodplains = More People in Harm’s Way
Loss of Natural Buffers = Less Protection
A county with more natural areas (wetlands, forests, etc.) and less development within floodplains typically has lower exposure to flooding. A county that monitors land cover changes within the floodplain will detect important trends that indicate whether flood exposure is increasing or decreasing. Armed with this information, local leaders can take steps to improve their safety and resilience.

Based on NOAA land cover data.

Amount of Land Converted to Development 2001-2006 (acres)
Total: 29

- Land in FEMA Floodplain: 1 (3%)
- Land Outside FEMA Floodplain: 28 (97%)

Type of Land Converted to Development 2001-2006

- Agricultural Areas
- Natural Areas
2. Coastal Storms and Hurricanes

History: Historically, hurricanes are the natural disasters that pose the greatest threat to Florida and Pinellas County. They have caused the greatest amount of property damage and as more people move to Pinellas County, and more development takes place, the potential for hurricane-related deaths and damages, increases each year.

In the 1920’s, a time characterized by economic prosperity and growth in the resort areas of Florida, the Tampa Bay area was just beginning to feel the effects of “Florida fever” when it experienced its worst hurricane in over seventy years in October of 1921. The hurricane of 1921 produced a storm surge of 10.5 feet which was the highest recorded since the hurricanes of 1848. Locally, it created both Longboat Pass (which now separates the City of Bradenton Beach and Longboat Key) and Hurricane Pass in Dunedin. Passage Key, located between Egmont Key and Anna Maria Island, before the storm, was the home to a fishing village and fresh water lake. Following the storm and continuing today, Passage Key is a sand bar with little vegetation and a National Bird Sanctuary. This was the last major hurricane (a category three on the Saffir-Simpson Scale when it hit the coast) to actually make landfall in Pinellas County.

Pinellas County has experienced the effects (wind damage, beach erosion, etc) from a number of hurricanes since 1886. A total of seven hurricanes have affected Pinellas County within the last 25 years. They were Hurricanes Elena (1985), Opal (1995), Georges (1998), Gordon (2000), and Hurricanes Charley, Frances and Jeanne (2004). In addition there were tropical storms Josephine (2000), Gabrielle (2001) and Faye (2008).

In August 2010, the update of the evacuation study for the Tampa Bay Region (part of the Statewide Regional Evacuation Study Program) was released. New Evacuation zones as defined by the revised SLOSH basin, LIDAR topography and parcel-based definition are presented on Figure 3.2 with the planning areas.

---

19 Pinellas County Comprehensive Emergency Management Plan (CEMP), 2010
Figure 3.2 Hurricane Evacuation Zones (2010) and Planning Areas

Source: U.S.G.S., Pinellas County

MAP LEGEND
- Traffic Evac Area
- Level A
- Level B
- Level C
- Level D
- Level E

Note: This map is generated under the direction of Florida Department of Emergency Management for the Regional Evacuation Study. Areas shown are based on the latest data available. Refer to the report for comprehensive area descriptions. Senior citizens with questions for the area information.

20 Tampa Bay Regional Evacuation Study Update, 2010

CHAPTER 3: VULNERABILITY ANALYSIS  Page 3-46
The MEMPHIS Model\textsuperscript{21} was used to calculate the risk and impacts from the major natural hazards which confront the county: hurricanes and coastal storms, floods, wildfires, tornados and sinkholes. Excerpts from the reports for the County are provided in this analysis.

Describing vulnerability in terms of potential dollar loss provides the local government, the State and the federal government with a common framework with which to quantitatively measure the effects of hazards on the community and more accurately determine the benefit-cost ratio of investments in mitigation activities. It is an essential component to risk assessment and the ability to implement a strategy to prevent or reduce future losses. In Florida, it is a vital tool for decision-makers who must make the sometimes difficult decisions regarding growth-management, land development regulations, and funding for infrastructure and mitigation projects.

Using results from the MEMPHIS model, estimates were generated of potential flood and wind damage from each category of hurricane. Tables 3.8 – 3.12 provide the estimated structural damage.

<table>
<thead>
<tr>
<th>Table 3.8</th>
<th>Category 1 Hurricane Hazards for Pinellas County</th>
</tr>
</thead>
<tbody>
<tr>
<td>Impact Summary</td>
<td>Peak winds 93 mph, peak water depth 9.2 ft.</td>
</tr>
<tr>
<td>Maximum Damage Summary:</td>
<td></td>
</tr>
<tr>
<td>Tax Parcel-based Wind Damage:</td>
<td>$3.03 Billion</td>
</tr>
<tr>
<td>DOR based Flood Damage:</td>
<td>$2.43 Billion</td>
</tr>
<tr>
<td>DOR Structures in Flood Zone:</td>
<td>45,406</td>
</tr>
<tr>
<td>Census based Wind Damage:</td>
<td>$3.47 Billion</td>
</tr>
<tr>
<td>Census based Flood Damage:</td>
<td>$1.92 Billion</td>
</tr>
<tr>
<td>Uninhabitable Housing Units:</td>
<td>2,912 (0.6% of total HU)</td>
</tr>
</tbody>
</table>

\textsuperscript{21} MEMPHIS (Mapping for Emergency Management, Parallel Hazard Information System) is an experimental web based system to allow emergency managers to access a variety of hazard related data. The website was developed in support of the Florida Local Mitigation Strategy Project. The links take you to documentation or start the mapserver to allow access to the outputs for the Florida Local Mitigation Strategy data sets created by Kinetic Analysis Corporation under contract with the Florida Department of Community Affairs.
### Table 3.9
**Category 2 Hurricane Hazards for Pinellas County**  
**Impact Summary**  
Peak winds 113 mph, peak water depth 12.4 ft.

Maximum Damage Summary:  
- Tax Parcel-based Wind Damage: $9.26 Billion  
- DOR based Flood Damage: $6.90 Billion  
- DOR Structures in Flood Zone: 68,641  
- Census based Wind Damage: $10.42 Billion  
- Census based Flood Damage: $5.41 Billion  
- Uninhabitable Housing Units: 9,211 (1.9% of total HU)

### Table 3.10  
**Category 3 Hurricane Hazards for Pinellas County**  
**Impact Summary**  
Peak winds 136 mph, peak water depth 18.6 ft.

Maximum Damage Summary:  
- Tax Parcel-based Wind Damage: $21.89 Billion  
- DOR based Flood Damage: $14.01 Billion  
- DOR Structures in Flood Zone: 89,930  
- Census based Wind Damage: $24.55 Billion  
- Census based Flood Damage: $9.86 Billion  
- Uninhabitable Housing Units: 21,802 (4.5% of total HU)

### Table 3.11
**Category 4 Hurricane Hazards for Pinellas County**  
**Impact Summary**  
Peak winds 163 mph, peak water depth 26.9 ft.

Maximum Damage Summary:  
- Tax Parcel-based Wind Damage: $49.19 Billion  
- DOR based Flood Damage: $28.11 Billion  
- DOR Structures in Flood Zone: 143,684  
- Census based Wind Damage: $54.20 Billion  
- Census based Flood Damage: $14.32 Billion  
- Uninhabitable Housing Units: 48,951 (10.2% of total HU)
### Table 3.12

**Category 5 Hurricane Hazards for Pinellas County**  
**Impact Summary**  
Peak winds 189 mph, peak water depth 31.9 ft.

<table>
<thead>
<tr>
<th>Maximum Damage Summary:</th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Tax Parcel-based Wind Damage:</td>
<td>$88.07 Billion</td>
</tr>
<tr>
<td>DOR based Flood Damage:</td>
<td>$33.93 Billion</td>
</tr>
<tr>
<td>DOR Structures in Flood Zone:</td>
<td>169,467</td>
</tr>
<tr>
<td>Census based Wind Damage:</td>
<td>$95.29 Billion</td>
</tr>
<tr>
<td>Census based Flood Damage:</td>
<td>$16.71 Billion</td>
</tr>
<tr>
<td>Uninhabitable Housing Units:</td>
<td>87,522 (18.2% of total HU)</td>
</tr>
</tbody>
</table>

### C. Scenario-Based Vulnerability Analysis

In order to get a better understanding of the potential impact of a widespread catastrophic incident, a HAZUS-MH hurricane model\(^\text{22}\) was run simulating a direct landfall of a category 5 hurricane in Pinellas County.

*Hurricane Phoenix* is a fictitious storm created to simulate the effects of a worst-case scenario. With input from Tampa Bay area emergency management agencies and the local office of the National Weather Service (NWS), a simulated storm was developed with a track and intensity that would devastate the entire Tampa Bay region. The NWS generated National Hurricane Center advisories, local hurricane statements, and data files that simulate the hurricane’s location and intensity from its formation in the Caribbean Sea, through landfall in Pinellas County, to the hurricane’s exit from the east coast of Florida into the Atlantic Ocean. The maps and information presented in this packet are based upon the data files developed for this simulated storm.

The simulated parameters of Hurricane Phoenix were input into HAZUS-MH, the risk assessment tool that uses the Federal Emergency Management Agency (FEMA) standard methodology to measure the effects of real and simulated hazard events like hurricane winds and flooding. As one might expect, a storm of the size and strength of Hurricane Phoenix would create almost unthinkable damage to the area’s homes, businesses, infrastructure, overall economy, and social systems that are currently in place. The goal of this planning process is to develop strategies that will help the Tampa Bay region to recover and rebuild after such a devastating catastrophe.

\(^{22}\) HAZUS-MH is FEMA’s powerful risk assessment software program for analyzing potential losses from floods, hurricane winds and earthquakes. Current scientific and engineering knowledge is coupled with the latest geographic information systems technology to produce estimates of hazard related damage before, or after, a disaster occurs.
The goal of this scenario was to estimate the direct physical damages, social impacts, and direct economic losses that could result from the storm surge and wind of this catastrophic hurricane using recently developed user-supplied SLOSH data. For the purposes of this study, direct physical damages consist of estimated impacts to the county’s general building stock (i.e., residential, commercial, industrial, and agricultural buildings), essential facilities (i.e., schools, fire stations, police stations, medical care facilities, and emergency operations centers as applicable), and agricultural products. Social impacts consist of estimated shelter requirements (in terms of households and individual persons displaced by the event). Economic losses consist of direct economic impacts (not indirect losses). Figure 3.3 shows the depths of inundation from storm surge in the coastal counties and indicates those areas estimated to be significantly impacted.

FIGURE 3.3 REGION MAP WITH STORM SURGE FLOOD DEPTHS\textsuperscript{23}

\textsuperscript{23} \textit{Tampa Bay Regional Evacuation Study Update}, 2010
Figure 3.4 shows the distribution of those areas estimated to be completely destroyed by providing percentages of complete destruction by census tract for residential structures.

FIGURE 3.4: RESIDENTIAL DAMAGE
(PERCENTAGE OF COMPLETE DAMAGE DESTRUCTION PER CENSUS TRACT)
D. Quantifying Vulnerabilities

An important aspect in determining a community’s vulnerability is quantifying the potential impacts. Based on the Hurricane Phoenix (category 5) scenario, the following estimates were derived.

1. Damages
   a. Wind Damage
   The analysis conducted to determine direct physical damages to the general building stock was performed at the census tract level (outputs aggregated to the county level) and focuses on residential, commercial, industrial, and agricultural building occupancy types as defined by HAZUS-MH. **Table 3.13** shows damage probabilities for these selected occupancy types for the modeled, coastal event.

   b. Storm Surge Damage
   The analysis conducted to determine direct physical damages to the general building stock was performed at the census tract level (outputs aggregated to the county level) and focuses on residential, commercial, industrial, and agricultural building occupancy types as defined by HAZUS-MH. **Table 3.13** shows damage levels (minor, moderate, major) by county for the modeled, coastal event.

**TABLE 3.13**
NUMBER OF BUILDINGS BY STORM SURGE DAMAGE AND WIND

<table>
<thead>
<tr>
<th></th>
<th>Total Structures</th>
<th>Number With Minor Damage</th>
<th>Number With Moderate Damage</th>
<th>Number with Severe Damage or Destroyed</th>
<th>Number With More Than Minor Damage</th>
</tr>
</thead>
<tbody>
<tr>
<td>Wind/Surge</td>
<td>425,064</td>
<td>5,692</td>
<td>36,261</td>
<td>382,167</td>
<td>418,428</td>
</tr>
<tr>
<td>Surge Only</td>
<td></td>
<td>70</td>
<td>85,265</td>
<td>36,979</td>
<td>122,244</td>
</tr>
</tbody>
</table>

**TABLE 3.14**  COMBINED DAMAGE
The following table summarizes the combined damage from wind and storm surge flooding.

<table>
<thead>
<tr>
<th></th>
<th>Pre-Storm Building Stock Value (Millions of $)</th>
<th>Total Structural Damage from Wind (Millions of $)</th>
<th>Percent of Pre-Storm Building Stock Value Loss from Wind</th>
<th>Total Structural Damage from Storm Surge (Millions of $)</th>
<th>Percent of Pre-Storm Building Stock Value Loss from Storm Surge</th>
<th>Total Combined Structural Damage (Millions of $)</th>
<th>Total Combined Percent of Pre-Storm Building Stock Value Loss</th>
</tr>
</thead>
<tbody>
<tr>
<td>Pinellas</td>
<td>70,489</td>
<td>54,287</td>
<td>77.0%</td>
<td>12,824</td>
<td>18.2%</td>
<td>57,235</td>
<td>81.2%</td>
</tr>
</tbody>
</table>
2. Debris Calculations
Debris calculations were performed using the HAZUS regional database.

<table>
<thead>
<tr>
<th>County</th>
<th>Brick, Wood and Other</th>
<th>Reinforced Concrete and Steel</th>
<th>Eligible Tree Debris</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td>Pinellas</td>
<td>15,529,750</td>
<td>2,161,617</td>
<td>737,575</td>
<td>18,428,942</td>
</tr>
<tr>
<td>Total for Regional Scenario</td>
<td>34,189,347</td>
<td>4,625,635</td>
<td>2,400,613</td>
<td>41,215,595</td>
</tr>
</tbody>
</table>

Note: The U.S. Army Corps of Engineers estimates that Hurricane Andrew generated approximately 15 million cubic yards of debris and Hurricane Katrina generated more than 118 million cubic yards.

3. Social Impacts
Displaced Population (# of Households) 144,856
Short Term shelter (3 of Persons) 412,000

4. Economic Loss
Residential Property (Capital Stock) Losses $16,316,000,000
Total Property (Capital Stock) Losses $25,548,000,000
Business Interruptions (Income) $169,000,000

The Disaster Resiliency Study for the Tampa Bay Region was completed in FEBRUARY 2012. This study focused on the economic viability of Pinellas County and the Tampa Bay Region from a major storm event.
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CHAPTER 4
INSTITUTIONAL CAPACITY

This section discusses the capacity of Pinellas County government and other critical stakeholders to implement a post-disaster redevelopment strategy. It consists of the following five subsections:

- Description of a Capacity Assessment
- Capacity Assessment Findings
- Conclusions on Local Capacity
- Plan Integration
- Recommendations for Further Integration

A. Description of a Capacity Assessment

The purpose of the Pinellas County Institutional Capacity Analysis is to examine the capacity of the county to facilitate redevelopment in the context of the goals and objectives of this plan. “Capacity” in the context of this plan is not focused on physical assets (i.e. number of fire trucks, ambulances, etc.). Instead, capacity is assessed to determine if the framework exists to implement the goals and actions in the PDRP, such as programs, agencies, organizations (and their associated staffs) and other tools. The assessment is intended to determine the robust programs and resources that strongly support post-disaster redevelopment, programs that exist but could be improved to better support post-disaster redevelopment goals, and weakness or gaps where programs or plans could be implemented to improve the County’s capacity to recover in the long term.  

A capacity assessment has two primary components: 1) an inventory of a local jurisdiction’s relevant plans, ordinances or programs already in place and discussion of their potential impact on post-disaster redevelopment; and 2) an analysis of the jurisdiction’s capacity to carry them out. Careful examination of local capacity will detect any existing gaps, shortfalls or weaknesses with ongoing government activities that could hinder proposed recovery/redevelopment activities and possibly exacerbate community recovery/redevelopment efforts. A capacity assessment also highlights the positive steps that have already been taken by the local government to prepare for post-disaster redevelopment, which should continue to be supported and enhanced through future mitigation efforts.

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24 Polk County PDRP
B. Capacity Assessment Findings

The findings of the capacity assessment are summarized in this Plan to provide insight into the relevant capacity of Pinellas County to implement post-disaster recovery and redevelopment activities. All information is based upon the input provided by County staff members through the Capacity Assessment Survey and during meetings of the Planning Policy and Coordination Workgroup and the Local Mitigation Strategy Committee.

1. Planning and Regulatory Capacity

Planning and regulatory capacity is based on the implementation of plans, ordinances and programs that demonstrate a local jurisdiction’s commitment to guiding and managing growth, development and redevelopment in a responsible manner, while maintaining the general welfare of the community. It includes emergency response and mitigation planning, comprehensive land use planning and transportation planning, in addition to the enforcement of zoning or subdivision ordinances and building codes that regulate how land is developed and structures are built, as well as protecting environmental, historic and cultural resources in the community. Although some conflicts can arise, these planning initiatives generally present significant opportunities to integrate recovery and redevelopment principles and practices into the local decision making process.

This assessment is designed to provide a general overview of the key planning and regulatory tools or programs in place or under development for Pinellas County, along with their potential effect on recovery and redevelopment. This information will help identify opportunities to address existing gaps, weaknesses or conflicts with other initiatives in addition to integrating the implementation of this Plan with existing planning mechanisms where appropriate.

Table 4.1 provides a summary of the relevant local plans, ordinances and programs already in place or under development for Pinellas County. A checkmark (✓) indicates that the given item is currently in place and being implemented, or that it is currently being developed for future implementation. Each of these other local plans, ordinances and programs should be considered available mechanisms for incorporating certain elements of the Post-disaster Redevelopment Plan.
Each County Department is responsible for developing and updating their COOP Plan and are in different stages of development, revision and completion.

---

### Table 4.1: Relevant Plans, Ordinances and Programs

<table>
<thead>
<tr>
<th>PLANNING / REGULATORY TOOL</th>
<th>IN PLACE</th>
<th>UNDER DEVELOPMENT TO BE UPDATED</th>
<th>DEPARTMENT RESPONSIBLE</th>
<th>EFFECT ON RECOVERY/REDEVELOPMENT</th>
</tr>
</thead>
<tbody>
<tr>
<td>Post-disaster Redevelopment Plan</td>
<td>✓</td>
<td></td>
<td>Pinellas County Planning – General Planning Division</td>
<td>✓</td>
</tr>
<tr>
<td>Post-disaster Redevelopment / Reconstruction Ordinance</td>
<td>✓</td>
<td></td>
<td>Pinellas County Planning – General Planning Division</td>
<td>✓</td>
</tr>
<tr>
<td>Pinellas County Comprehensive Plan</td>
<td>✓</td>
<td></td>
<td>Pinellas County Planning - General Planning Division</td>
<td>✓</td>
</tr>
<tr>
<td>Floodplain Management Plan</td>
<td>✓</td>
<td></td>
<td>Pinellas County Public Works - Stormwater Management</td>
<td>✓</td>
</tr>
<tr>
<td>Environmental Lands Management Plan</td>
<td>✓</td>
<td></td>
<td>Pinellas County Environmental Management Department – Environmental Lands Division</td>
<td>✓</td>
</tr>
<tr>
<td>Stormwater Management Plan</td>
<td>✓</td>
<td></td>
<td>Pinellas County Public Works Department – Stormwater Management</td>
<td>✓</td>
</tr>
<tr>
<td>Comprehensive Emergency Management Plan including the Recovery Annex</td>
<td>✓</td>
<td></td>
<td>Pinellas County Emergency Management Department</td>
<td>✓</td>
</tr>
<tr>
<td>Recovery Annex to Plan</td>
<td>✓</td>
<td></td>
<td>Pinellas County Emergency Management Department</td>
<td>✓</td>
</tr>
<tr>
<td>Continuity of Operations (COOP) Plans25</td>
<td>✓</td>
<td>✓</td>
<td>County Departments</td>
<td>✓</td>
</tr>
<tr>
<td>Departmental Emergency Operations Plans (EOPs)</td>
<td>✓</td>
<td></td>
<td>County Departments</td>
<td>✓</td>
</tr>
<tr>
<td>Emergency Permitting Procedures</td>
<td>✓</td>
<td></td>
<td>BDRS</td>
<td>✓</td>
</tr>
<tr>
<td>Disaster Recovery Leadership Network Communications Plan</td>
<td>✓</td>
<td></td>
<td>HHSCC</td>
<td>✓</td>
</tr>
<tr>
<td>Pinellas Hillsborough Pasco Community Organizations Active in Disasters (PHP COAD) SOG</td>
<td>✓</td>
<td></td>
<td>PHP COAD</td>
<td>✓</td>
</tr>
<tr>
<td>Pinellas Recovery Organizations United in Disasters (PROUD) SOG</td>
<td>✓</td>
<td></td>
<td>PROUD</td>
<td>✓</td>
</tr>
</tbody>
</table>

25 Each County Department is responsible for developing and updating their COOP Plan and are in different stages of development, revision and completion.
<table>
<thead>
<tr>
<th>PLANNING/REGULATORY TOOL</th>
<th>IN PLACE</th>
<th>UNDER DEVELOPMENT/ TO BE UPDATED</th>
<th>DEPARTMENT RESPONSIBLE</th>
<th>EFFECT ON RECOVERY/REDEVELOPMENT</th>
</tr>
</thead>
<tbody>
<tr>
<td>Local Mitigation Strategy</td>
<td>✓</td>
<td></td>
<td>Pinellas County Planning – General Planning Division</td>
<td>✓</td>
</tr>
<tr>
<td>Capital Improvements Program</td>
<td>✓</td>
<td></td>
<td>Pinellas County Office of Management &amp; Budget</td>
<td>✓</td>
</tr>
<tr>
<td>Economic Development Plan</td>
<td>✓</td>
<td></td>
<td>Pinellas County Economic Development Department</td>
<td>✓</td>
</tr>
<tr>
<td>Pinellas by Design (An Economic Development</td>
<td>✓</td>
<td></td>
<td>Pinellas Planning Council (PPC), Pinellas County Economic Development and Planning Dept.</td>
<td>✓</td>
</tr>
<tr>
<td>and Redevelopment Plan)</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Historic Preservation Plan</td>
<td>✓</td>
<td>✓</td>
<td>Pinellas County Planning Department – General Planning Division and the Pinellas County</td>
<td>✓</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>Cultural, Education &amp; Leisure (CEL) Department</td>
<td></td>
</tr>
<tr>
<td>Flood Damage Prevention Ordinance</td>
<td>✓</td>
<td></td>
<td>Pinellas County Public Works Department – Stormwater Management</td>
<td>✓</td>
</tr>
<tr>
<td>Zoning Ordinance</td>
<td>✓</td>
<td></td>
<td>Pinellas County Building &amp; Development Review Services (BDRS) Department</td>
<td>✓</td>
</tr>
<tr>
<td>Subdivision Ordinance</td>
<td>✓</td>
<td></td>
<td>Pinellas County BDRS Department</td>
<td>✓</td>
</tr>
<tr>
<td>Land Development Code</td>
<td>✓</td>
<td></td>
<td>Pinellas County BDRS, Planning, &amp; Environmental Management</td>
<td>✓</td>
</tr>
<tr>
<td>Building Code</td>
<td>✓</td>
<td></td>
<td>Pinellas County BDRS</td>
<td>✓</td>
</tr>
<tr>
<td>Fire Code</td>
<td>✓</td>
<td></td>
<td>Pinellas County Fire Administration/EMS</td>
<td>✓</td>
</tr>
<tr>
<td>Debris Management Plan</td>
<td>✓</td>
<td></td>
<td>Pinellas County Utilities Solid Waste</td>
<td>✓</td>
</tr>
<tr>
<td>Temporary Housing Plan / Disaster Housing</td>
<td></td>
<td>✓</td>
<td>Pinellas County Emergency Management Dept.</td>
<td>✓</td>
</tr>
<tr>
<td>Plan</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>National Flood Insurance Program</td>
<td>✓</td>
<td></td>
<td>Pinellas County Public Works Department – Stormwater Mgmt.</td>
<td>✓</td>
</tr>
</tbody>
</table>
The implementation of post-disaster redevelopment activities relies heavily on the local planning department. Other important stakeholders may include public works officials, economic development specialists and others. In many instances, concurrent local planning efforts will help to achieve or complement recovery and redevelopment goals even though they are not designed as such. Therefore, the Capacity Assessment Survey reviewed each of Pinellas County’s general planning capabilities and to the degree to which post-disaster recovery and redevelopment planning is integrated into other on-going planning efforts.

**Pinellas County Comprehensive Land Use Plan:** The Comprehensive Plan establishes the goals and objectives that govern the community’s growth and development and policies for daily land-use and development decision making. The Comprehensive Plan serves as the foundation for land development regulations, zoning, major capital expenditures and other initiatives to accomplish the community’s overall vision. The Comprehensive Plan includes a demographic analysis and elements that address future land use, housing transportation, public facilities and services, conservation, recreation and open space, intergovernmental coordination and capital improvements. Given the broad nature of the plan and its regulatory standing, the integration of post-disaster redevelopment policies into the Comprehensive Plan can enhance the likelihood of implementing a successful post-disaster redevelopment strategy following a disaster.

- Pinellas County adopted their Comprehensive Plan in 1989. The plan is revised every seven years through the Evaluation and Appraisal Report process coordinated through the Florida Department of Community Affairs (FDCA). The County also updates the plan as needed, in coordination with FDCA. The Comprehensive Plan is evaluated in greater detail later in this Section.

**Capital Improvements Plan:** A capital improvement plan guides the scheduling of spending on public improvements. A capital improvements plan can serve as an important mechanism for guiding future development away from identified hazard areas. Limiting public spending in hazardous areas is one of the most effective long-term mitigation actions available to local governments and helps to reduce post-disaster damage.

- Pinellas County has a Capital Improvements Element (CIE) that is part of the Comprehensive Plan. The CIE was developed by the Pinellas County Planning Department – General Planning Division. The capital improvement plan should be considered a local funding source for mitigation projects recommended as part of the Local Mitigation Strategy and the implementation of those actions will help to reduce post-disaster damages.
**Historic Preservation Plan:** A historic preservation plan is intended to preserve historic structures or districts within a community. An often overlooked aspect of the historic preservation plan is the assessment of buildings and sites located in areas subject to natural hazards, and the identification of ways to reduce future damages. This may involve retrofitting or relocation techniques that account for the need to protect buildings that do not meet current building standards, or are within a historic district that cannot easily be relocated out of harms way. These properties provide unique challenges in the post-disaster environment.

- While Pinellas County has not developed a specific Historic Preservation Plan, the County’s Land Development Code protects historic resources by designating them with a Historical and Archaeological Overlay District. These areas have special regulations applied to them in order to preserve the character of the existing resource or resources. Development or construction within these districts is often reviewed by the County’s Historic Preservation Board.
- The County has a Division of Historical Resources that is part of the County Clerk’s Office.
- The County could consider implementing mitigation strategies such as applying for federal grant funds (i.e., PDM, FMA, HMGP) to protect identified at-risk historic structures in Pinellas County in any future County historic planning efforts.

**Zoning Ordinances:** Zoning represents the primary means by which land use is controlled by local governments. As part of a community’s police power, zoning is used to protect the public health, safety and welfare of those in a given jurisdiction that maintains zoning authority. A zoning ordinance is the mechanism through which zoning is typically implemented. Since zoning regulations enable local governments to limit the type and density of development, it can serve as a powerful tool when applied in identified hazard areas.

- Pinellas County has adopted a Land Development Code (LDC) that includes the zoning ordinance. The LDC is used to regulate new development and to guide local decisions for residential, commercial and industrial growth in the unincorporated areas of the County. Unwise development patterns in hazardous areas is prohibited or discouraged through floodplain and conservation districts.

**Subdivision and Platting Ordinances:** A subdivision ordinance is intended to regulate the development of housing, commercial, industrial or other uses, including associated public infrastructure, as land is subdivided into buildable
lots for sale or future development. Subdivision design that accounts for natural hazards can dramatically reduce the exposure of future development.

- Pinellas County enforces subdivision regulations (Chapter 154, Pinellas County Land Development Code) and includes the consideration of natural hazards as part of their application (i.e., buffer zones and setbacks against flood hazards areas).

**Building Codes, Permitting and Inspections:** Building Codes regulate construction standards. In many communities permits are issued for new construction and inspections of work take place over the course of construction of the building. Decisions regarding the adoption of building codes (that account for hazard risk), the type of permitting process required both before and after a disaster, and the enforcement of inspection protocols all affect the level of hazard risk faced by a community.

- Pinellas County has adopted and enforces the Florida Building Code. The 2007 Florida Building Code became effective March 2008 (first publication date).

The adoption and enforcement of building codes by local jurisdictions is routinely assessed through the Building Code Effectiveness Grading Schedule (BCEGS) program developed by the Insurance Services Office, Inc. (ISO).26 Under the BCEGS program, ISO assesses the building codes in effect in a particular community and how the community enforces its building codes, with special emphasis on mitigation of losses from natural hazards. The results of BCEGS assessments are routinely provided to ISO’s member private insurance companies, which in turn may offer ratings credits for new buildings constructed in communities with strong BCEGS classifications. The concept is that communities with well-enforced, up-to-date codes should experience fewer disaster-related losses, and as a result should have lower insurance rates.

In conducting the assessment, ISO collects information related to personnel qualification and continuing education, as well as number of inspections performed per day. This type of information combined with local building codes is used to determine a grade for that jurisdiction. The grades range from 1 to 10, with the lower grade being better. A BCEGS grade of 1 represents exemplary commitment to building code enforcement, and a grade of 10 indicates less than minimum recognized protection.

- Pinellas County has received a BCEGS rating of grade of 7.

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26 Participation in BCEGS is voluntary and may be declined by local governments if they do not wish to have their local building codes evaluated.
In addition to sound building codes and the BCEGS rating discussed above, the Pinellas County Building Department has also developed a Post Hurricane Assistance Manual that provides information that will be helpful to citizens and business owners following a disaster. It includes a list of important phone numbers and a step-by-step list of things to do upon returning to home following a hurricane.

**Floodplain Management**

Flooding represents the greatest natural hazard facing the nation. At the same time the tools available to reduce the impacts associated with flooding are among the most developed. In addition to approaches that cut across hazards, such as education, outreach, and the training of local officials, the National Flood Insurance Program (NFIP) contains specific regulatory measures that enable government officials to determine where and how growth occurs relative to flood hazards. These regulations particularly apply to buildings damaged during a disaster through the NFIP’s Substantial Damage regulations. These regulations will play an important role in post-disaster redevelopment. Therefore, the community’s floodplain management program is evaluated as a key indicator for measuring local capacity as part of this assessment.

In order for a community to join the NFIP, they must adopt a local flood damage prevention ordinance that requires jurisdictions to follow established minimum building standards in the floodplain. These standards require that all new buildings and substantial improvements to existing buildings will be protected from damage by the 100-year flood, and that new floodplain development will not aggregate existing flood problems or increase damage to other properties.

Another key service provided by the NFIP is the mapping of identified flood hazard areas. Once prepared the Flood Insurance Rate Maps (FIRMs) are used to assess flood hazard risk, regulate construction practices and set flood insurance rates. FIRMs are an important source of information to educate residents, government officials and the private sector about the likelihood of flooding in their community.

Pinellas County joined the NFIP on August 18, 1971. The current effective map date for the County’s FIRMs is September 2003 (updated 02/17/02). The County is committed to maintaining its continued compliance with the NFIP. As of March 31, 2011, there were 37,111 NFIP policies in force in unincorporated Pinellas County providing approximately $8.1 billion in flood insurance coverage. As of March 2011, there have been approximately $20.1 million paid in insurance claims on 2,696 reported losses.  

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An additional indicator of floodplain management capacity is the active participation of local jurisdictions in the Community Rating System (CRS). The CRS is an incentive-based program that encourages counties and municipalities to undertake defined flood mitigation activities that go beyond the minimum requirements of the NFIP, adding extra local measures to provide protection from flooding. All of the 18 creditable CRS mitigation activities are assigned a range of point values. As points are accumulated and reach identified thresholds, communities can apply for an improved CRS class. Class ratings, which run from 10 to 1, are tied to flood insurance premium reductions as shown in Table 4.2. As class ratings improve (decrease), the percent reduction in flood insurance premiums for NFIP policy holders in that community increases.

Community participation in the CRS is voluntary. Any community that is in full compliance with the rules and regulations of the NFIP may apply to FEMA for a CRS classification better than class 10. The CRS application process has been greatly simplified over the past several years based on community feedback to make the CRS more user-friendly. Extensive technical assistance is also available for communities who request it.

Pinellas County joined the CRS program in 1992 and is currently certified as a Class 8 community, meaning that citizens who live in a Special Flood Hazard Area that have purchased flood insurance have their premiums reduced by 10%.

**Floodplain Management Plan:** A floodplain management plan (or a flood mitigation plan) provides a framework for action regarding the corrective and preventative measures in place to reduce flood-related impacts.

- Pinellas County does have a stand-alone floodplain management plan but the Local Mitigation Strategy also addresses flood vulnerability and included mitigation actions to address the flood hazard in Pinellas County. Pinellas County also practices floodplain management through the County Land Development Code (Chapters 158 & 170).

**Environmental Lands Management Plan:** Environmental lands management plans are designed to preserve, protect and restore largely undeveloped lands in

<table>
<thead>
<tr>
<th>CRS CLASS</th>
<th>PREMIUM REDUCTION</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>45%</td>
</tr>
<tr>
<td>2</td>
<td>40%</td>
</tr>
<tr>
<td>3</td>
<td>35%</td>
</tr>
<tr>
<td>4</td>
<td>30%</td>
</tr>
<tr>
<td>5</td>
<td>25%</td>
</tr>
<tr>
<td>6</td>
<td>20%</td>
</tr>
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<td>7</td>
<td>15%</td>
</tr>
<tr>
<td>8</td>
<td>10%</td>
</tr>
<tr>
<td>9</td>
<td>5%</td>
</tr>
<tr>
<td>10</td>
<td>0</td>
</tr>
</tbody>
</table>

Table 4.2: CRS Premium Discounts
their natural state, and to expand or connect areas in the public domain such as parks, greenways and other outdoor recreation areas. In many instances open space management practices are consistent with the goals of reducing hazard losses, such as the preservation of wetlands or other flood-prone areas in their natural state in perpetuity.

- The Environmental Management Division works to protect the lands and waterways of Pinellas County along with air quality and native biodiversity. It is involved in many urban environmental issues through the enforcement of various codes and regulations. It develops and implements management policies for the county's largest lakes, and restores wildlife habitat on County property. The department also investigates environmental issues in response to complaints filed by citizens.

**Stormwater Management Plan:** A stormwater management plan is designed to address flooding associated with stormwater runoff. The stormwater management plan is typically focused on design and construction measures that are intended to reduce the impact of more frequently occurring minor urban flooding.

- The County’s Public Works Department Stormwater Division monitors and regulates the stormwater management system in the County. Improvements are identified in the CIP and LMS.

**Long-Range Transportation Plan:**
The Pinellas Metropolitan Planning Organization (MPO) develops the **Long-Range Transportation Plan** which identifies improvements to the transportation system within the county including roads, bridges, transit and bicycle/pedestrian facilities. Transportation is a key element in both the ability to evacuate as well as to respond and recovery from an emergency event. Transportation is directly tied to land use. Impacts to the transportation system will have an impact on redevelopment activities and vice versa. Post-disaster redevelopment should be consistent with the long range transportation plan of the community.

**Pinellas by Design: An Economic Development and Redevelopment Plan for the Pinellas Community:**
The purpose of the **Economic Development and Redevelopment Plan for the Pinellas Community** (EDRP) is to identify the actions necessary to assure future economic prosperity and a corresponding high quality of life for all of Pinellas County’s citizens. The EDRP establishes economic, real estate, and urban design strategies to serve as a foundation for future countywide economic development and redevelopment efforts. Pinellas by Design provides the vision for economic
redevelopment, while the PDRP will further identify the process, procedures, and implementation strategies.

2. Emergency Management Plans

Recovery is recognized as one of the four primary phases of emergency management. The three other phases include preparedness, response and mitigation. In reality each phase is interconnected as Figure 4.1 suggests.

Recovery is generally described as the process of taking the steps necessary, following a disaster, to return a community to the condition it was in before the event occurred. There are two general phases of recovery: short-term and long-term. Short-term recovery activities are generally those activities that have to take place following a disaster in order for citizens to return to their homes. They are typically initiated in the County Emergency Operations Center while in emergency response mode. Short-term recovery activities include such functions as: implementing a curfew; conducting impact assessments; re-establishing the critical infrastructure necessary for community reconstruction; re-establishing critical services that meet the physical and safety needs of the community (e.g., water, food, ice, medicine and medical care, emergency access, and continuity of government operations), and coordinating re-entry procedures. Short-term recovery typically does not include reconstruction of the built environment.
Long-term recovery usually involves those activities that are taken in an attempt to return the community to the conditions that existed before the disaster or emergency occurred, preferably while taking advantage of opportunities to mitigate against the impacts of future disasters. Long-term recovery activities can last for many years following a disaster. They include activities such as: redevelopment; environmental preservation and restoration; rebuilding; construction; repairs; and restoration. Economic recovery and business assistance are some of the most important long-term recovery activities that must take place in order for a community to fully recover from a disaster.

Planning for each phase of emergency management is a critical part of a local comprehensive emergency management program and a key to the successful implementation of a post-disaster recovery and redevelopment strategy. As a result, the Capacity Assessment Survey addresses plans and programs across a range of emergency management plans in order to assess Pinellas County’s willingness to plan and their level of technical planning proficiency.

**Post-disaster Redevelopment Plan:** A post-disaster redevelopment plan identifies policies, operational strategies, and roles and responsibilities for implementation that will guide decisions that affect long-term recovery and redevelopment of the community after a disaster. The plan emphasizes seizing opportunities for hazard mitigation and community improvement consistent with the goals of the local comprehensive plan and with full participation of the citizens. Recovery topics addressed in the plan should include business resumption and economic redevelopment, housing repair and reconstruction, infrastructure restoration and mitigation, short-term recovery actions that affect long-term redevelopment, sustainable land use, environmental restoration, and financial considerations as well as other long-term recovery issues identified by the community.

- This plan serves as an update to Pinellas County’s first Post-disaster Redevelopment Guide (March 1994).

**Local Mitigation Strategy (LMS):** Also called a hazard mitigation plan, the local mitigation strategy represents a community’s blueprint for how it intends to reduce the impact of natural and human-caused hazards on people and the built environment. The essential elements of a local mitigation strategy include a risk assessment, capability assessment, mitigation strategy and the mitigation projects list.

- Pinellas County developed the first version of their local mitigation strategy plan in 1999 and has subsequently updated the plan in 2004. The plan is currently undergoing a revision that was completed in May of 2009. Because the LMS is being updated at the same time that this plan
was being developed, Pinellas County staff took the opportunity to integrate certain elements of the Vulnerability Assessment developed for this plan into the Risk Assessment for the LMS.

- The Pinellas County LMS is reviewed in greater detail earlier in this section under the Plan Integration discussion.

**Comprehensive Emergency Management Plan (CEMP):** The CEMP outlines responsibilities and the means by which resources are deployed during and following an emergency or disaster. The CEMP also establishes command and control of the emergency management program and coordination among municipal, county, state, and federal agencies. Although the CEMP is predominantly an operations plan, the following sections contain elements that are highly relevant to post-disaster redevelopment:

- Pinellas County Emergency Management has prepared a Comprehensive Emergency Management Plan (CEMP) to address the County’s response to a variety of disasters and emergencies. This plan is currently being revised with completion expected in September 2009.

- **Recovery Annex to the Emergency Management Operations Plan:** This section of the CEMP establishes the organization and procedures for conducting short-term recovery operations. The Pinellas County CEMP does contain a Recovery Annex and is currently being updated.

- Those departments and entities with response or recovery responsibilities should have emergency operations plans (EOPs) which describe the responsibilities and necessary procedures and resources necessary. While emergency response entities are more familiar with disaster operations, many entities with recovery responsibilities are not familiar with these assignments, may need for EOPs, training and networks with supporting organizations.

**Continuity of Operation (COOP) Plans:** A continuity of operations plan establishes a chain of command, line of succession and plans for backup or alternate emergency facilities in case of an extreme emergency or disaster event.

- Pinellas County Departments with Critical Emergency Support Functions have developed COOP Plans. The county is currently updating the COOP Plans and expanding the requirement for COOP planning to additional departments with recovery support roles.

**Debris Management Plan:** The Debris Management Plan (DMP) provides the operational and coordination activities to remove, collect and dispose of debris following a disaster. The DMP explains the organizational structure, roles and responsibilities and the concept of operations including debris removal priorities.
Debris removal is important to expedite recovery efforts in the affected area and reduce the threat to public health and safety. While debris operations are mainly considered short-term recovery, certain elements (including placement of debris reduction sites) can have impacts on long-term recovery.

- Pinellas County and each municipality have a DMP in place that is discussed in greater detail in the Plan Integration portion of this section.

**Disaster Housing Plan:** The Disaster Housing Plan establishes the framework for addressing temporary housing for those that are left homeless following a disaster and identifies the key agencies that can be brought together to identify and activate housing resources. This plan is currently being updated as a result of FEMA’s recent change in temporary disaster housing policies. While the temporary disaster housing issues are mainly considered short-term recovery, certain elements (including location of the temporary housing sites) can have impacts on long-term recovery.

- Pinellas County currently has a Disaster Housing Plan in place. It is expected this plan will be significantly revised as part of the PDRP planning process.
3. Health and Human Services

The socio-economic characteristics of Pinellas County present challenges in the coordination of health and human services. In order to meet these challenges in “blue skies” as well as post-disaster, the county has developed organizational structures which work together to ensure quality and continuity of care throughout the county.

**Pinellas Hillsborough Pasco Community Organizations Active in Disaster (PHP COAD)**

The PHP COAD is a humanitarian association of organizations, agencies and businesses which are active in one or more phases of disaster: preparedness, response, recovery and mitigation. Its mission is to foster efficient, streamlined disaster service delivery, while minimizing duplication of effort. PHP COAD will work in close partnership with Pinellas, Hillsborough, and Pasco Counties’ long-term recovery organizations to support their primary mission of recovery. The **PHP COAD Communications Plan** specifies the procedures whereby the COAD will communicate with the County EOCs to coordinate the volunteer and donations in the region following a disaster. The PHP COAD will establish the client management system for both response and short term recovery.

**Health and Human Services Coordinating Council**

The Health and Human Services Coordinating Council (HHSCC) is a consortium of stakeholders involved in the collaborative activities supported by the HHSCC. It is through their efforts, planning and strategic investment that the county works to improve the health and human services system in Pinellas County.

The **Policy Board** provides policy direction, support and resources to guide and facilitate the work of the HHSCC. It sets policy and determines local discretionary funding in the context of overall community priorities, needs and direction. The policy board includes members of the Board of County Commissioners, the Sheriff and the Juvenile Welfare Board (JWB) members.

The **Administrative Forum** is comprised of chief administrators from planning and funding entities to provide a systems perspective to the planning process. It provides administrative oversight to the Council, reviews and recommends community-based plans to the Policy Board, develops strategies to implement plans, takes measures to increase coordination, and works to identify funding for new endeavors.

The Administrative Forum membership includes representatives from the following organizations (click on a link to learn more):
6th Judicial Court
Agency for Persons with Disabilities
Area Agency on Aging
Central Florida Behavioral Health Network
City of Clearwater
City of Largo
City of St. Petersburg
Department of Children and Families
Department of Juvenile Justice
Department of Vocational Rehabilitation
DOE
Early Learning Coalition of Pinellas County
Eckerd Community Alternatives
Juvenile Welfare Board of Pinellas County
Foundation Representatives
- Eckerd Family Foundation
- Community Foundation of Tampa Bay
- Allegany Franciscan Ministries
Pinellas County Schools
Pinellas County Department of Health and Human Services
Pinellas County Justice and Consumer Services
Pinellas County Health Department
Pinellas County Sheriff's Office
Pinellas Suncoast Transit Authority
United Way of Tampa Bay
WorkNet Pinellas

Networks
- The Health and Behavioral Health Leadership Network (HBHLN) works to develop a common understanding of how care is delivered in Pinellas County, identifies system level best practices that could expand access to health care for county residents, and establishes short, intermediate and long term policy, funding and system strategies for increasing access to health care in the County.

- The Homeless Leadership Network (HLN) is the leadership group in the Pinellas homeless services system.

- The mission of the Low Income Housing Leadership Network is to provide leadership to the community to facilitate access, preserve, and expand housing for low income service workers and other households whose income is at or below 80% of the area median income.
The Health and Human Services Disaster Recovery Leadership Network (DRLN) consists of representatives from funding agencies, government bodies, the school board, and health and human services agencies that play or could play a role in disaster recovery in Pinellas County. Its mission is to help ensure that priority services are made available to the public at the earliest opportunity should a major disaster occur in Pinellas County.

**Pinellas Recovery Organizations Active in Disaster (PROUD)**

PROUD is a non-profit, 501c.3 which will focus on meeting unmet needs of survivors in long-term recovery. Its membership includes private non-profit services providers, government representatives, and faith-based partners.

### 4. Administrative and Technical Capacity

The ability of a local government to develop and implement a post-disaster redevelopment strategy through projects, policies and programs is directly tied to its ability to direct staff time and resources for that purpose. Administrative capacity can be evaluated by determining how post-disaster redevelopment-related activities are assigned to local departments and if there are adequate personnel resources to complete these activities.

The degree of intergovernmental coordination among departments will also affect administrative capacity for the implementation and success of proposed post-disaster redevelopment activities.

Technical capacity can generally be evaluated by assessing the level of knowledge and technical expertise of local government employees, such as personnel skilled in using Geographic Information Systems (GIS) to analyze and assess community hazard vulnerability.

The Capacity Assessment Survey was used to capture information on administrative and technical capacity through the identification of available staff and personnel resources. It should be noted however, that the recent economic downturn and budgetary restrictions has resulted in a significant reduction in staff. These staff reductions will impact the capacity for technical expertise and experience.

**Table 4.3** provides a summary of the results for Pinellas County with regard to relevant staff and personnel resources. A checkmark (✓) indicates that the given local staff member(s) is maintained through the County’s local government resources.
### Table 4.3: Relevant Staff / Personnel Resources

<table>
<thead>
<tr>
<th>STAFF / PERSONNEL RESOURCES</th>
<th>IN PLACE</th>
<th>DEPARTMENT</th>
<th>COMMENTS</th>
</tr>
</thead>
<tbody>
<tr>
<td>Planners with knowledge of land development and land management practices</td>
<td>✔️</td>
<td>Pinellas County Planning Department, Pinellas County Department of Environment and Infrastructure</td>
<td></td>
</tr>
<tr>
<td>Engineers or professionals trained in construction practices related to buildings and/or infrastructure</td>
<td>✔️</td>
<td>Pinellas County Public Works Department, Pinellas County Licensing Board</td>
<td></td>
</tr>
<tr>
<td>Planners or engineers with an understanding of natural and/or human-caused hazards</td>
<td>✔️</td>
<td>Pinellas County Planning, Public Works, Emergency Management and Environmental and Infrastructure Departments</td>
<td>County will work with RPC and university for assistance</td>
</tr>
<tr>
<td>Emergency manager</td>
<td>✔️</td>
<td>Pinellas County Emergency Management Department</td>
<td></td>
</tr>
<tr>
<td>Floodplain manager</td>
<td>✔️</td>
<td>Pinellas County Public Works Department</td>
<td></td>
</tr>
<tr>
<td>Land surveyors</td>
<td>✔️</td>
<td>Pinellas County Public Works Department</td>
<td></td>
</tr>
<tr>
<td>Scientists familiar with the hazards of the community</td>
<td></td>
<td>University of South Florida (USF St. Pete Campus), Mote Marine Laboratory, Pinellas County Environmental Management, Dept. of Health</td>
<td>County departments will work with university and scientific communities</td>
</tr>
<tr>
<td>Staff with education or expertise to assess the community’s vulnerability to hazards</td>
<td>✔️</td>
<td>Pinellas County Emergency Management and Planning Departments</td>
<td></td>
</tr>
<tr>
<td>Personnel skilled in Geographic Information Systems (GIS) and/or FEMA’s HAZUS program</td>
<td>✔️</td>
<td>Pinellas County Business Technology Services &amp; Planning Departments</td>
<td></td>
</tr>
<tr>
<td>Resource development staff or grant writers</td>
<td>✔️</td>
<td>Pinellas County Office of Management &amp; Budget, and Planning Departments</td>
<td></td>
</tr>
<tr>
<td>County-wide organization to coordinate health and human services</td>
<td>✔️</td>
<td>HHSCE and Leadership Networks</td>
<td></td>
</tr>
<tr>
<td>Active organization to coordinate volunteers and donations</td>
<td>✔️</td>
<td>PHP COAD</td>
<td></td>
</tr>
<tr>
<td>Organization prepared to address Unmet Needs in Long term Recovery</td>
<td>✔️</td>
<td>PROUD</td>
<td></td>
</tr>
</tbody>
</table>
5. Fiscal Capacity

The ability of a local government to implement a successful post-disaster redevelopment strategy is often closely associated with the amount of money available to implement policies and projects. This may take the form of outside grant funding awards or locally-based revenue and financing. The costs associated with recovery/redevelopment policy and project implementation vary widely. In some cases, policies are tied primarily to staff time or administrative costs associated with the creation and monitoring of a given program. In other cases, direct expenses are linked to actual projects which can require a substantial commitment from local, state and federal funding sources.

The Capacity Assessment Survey was used to capture information on Pinellas County’s fiscal capacity through the identification of locally available financial resources. Table 4.4 provides a summary of the results for Pinellas County with regard to relevant fiscal resources. A checkmark (✓) indicates that the given fiscal resource is locally available.

<table>
<thead>
<tr>
<th>FISCAL RESOURCES</th>
<th>AVAILABLE</th>
<th>DEPARTMENT</th>
<th>COMMENT</th>
</tr>
</thead>
<tbody>
<tr>
<td>Special Purpose Taxes (or taxing districts)</td>
<td>✓</td>
<td>Pinellas County Office of Management and Budget</td>
<td></td>
</tr>
<tr>
<td>Gas / Electric Utility Fees</td>
<td></td>
<td></td>
<td>The County does not provide these services.</td>
</tr>
<tr>
<td>Water / Sewer Fees</td>
<td>✓</td>
<td>Pinellas County Utilities Department</td>
<td></td>
</tr>
<tr>
<td>Stormwater Utility Fees</td>
<td></td>
<td></td>
<td>No stormwater fee in place.</td>
</tr>
<tr>
<td>Development Impact Fees/ Building and Development Review Fees</td>
<td>✓</td>
<td>Pinellas County Building &amp; Development Review Services</td>
<td></td>
</tr>
<tr>
<td>General Obligation, Revenue and/or Special Tax Bonds</td>
<td>✓</td>
<td>Pinellas County Office of Management &amp; Budget</td>
<td></td>
</tr>
<tr>
<td>Partnering arrangements or intergovernmental agreements</td>
<td>✓</td>
<td>Various Pinellas County Departments depending on issue.</td>
<td>Recommend copies of all inter-governmental agreements are kept by OMB</td>
</tr>
<tr>
<td>Capital Funds</td>
<td>✓</td>
<td>Various Pinellas County Departments depending on issue.</td>
<td></td>
</tr>
</tbody>
</table>
### Table 4.4: Relevant Fiscal Resources

<table>
<thead>
<tr>
<th>FISCAL RESOURCES</th>
<th>AVAILABLE</th>
<th>DEPARTMENT</th>
<th>COMMENT</th>
</tr>
</thead>
<tbody>
<tr>
<td>Special Revenue Funds (County Transportation Trust, Health Dept., Summer Food Program, Emergency Medical Service, Mosquito Control – State, Community Development Block Grants, SHIP Funds, Gifts for Animal Welfare Trust, Tree Bank Fund, Public Library Coop, School Crossing Guard Trust Fund, Intergov’t Radio Communication, STAR Center, marina Operations Fund, Emergency Communication (E 911 System), Community Housing Trust Fund, Tourist Development Council, Fire Districts, Construction Licensing Board, Air Quality – Tag Fee Fund, Palm Harbor Recreation &amp; Library District, Feather Sound Community Services District, Drug Abuse Trust Fund, Street Lighting District, Special Assessments – Paving, Special Assessments – Nav Dredging, Lealman Solid Waste Collection &amp; Disposal District, Special Assessments – Drainage)</td>
<td>✓</td>
<td>Various Pinellas County Departments depending on issue.</td>
<td></td>
</tr>
<tr>
<td>Debt Service Funds (Capital Improvement Bonds Debt Service, Penny for Pinellas Infrastructure Tax, Local Option Gas Tax)</td>
<td>✓</td>
<td>Various Pinellas County Departments depending on issue.</td>
<td></td>
</tr>
<tr>
<td>Internal Service Funds (Business Technology Services, Fleet Management, Risk Financing Fund, Employee Health Benefits)</td>
<td>✓</td>
<td>Various Pinellas County Departments depending on issue.</td>
<td></td>
</tr>
<tr>
<td>Capital Improvement Programming</td>
<td>✓</td>
<td>Pinellas County Office of Management &amp; Budget</td>
<td></td>
</tr>
<tr>
<td>Community Development Block Grants (CDBG)</td>
<td>✓</td>
<td>Pinellas County Community Development Department</td>
<td></td>
</tr>
</tbody>
</table>
6. Political Capacity

One of the most difficult capacities to assess involves the political will of a jurisdiction to enact meaningful policies and projects designed to improve disaster recovery or manage redevelopment activities following a disaster. Redevelopment can often be faced with tremendous political pressure and the community’s goals for post-disaster recovery and redevelopment may be seen as an impediment to other goals of the community, such as growth and economic development. Therefore the local political climate must be considered in designing the recovery and redevelopment strategy, as it could be the most difficult hurdle to overcome in accomplishing its implementation.

- Pinellas County has directed funds and significant local resources into the development of the Post-disaster Redevelopment Plan. In addition county departments, municipalities and volunteer agencies are working to address what is viewed as essential for the recovery after a disaster. Past experiences have demonstrated the need for a plan for long-term recovery and the county leadership has verified its commitment.
- Recognizing the need to address health and human service issues related to disaster response and recovery, Pinellas County and the Juvenile Welfare Board set up the Health and Human Services Coordinating Council with direction to establish the Disaster Recovery Leadership Network (DRLN).

C. Conclusions on Local Capacity

Linking the Capacity Assessment with the Vulnerability Assessment and the Recovery and Redevelopment Strategy

The conclusions of the Vulnerability Assessment and Capacity Assessment serve as the foundation for the development of a meaningful recovery and redevelopment strategy. During the process of identifying specific recovery and redevelopment actions to pursue, Pinellas County considered not only its level of hazard risk but also the existing capacity to implement a successfully recovery and redevelopment strategy.
Figure 4.2 shows a Risk vs. Capacity Matrix that is used to illustrate Pinellas County’s overall hazard risk\(^{28}\) in comparison to overall capacity. Based on the assessments completed for Pinellas County, hazard risk was determined to be HIGH while the overall capacity is HIGH. This means that while Pinellas County does face the potential to be impacted by natural hazards, it also has significant capacity to implement a successful post-disaster recovery and redevelopment strategy to manage the impacts of those hazards.

**D. Plan Integration**

An important aspect in determining a community’s capacity to implement a successful post-disaster redevelopment strategy is obtaining a thorough understanding of the community’s post-disaster redevelopment-related plans, policies and programs already in place. This Plan Integration analysis describes the analysis that was conducted of Pinellas County’s plans and associated goals, objectives and policies that contribute to or facilitate the County’s ability to implement a post-disaster redevelopment strategy. The analysis also served as a means of identifying existing gaps, shortfalls or weaknesses, if any, with the County’s regulatory framework that may hinder or impede a successful post-disaster redevelopment operation. These identified gaps, shortfalls and weaknesses can become actions to be implemented in the County’s Post-disaster Redevelopment Strategy (See Chapter 5).

The plans that were evaluated as part of the Plan Integration analysis included:

- **Pinellas County Comprehensive Plan** (Supplement #10, adopted 12/18/07, effective 2/28/08)
- **Pinellas County Land Development Code**
- **Pinellas County Local Mitigation Strategy** (Revised, August 2010)
- **Pinellas County Comprehensive Emergency Management Plan** (Revised December 2010)
  - **Pinellas County Debris Management Plan** (Revised, 2008)
  - **Pinellas County Temporary Disaster Housing Strategy** (Under development)
- **Pinellas County Disaster Recovery Leadership Network Communications Plan**

**Pinellas County Comprehensive Plan**

The Pinellas County Comprehensive Plan establishes the goals and objectives that govern the community’s growth and development and policies for daily land-use and development decision making. The Comprehensive Plan serves as the foundation for land development regulations, zoning, major capital expenditures and other

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\(^{28}\) Overall hazard risk was determined using the results of the risk assessment combined with information on the following factors: total population, population growth rate, land area, historical disaster declarations, unique hazard risks, NFIP participation and the value of existing Pre-FIRM structures.
initiatives to accomplish the community’s overall vision for what it wants to be. Pinellas County’s Comprehensive Plan includes a demographic analysis and elements that address future land use, housing transportation, public facilities and services, coastal management, recreation and open space, intergovernmental coordination and capital improvements. Given the broad nature of the plan and its regulatory standing, the integration of post-disaster redevelopment policies into the Comprehensive Plan can enhance the likelihood of implementing a successful post-disaster redevelopment strategy following a disaster.

Chapter 9J-5 of the Florida Administrative Code requires that post-disaster redevelopment issues be addressed either as part of the data and analysis of the comprehensive plan or as policies in the comprehensive plan elements. As a result of the Plan Integration process, the following elements of the Pinellas County Comprehensive Plan have been found to contain goals, objectives and/or policies related to post-disaster redevelopment:

- Future Land Use & Quality Communities Element
- Coastal Management Element
- Recreation, Open Space and Culture Element
- Capital Improvements Element
- Intergovernmental Coordination Element

The Future Land Use & Quality Communities Element contains the general development/redevelopment policies for Pinellas County. While most of the goals, objectives and policies in this element are not directly related to post-disaster redevelopment, they could be indirectly linked to post-disaster redevelopment.

The Future Land Use & Quality Communities Element contains goals objectives and policies (see FLU Objective 1.6) for:

- Restraining development and redevelopment in areas such as hurricane velocity and flood-prone area in compliance with NFIP and other applicable federal and state regulations, including relevant findings from interagency hazard mitigation reports
- Directing development away from areas subject to flooding to reduce risks to life and property and to reduce public expenditures in these areas
- Restricting development and redevelopment based on Coastal Management Element and associated NFIP and Pinellas County land development codes

The Coastal Management Element contains goals, objectives and policies for:

- Implementing, updating, and revising its Post-disaster Redevelopment Plan and continuing implementing hazard mitigation measures to reduce exposure to natural hazards
- Cooperating with state and regional agencies, and with other local governments to maintain or reduce hurricane clearance times
Restricting development within the Coastal Storm Area, and direct population concentrations out of the Coastal Storm Area
Restricting public expenditures that subsidize development or redevelopment in the Coastal Storm Area
Reducing public shelter deficits
Protecting natural beaches and dunes from the impacts of development and continuing to manage shoreline by restoring and preserving the natural functions of beach and dune systems
Prohibiting the siting of new or expansion of existing hospitals, nursing homes, and assisted living facilities within the Coastal Storm Area

The Housing Element contains goals objectives and policies for:
Restricting density incentives for affordable housing to non-coastal storm areas
Encourage replacement/upgrading of mobile homes with modern manufactured homes
Continuing to reduce the number of sub-standard housing units

The Recreation, Open Space and Culture Element contains goals objective and policies for:
In tandem with updating a countywide inventory of historical and archaeological resources, updating the GIS for an accurate database for preservation decisions, including redevelopment planning

The Capital Improvements Elements contains goals objective and policies for:
Encouraging efficient provision of capital improvements by minimizing public expenditures that subsidize development in the Coastal Storm Area
Limiting public investments in the Coastal Storm Area to those necessary or those designed to minimize loss of public investment

The Intergovernmental Coordination Element contains a policy for:
Continuing to take the leadership role in emergency preparedness and to support disaster planning through cooperative and regional solutions

The Public School Facilities Element contains goals and policies for:
Restricting the location of new or expanded public educational facility to be in a non-velocity flood zone or a floodway
Maximizing opportunity for public schools to be designed such that they can serve a vital emergency management purpose

The actual text from the elements that pertain to post-disaster redevelopment issues can be found in Attachment 4.1.
All elements of the Comprehensive Plan should continue to be used to guide growth in the County, even following a disaster. Although there will be tremendous pressure to relax the goals, objectives and policies of the Comprehensive Plan following a disaster, the County should make every attempt to continue to enforce these policies following a disaster to ensure that community goals for development and redevelopment continue to be met.

**Pinellas County Land Development Regulations**

The Pinellas County Land Development Ordinance supplements the Comprehensive Plan and is used to regulate the development of housing, commercial, industrial or other uses, including associated public infrastructure, as land is subdivided into buildable lots for sale or future development. The Land Development Ordinance contains many post-disaster redevelopment-related elements that ensure that the policies identified in the Comprehensive Plan are carried out accordingly. Provisions of the LDR may need to be revised in the post-disaster environment in order to accommodate recovery operations, expedite emergency repairs and allow temporary disaster housing. However, in order to “build back” a safer, more sustainable community, the county PDRP will establish the procedures, policies and strategies to ensure these goals are balanced and contribute to the long-term recovery.

**Pinellas County Local Mitigation Strategy (LMS)**

The Pinellas County Local Mitigation Strategy represents the County’s blueprint for how it intends to reduce the impact of natural hazards on people and the built environment. The essential elements of the LMS include hazard identification and vulnerability assessment, guiding principles (capacity assessment) and mitigation initiatives list. The LMS guiding principles section includes natural hazards mitigation policies from the community’s comprehensive plan and local ordinances, which provides for purposeful integration among local planning initiatives to facilitate post-disaster redevelopment activities.

The Pinellas County LMS contains goals and objectives that are relative to post-disaster redevelopment planning. Examples include goals and objectives for:

- Encouraging local governments within Pinellas County, prior to a disaster event to prepare draft ordinances and resolutions dealing with post-disaster response for immediate post-event action by the governing bodies.

- Reviewing and updating mitigation strategies post-event, taking into account post-event interagency hazard mitigation reports.

- Coordinating with the Division of Emergency Management in developing strategies for addressing the pre- and post-disaster needs of special needs population (e.g., elderly, disabled, low-income).
• Reducing the number of repetitive loss properties in the County.

• Encouraging the retrofitting of repetitive loss properties where financially and environmentally feasible.

• Considering the acquisition of wetland, floodplain, and repetitive loss properties where retrofitting is not a viable option.

• Encouraging local governments in the County to explore funding alternatives which reduce the number of repetitive loss properties.

• Reducing the vulnerability of identified critical facilities.

• Considering the retrofitting and/or relocation of threatened critical facilities.

• Establishing a schedule of regular quarterly meetings with the emergency responders from neighboring counties to focus on mitigation, emergency management issues, and communication.

• Improving the County’s ability to respond to disaster and hazard material events by providing opportunities for all government employees, both county and municipal, to be trained in emergency functions including mitigation, preparedness, response, and recovery.

In addition to the goals and objectives related to post-disaster redevelopment planning as listed above, the Mitigation Initiative List contains opportunities for the County to consider following a disaster event which can be implemented to improve the resiliency of the County. The Mitigation Initiative List should be incorporated into the Post-disaster Redevelopment Strategy as appropriate.

Pinellas County Comprehensive Emergency Management Plan (CEMP)
The Pinellas County Comprehensive Emergency Management Plan outlines responsibilities and the means by which resources are deployed during and following an emergency or disaster. The CEMP establishes command and control of the emergency management program and coordination among municipal, county, state, and federal agencies. The CEMP also explains emergency preparedness, response, recovery and mitigation actions. Although the CEMP is predominantly an operations plan, the following sections contain elements that are highly relevant to post-disaster redevelopment:
• **Basic Plan**
  Definitions of recovery, short-term recovery and long-term recovery are found in the Definitions section of the Basic Plan.

• **Recovery Annex**
  This section of the plan establishes the organization and procedures for conducting recovery operations (mainly for short-term recovery). The entire annex is relative to post-disaster redevelopment operations.

  o  **Pinellas County Debris Management Plan (DMP)**
  The Debris Management Plan provides the operational and coordination activities to remove, collect and dispose of debris following a disaster. The DMP explains the organizational structure, roles and responsibilities and the concept of operations including debris removal priorities. Debris removal is important to expedite recovery efforts in the affected area and reduce the threat to public health and safety.

  While debris operations are mainly considered short-term recovery, certain elements (including placement of debris reduction sites) can have impacts on other recovery operations and, ultimately long-term recovery. In addition it is critical that these operations are coordinated between different levels of government (federal, state and local) as well as between jurisdictions. FEMA requires that each jurisdiction plan and contract for their own debris management. This has resulted in a somewhat less than countywide-coordinated approach to this important aspect of recovery. Through emergency management, Solid Waste Department and the PDRP planning process, a consolidated strategy will be developed until a solution to this planning insufficiency can be resolved with FEMA and the jurisdictions within Pinellas County.

  o  **Pinellas County Temporary Disaster Housing Strategy**
  The Temporary Disaster Housing Strategy establishes the framework for addressing temporary housing for those that are left homeless following a disaster and identifies the key agencies that can be brought together to identify and activate housing resources. This plan is currently being updated as a result of FEMA’s recent change in temporary disaster housing policies.

  While the temporary disaster housing issues are mainly considered short-term recovery, certain elements (including location of the temporary housing sites) can have impacts on long-term recovery.
- **Mitigation Annex**
  This annex provides information on how mitigation efforts in Pinellas County are addressed in both pre-disaster and post-disaster environments. The annex defers to the Pinellas County LMS as the County’s plan for implementing a mitigation strategy. Mitigation is quite relevant to post-disaster redevelopment because an effective mitigation strategy can help speed a community’s recovery following a disaster occurs.

- **Disaster Recovery Leadership Network (DRLN) Communications Plan**
  This Disaster Recovery Leadership Network’s Communications Plan (“Communications Plan” or “Plan”) is designed to provide a framework and Standard Operating Guidelines (SOG) to guide Disaster Recovery Leadership Network’s health and human services response efforts in Pinellas County, FL, after natural disasters and emergencies including, but not limited to, hurricanes, tornadoes, high winds, and flooding. The Communications Plan is intended to ensure notification of staff identified to execute the Plan when a disaster looms or has occurred, provide guidance in establishing the objective of restoring services, facilitating communication between participants to manage service delivery, and provide needed short term assistance.

The Communications Plan is organized in a structural format, starting with a brief background, a diagram showing the flow of communications, a review of the concept of operations, and specific pre- and post-disaster operational activities. Where possible, Standard Operating Guidelines (SOG) augment operational guidelines to help add specificity to the many processes, tasks and activities that must be completed prior to and after a disaster. The Communications Plan is intended to complement the Pinellas County Board of County Commissioners Comprehensive Emergency Management Plan (CEMP). There are some limitations to the DRLN Communications Plan in that it may not be inclusive of all social services provided in the county. In addition, the health care system is not fully represented on the Health and Human Services Coordinating Council. Both of these issues will be addressed through the PDRP Process and incorporated in the Action Plan.

### E. Conclusions on Local Plan Integration

Upon review of the plans detailed above, it is apparent that Pinellas County has a solid foundation for developing this Post-disaster Redevelopment Plan and for formulating and implementing an effective Post-disaster Redevelopment Strategy. This foundation is based upon a clear understanding by County officials and
employees of the hazard risks facing the County and the vulnerability to the built environment that these hazards present. Most importantly, County officials and employees recognize the benefits of planning for a successful recovery and are aware of the consequences of failing to plan for a post-disaster environment. This understanding has been supported by political leaders with the wherewithal to support policy recommendations made by County staff.

F. Identifying Issues, Goals and Strategies

In order to address the myriad of issues that confront any community following a disaster, Pinellas County identified eight (8) working groups. The working groups were to address the following topics:

- Land Use, Housing and Mitigation
- Construction, Permitting and Historic Preservation
- Infrastructure Restoration
- Environmental Restoration
- Economic Redevelopment
- Public Information
- Health and Human Services
- Finance and Administration

The charge to each group was to (1) Identify the major issues within the topic area and the goal(s) of the plan related to the topic area; (2) identify the strategies and tasks necessary to address the major issues; (3) develop a strategic action plan to implement the pre-disaster and post-disaster operations to meet the goals of the plan and (4) assign roles and responsibilities in a timeline to complete these tasks. Chapters 5-12 discuss the major issues, goals and strategies. The Action Plans identifying the implementing tasks and the assignment of responsibility specific to the topic areas are presented as Appendices to those chapters. The County has already incorporated post-disaster redevelopment goals, objectives and policies into the plans that were analyzed in this section. Recommendations to further integrate post-disaster policies into existing plans, codes, and emergency procedures are provided in the Strategic Action Plans for each subject area (See Chapters 5-12).
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CHAPTER 5
LAND USE, HOUSING AND MITIGATION

A. Overview

I. Land Use and Community Design

Land use and community design are two of the most central and potentially most controversial elements of the Post-Disaster Redevelopment Plan. These issues are often identified as key to the PDRP planning process. It is recognized that a significant disaster can provide the opportunity to change land use decisions made in another time which do not reflect the community’s current goals as well as to take a giant leap forward in the implementation of the community’s vision. The disaster, while devastating, is envisioned as an opportunity to build back safer, more resilient and sustainable.

Post-disaster redevelopment may present opportunities to achieve other community goals such as transit-oriented, traditional neighborhood designs, as well as safe, pedestrian and bicycle-friendly, healthy communities with recreational opportunities and the protection of wildlife habitats and corridors. Some of these types of decisions should be made in blue skies because if a community waits until after a disaster to make land use decisions, it may not be able to take advantage of these opportunities. On the other hand, making detailed decisions on where and what to rebuild before a disaster occurs is not always practical as disasters are unique, impacted areas may vary significantly, challenges and pressures may be intense and there is very rarely a “clean slate”.

2. Implementing the Vision

Specific land use decisions will be made regarding “nonconforming” uses and structures, nonconforming setbacks and lots or parcels of substandard dimensions. (Refer to Pinellas County Land Development Code, section 134-87 and Zoning Code Section 138-201...211.). If the structures sustain damage...
of more than 50% of the market value, the jurisdiction and property owners need to understand that the comprehensive plan requires compliance with the future land use plan and zoning regulations.

It is recognized that this may not be an easy, straight-forward process. The needs of the survivors will be balanced against the vision of the community. With regards to non-conformance with safety issues such as the building code and floodplain management regulations, there is little room for compromise. However, specific zoning and setback restrictions may require additional consideration and review.

3. Build-back Policies and Mitigation

Another potential challenge will be the decision of limiting redevelopment in areas hardest hit by the disaster. Recognizing that comprehensive plans do limit density increases - policies prohibit “increased density” in the CHHA for example, there may be an opportunity to “reduce” the density/intensity replaced to that currently constructed and not allowing additional density permitted under the future land use/zoning category.

In areas significantly impacted – where the structural loss is great or where the land itself has been eroded, contaminated or is rendered unusable – decisions will need to be made regarding build-back, i.e. coastal setbacks, reconstruction of infrastructure, reinvestment of real estate and density/intensity, insurance issues, etc.

Implementing changes in land use after a disaster must recognize and balance private property rights, i.e. the financial burden that disaster victims may face if required to contend with moratoria or adjust to land use/zoning changes with the need for greater resiliency within the community.

4. Disaster Housing Strategy

In addition to land use and zoning issues, this group also tackled the disaster housing strategy. After a disaster, one of the most basic foundations of community recovery is the rapid repair and reconstruction of permanent housing and, where necessary, the timely provision of temporary or interim housing if sufficient units can not be brought back in a reasonable timeframe. Housing disaster survivors is a prerequisite to all other components of long-term post-disaster recovery. At the same time, the success of housing recovery efforts
depends on other aspects of post-disaster redevelopment such as infrastructure restoration, job recovery, social service provision, and land use controls. 29

It is also important to note that in order to take advantage of opportunities such as providing safer and more affordable and sustainable housing options, public outreach and intergovernmental and stakeholder coordination are essential components of the process.

This work group also reviewed the Pinellas County Disaster Housing Strategy incorporating the best practices identified in the State Disaster Housing Planning Guidance. (The Pinellas County Disaster Housing Strategy, 2010 is published under separate cover.) Strategies incorporated in the PDRP include addressing issues such as temporary housing group siting criteria, permitting procedures for temporary units of residential/commercial lots/properties, facilitating the transition of displaced residents back to permanent housing, affordable housing issues and neighborhood protection. The County established ordinances amending their land development code to allow temporary placement of temporary housing units (THUs) on private residential lots, some commercial properties and the establishment of community sites (See Chapter 14, PDRP ToolKit).

The County also worked with the University of Florida’s School of Design, Construction and Planning and the Levin College of Law which conducted several graduate student research projects related to post-disaster redevelopment challenges. Students conducted legal research and developed emergency ordinances pertaining to (1) building moratoria in areas devastated by the event, and (2) expedited condemnation for abandoned properties as well as other blight abatement strategies. UF Legal students also provided research and white papers on avulsion or sudden beach loss and emergency sign codes. These papers are available online at www.postdisasterplan.org.

B. Goal, Issues and Strategies
The best practice for post-disaster redevelopment is to restrict rebuilding in hazardous locations and require mitigation where vulnerable redevelopment cannot be precluded. Potential regulatory methods could include reduced intensity or density of use, special permit requirements, increased setbacks from hazard sources (i.e., beach or waterway), hazard-specific site design requirements, and increased structural mitigation requirements. These methods are implemented through policies and land development regulations requiring nonconforming uses/structures

29 Source: Post-Disaster Redevelopment Planning – A Guide for Florida Communities, 2010
to meet current standards, zoning overlay districts, and/or special assessment districts to fund mitigation projects that benefit more than one property, such as beach renourishment.

The work group identified the major goal of this section of the PDRP as follows:

**GOAL:** Redevelopment in the County will proceed in a way consistent with the comprehensive plan, forwarding the community vision in a manner that will increase the sustainability and resiliency of the community to future disasters.

The following major issues related to Land Use, Housing and Mitigation were identified as well as the strategies to address these issues. As part of the Action Plan (Appendix 5-A), tasks/actions were identified to implement these strategies. The Action Plan includes tasks to be undertaken before an event as well as during recovery operations.

**ISSUE A1: TEMPORARY POST-DISASTER PERMITTING AND LAND USES** – While the PDRP is meant to address long-term redevelopment issues, it can not be denied that many actions taken in response and short-term recovery may have a significant impact on long-term recovery and economic stabilizations. Three major response/short-term recovery actions – disaster housing, emergency permitting and debris management – have demonstrated the potential to undermine recovery if not addressed comprehensively prior to a disaster.

**Strategy A1.1: Disaster Housing: Develop and maintain a plan for the use, placement, and removal of temporary disaster housing. Avoid the use of preserves, resource-based parks, and resource management areas as debris storage or temporary housing locations.**

As part of the PDRP process, the Work Group identified criteria for temporary disaster housing community sites. Using the GIS and property appraiser files, a list and corresponding map of properties (public and private) was created. This listing will be further defined and prioritized based on suitability and owner commitment, annually updated and included in the *Disaster Housing Strategy*.

In addition, a Disaster Housing Ordinance which would permit the temporary placement of mobile home units/ RVs on individual lots, on commercial properties and community sites in the event of a disaster requiring activation of the *Disaster Housing Strategy*. The ordinance was developed by the Planning Department and approved by the Pinellas County Board of County Commissioners in the spring of 2012. A copy of the ordinance is included in the PDRP Toolkit (Chapter 14).

While Pinellas County has an accepted *Debris Management Plan*, it only addresses unincorporated Pinellas County. Although Pinellas County is responsible for solid
waste disposal in “blue skies”, each jurisdiction (25) within the county must have a Debris Management Plan as required by FEMA. The County has attempted to coordinate with the municipalities; however, currently there is no over-arching Debris Management Coordination Strategy. This has been recognized as a potential problem for recovery. The Land Use, Housing and Mitigation Work Group as well as the Environmental Work Group and Infrastructure Work Group will work together to provide more collaboration on these plans through the PDRP planning process. This is necessary to ensure all sites have been reviewed for environmental impacts and will not conflict with temporary group housing sites. A survey of all jurisdictions was conducted in August of 2011 to compile the data and develop a matrix of Debris Management Plans and a county-wide map was developed with tentatively identified sites for debris management operations. (Refer to Appendix 5-B)

Strategy A1.2: Social Equity: Ensure that the siting of temporary housing and debris sites is fair to the community and does not unnecessarily burden low socio-economic areas.

It is also important to review potential sites for temporary housing and debris management sites with regard to socio-economic characteristics to ensure that the recovery sites serve but do not over-burden low income populations.

ISSUE A2: BUILD BACK POLICIES AND STANDARDS FOR NON-CONFORMING AND SUBSTANTIALLY DAMAGED STRUCTURES – Following a disaster there is tremendous pressure to build back quickly and restore or replace what was damaged or destroyed. Through the PDRP process, key issues such as how the community will address build back policies and non-conforming uses and structures were addressed. In addition, it was recognized that if a disaster resulted in significant erosion or severe beach loss, serious environmental contamination or other circumstances resulting in greater risk to public safety will have to be considered judiciously during redevelopment. Disasters may provide some opportunity to propel the vision developed for the county in the Local Comprehensive Plan, Land Development Regulations (LDRs), and Economic Redevelopment Plans. However, following a disaster there is (1) tremendous pressure to build back quickly as well as (2) to balance the needs of survivors.

As previously mentioned, working with graduate students at the University of Florida, the County prepared an emergency ordinance for a temporary moratorium in heavily damaged areas to allow sufficient time for review of reconstruction permits yet expediting minor or moderate repairs. This ordinance is provided in the PDRP Toolkit (Chapter 14).

Strategy A2.1: Through the PDRP, identify policies to address non-conforming uses and structures in a post-disaster situation, repairs to substantially damaged structures in the floodplain (50% rule) as well as any variances to these policies.
Non-conforming uses is a term that covers a wide range of issues; however, the issue of floodplain regulations and the requirement to elevate structures damaged more than 50% of market value of the improvement can be a difficult one. The amount of insurance and/or disaster assistance may not cover the cost of rebuilding to the current code and elevation. This gap can pose a significant burden on homeowners caught in the “middle” with substantial damage but not destroyed. The communities work with homeowners to identify potential grant and disaster assistance loans to facilitate this challenge in “blue skies”. In the post-disaster environment, it is essential that damage assessment captures the substantially damaged structures, that this outreach is continued and financial solutions are found for homeowners.

Strategy A2.2: Consider a Temporary Phased Moratorium on Building Reconstruction and Repair in Heavily Damaged Areas

Unless an area is completely destroyed or there is a significant loss of land (avulsion), it is doubtful that a moratorium on building reconstruction or repair would be proposed. However, in order to prioritize reconstruction, new construction could be postponed until the disaster repairs were significantly underway. In addition, it was considered prudent that local officials may consider a temporary moratorium on total reconstruction in order to focus limited resources on minor- and moderately-damaged structures in order to get as many residents “back home” as quickly as possible.

ISSUE A3: MINIMIZE BLIGHT AND LONG TERM NEGATIVE IMPACTS OF ABANDONED STRUCTURES AND PROPERTY – Many communities have seen resulting blight following a disaster due to abandoned structures and properties. In any economy – especially with a depressed real estate market - some residents may not be able to rebuild immediately or may choose to leave the area. It is incumbent upon the jurisdiction to decide how these abandoned structures/properties will be addressed to ensure that they do not have a long-term detrimental affect on recovery.

Working with graduate students at the University of Florida, the County prepared an emergency ordinance address abandoned properties, blight and public health issues. This ordinance is provided in the PDRP Toolkit (Chapter 14).

Strategy A3.1: Streamline public acquisition and condemnation processes so that unsafe and/or blighted structures do not remain in neighborhoods for an extended period of time.

ISSUE A4: AFFORDABLE HOUSING – Lessons learned from other disasters highlight the need to ensure that there is an adequate quantity of affordable housing/
workforce housing following a disaster. It is important to review existing requirements for affordable housing as well as to provide additional protections against unlawful rent hikes – especially for those property owners who use federal and state grants/loans for reconstruction. Additional safeguards should also be investigated. With the potential loss of mobile homes (there are approximately 49,000 in the County), affordable housing is recognized as a probable major issue following a significant flood or wind event. It was recognized that the County does have requirements and incentives for the provision of affordable housing in place; however, there may be additional programs available through federal and state partners as well as the non-profit community to assist survivors find affordable housing.

**Strategy A4.1: Have affordable housing ordinances in place to ensure that reconstruction and new construction following a disaster provide affordable options for the workforce**

It was recognized that affordable workforce housing is critical for the community. Those existing policies and programs meant to provide incentives for affordable housing will need to be enhanced. In addition, severely damaged neighborhoods may wish to re-evaluate the market to insure that new construction meets the housing needs of a changing market.

**Strategy A4.2: Work with government (federal, state, local), the private sector and the local non-governmental organizations, volunteer organizations and faith-based groups to help build affordable housing that is disaster-resilient.**

Successful recovery requires a coordinated effort between and among different levels of government. However, post-disaster redevelopment is not solely a government function. It requires a concerted and coordinated effort of government, the private sector, non-governmental entities, volunteer organization and faith-based groups as well as an engaged citizenry to address the challenges and take advantage of the opportunities to rebuild safer and better.

**ISSUE A5: ACHIEVING COMMUNITY GOALS** – Disasters provide an opportunity to propel a community toward fulfillment of its vision articulated in the local comprehensive plan and/or community redevelopment plans. Redevelopment following a natural disaster creates opportunities to implement long-range Comprehensive Plan goals as communities are rebuilt. To this end, the County wants to ensure that it can achieve its goals to reduce demands on energy and natural resources, incorporate livable community policies in the design of redeveloped neighborhoods, strengthen the local economy, and provide a better quality of life for its citizens and visitors. Following a disaster, there is pressure to move quickly, sometimes loosing the opportunity to accomplish these goals.
The Pinellas County Planning Department is currently reviewing its Comprehensive Plan and Land Development Regulations to incorporate the following policies in its plan and codes:

**Strategy A5.1:** Incorporate and implement development policies and practices to make homes and commercial buildings more efficient in energy and water use.

**Strategy A5.2:** Provide incentives to use energy conservation and renewable energy technologies, and sustainable building materials during (re)construction.

**Strategy A5.3:** Identify those areas of the community that are most vulnerable to specific hazards and the strategies most appropriate to mitigate this vulnerability.

**Strategy A5.4:** Use private and public investment following a disaster as an opportunity to further a community’s long-range vision, implement approved redevelopment and revitalization plans for specific areas, and achieve economic development objectives.

**Strategy A5.5:** Recognize Appropriate Redevelopment in the Coastal Storm Area (CSA).

**ISSUE A6: REDUCE FUTURE VULNERABILITY TO DISASTERS** - The goal of the PDRP is to ensure that the community rebuilt after a disaster is safer, stronger and better prepared for the next storm. The Tampa Bay Region has been identified as one of the most vulnerable metropolitan areas in the United States to damage from hurricanes. In order to reduce the exposure of human life and property to natural hazards, and support economic growth, Pinellas County must continue to support the implementation of hazard mitigation measures. The additional cost of mitigation must be borne by both the public and private sectors, recognizing that the future of the community is at stake. In order to ensure compliance with existing codes and encouraging code-plus reconstruction, Pinellas County must ensure adequate staffing, comprehensive public information and public/private partnerships.

As stated previously, the Pinellas County Planning Department is currently reviewing its Comprehensive Plan and Land Development Regulations to address the following policies in its plan and codes:

**Strategy A6.1:** Ensure capability to enforce Land Development Codes including the Florida Building Code and National Flood Insurance Program requirements during redevelopment following a natural disaster.
Strategy A6.2: Encourage the use of increased mitigation options that exceed the minimum FEMA and Building Code requirements (e.g. use of freeboard to elevate structures, upgraded roofing materials/connection methods)

Strategy A6.3: Consider appropriate changes to Future Land Use policies and Land Development Regulations to reduce the vulnerability of development to natural disasters.

Strategy A6.4: Identify criteria for the potential acquisition of vulnerable coastal properties consistent with the State’s land acquisition program and the goals of the Comprehensive Plan, the Tampa Bay Estuary Program, and other applicable resource management plans.
A. Overview
The Construction and Permitting Work Group consisted of many of the same representatives as the Land Use, Housing and Mitigation Work Group as the topics were inter-related. This group; however, focused on issues related to the implementation of land development regulations, permitting procedures, code enforcement, and emergency ordinances and procedures.

1. Emergency Permitting Procedures
Pinellas County has Emergency Permitting Procedures as part of the earlier PDRP effort in 1994. However, these procedures needed to be updated and expanded to incorporate the lessons learned from previous disasters in other areas of the United States as well as to address issues identified as part of the current planning process. These included the following major issues:

- Phased Reconstruction and Streamlined Permitting Procedures including expedited minor and emergency repairs, prioritization of permits, review of substantially damaged structures and structures within the floodplain, CHHA and Vulnerability Zone and moratoria for severely damaged or destroyed neighborhoods or communities.
- Code enforcement issues; i.e. adequate staff and resources
- Contractor licensing issues (Available contractors and skilled construction workers and use of local contractors and workers; preventing/prosecuting contractor fraud)
- Adequate construction materials/debris material reuse
- Emergency Ordinances allowing temporary placement of mobile units in residential/commercial areas;
- Emergency Ordinances pertaining to Nonconforming Uses (setbacks, easements, elevation, building code)
- Temporary housing siting, management and removal issues
- Temporary debris management sites (collection, disposal, burn)
- Condemnation Issues; i.e. Blight and abandoned homes
- Code enforcement/Code Plus/Mitigation during rebuild
2. Historic Preservation and Restoration

Some loss of historic resources due to a disaster may be unavoidable, but others could occur accidently during recovery operations if procedures are not in place to minimize these impacts. *Disaster Planning for Florida’s Historic Resources* (Florida Division of Historical Resources, 2006) provides guidance on developing expedited historic preservation review procedures, restoration tools and considerations in the post-disaster environment. Historic structures can be particularly vulnerable to damage due to their age, and repair of these structures must meet certain requirements to maintain their character and historic designation. Due to considerations for historical integrity, historic structures have more options for meeting Florida Building Code standards during repair than non-historical buildings. There may also be funding opportunities before or after a disaster for implementing mitigation measures to prevent further damages to historic resources.

Pinellas County enjoys a rich and diverse culture and historic past. The historical, cultural and aesthetic heritage is among its most valued assets. Few urban areas today boast such unique perspectives of the past. Because of widespread growth and redevelopment in recent years, it is critical to the future of our County that we preserve and maintain significant elements of its history.

With this in mind, the Board of County Commissioners (BCC) took the initiative to establish a countywide policy to address historical protection and redevelopment issues among local communities. In August 2005, the BCC by resolution created the Historic Preservation Task Force (HPTF) to develop a historic preservation plan inclusive of all jurisdictions. Now established as the Historic Preservation Advisory Board, members will be responsible for future objectives.

Historically, in the post-disaster environment, the following has occurred:

- Restorable buildings are torn down.
- Irreplaceable and significant architectural elements that could be salvaged are carted away with debris.
- Property owners make hasty decisions and inappropriate repairs.
- Archaeological resources are disturbed by heavy equipment.
- Construction applications may overburden officials, and there may be insufficient staff to carefully review all applications.
Inspections of historic structures may be carried out by persons without appropriate qualifications with response to the preservation of historic resources. (Source: Florida Division of Historical Resources, 2006 pg 18)

Recognizing these challenges, this section of the PDRP will require the engagement of the Historic Preservation Advisory Board into the planning and implementation process can ensure that the unique considerations involved with preserving and restoring historic structures and archeological sites are included in PDRP actions.

B. Goals, Issues and Strategies

For the “boots on the ground” professionals, the best practice in the post-disaster environment is to devise the tools necessary to expedite the reconstruction of homes, businesses, churches and schools while balancing the need to enforce the policies and codes adopted by the community. These “tools” include policy and regulation, streamlined processes and code enforcement. Incredible pressure to rebuild as quickly as possible yet all want the community to re-emerge safer and better.

The Work group identified the major goal as:

GOAL: The reconstruction process will proceed efficiently and expeditiously incorporating current codes and best practices.

The following issues were prioritized based on an online survey with corresponding strategies to address these concerns.

ISSUE B1: POST-DISASTER EMERGENCY PERMITTING PROCEDURES

Pinellas County has Emergency Permitting Procedures which seeks to balance the needs of the residents with the anticipated spike in demand of assessment, permitting, inspections and code enforcement. This activity will begin with short-term recovery and will continue well in to long-term recovery. Procedures will need to be followed to ensure a fair and consistent approach as well as to expedite the process. The Emergency Procedures are based on a tiered approach which will (1) expedite the permitting of minor repairs; (2) allow sufficient time for review of moderately-damaged structures which may trigger “substantial damage” thresholds and (3) a moratorium on reconstruction permits until there is sufficient resources for this long-term activity.

As with housing, the first priority will be to get emergency and minor repairs completed so most residents can safely return to their homes. For projects which
will require considerably more time such as the reconstruction, it is conceivable that those permitting applications will take longer to process.

**Strategy B1.1:** Facilitate the reconstruction of the affected area in a fair, consistent way furthering the goals of the community.

**ISSUE B2: PERMITTING ISSUES RELATED TO TEMPORARY HOUSING AND DEBRIS MANAGEMENT**

Permits including environmental permits will be required for post-disaster operations including both disaster housing and debris management. In order to expedite these operations, the pre-identification of sites as well as the process for coordination and response must be thoroughly planned, coordinated and communicated throughout the county. Through the PDRP process, several committees reviewed proposed sites identified in the Disaster Housing Strategy and the Debris Management Plans within the county.

**Strategy B2.1:** Support and Implement the Disaster Housing Strategy to facilitate a smooth transition from transient to permanent housing.

**Strategy B2.2:** Ensure the Debris Management Plan is implemented in such a way as to avoid environmental damage, negatively impact neighborhoods and economic redevelopment.

**ISSUE B3: SHORTAGE OF AVAILABLE LICENSED CONTRACTORS AND SKILLED CONSTRUCTION WORKERS AND CONSTRUCTION MATERIALS**

Lessons learned from past events highlight the potential and impacts of the dramatic demand and shortage of available licensed contractors, skilled workers and materials. The Pinellas County Licensing Board (PCLB) has procedures in place to assist communities ensure that this can occur; however, given a major disaster, we must work together. Success will require coordination and communication between different levels of government including our federal and state partners, volunteer agencies and, of course, the private sector.

In order not to compound economic impacts, local licensed professionals must receive priority, outside contractors must be vetted and preferably work under locally licensed contractors. If work must be opened up to outside contractors, it is important to distinguish which specific contractors; i.e. roofing, electrical, plumbing, etc.

The higher demand and potential shortage of construction materials should be addressed in ESF 18 (private sector) operating procedures to support supply chains.
and prevent price gouging in the county. Working with the private sector to ensure construction materials are available is a critical component to redevelopment and economic restoration.

**Strategy B3.1:** Ensure that reconstruction occurs under appropriate licensed construction professionals.

**Strategy B3.2:** Work with the private sector to ensure an adequate supply of construction materials.

**ISSUE B4: ENVIRONMENTAL ISSUES (MOLD, ASBESTOS, HAZARDOUS MATERIALS)**

“Regardless of the event, debris has the potential to contain regulated material that could require special handling to comply with federal, state and local regulations. If the debris is not handled and disposed of properly, it is possible that penalties will be imposed that could lead to the denial of FEMA funding.”

The Work Group discussed the potential for Construction and Demolition (C&D) debris to pose significant hazards to the community if it contained lead paint or asbestos. Other potential hazards are posed by “e-waste” such as computers, televisions and other electronic components and supplies. In addition “white goods” such as stoves, refrigerators and other major appliances can present bio-hazards in handling and disposal. Flooding often results in mold especially in a hot and humid climate, which can pose significant risks to our residents. Specially trained contractors will be necessary to ensure the proper handling and disposal of this type of debris as well as reconstruction.

**Strategy B4.1:** Ensure that building inspectors, code enforcement and permitting personnel as well as citizens are familiar with the potential and remedial/mitigation strategies for environmental issues related to repair and reconstruction.

**ISSUE B5: COUNTY/MUNICIPAL COORDINATION AND STAFFING ISSUES**

The current challenging economic climate has forced most communities in the region to cut staffing levels. This was recognized as a major concern by all work groups when considering the impact and anticipated work load in the post-disaster environment. Trying to accomplish “more with less” is difficult in “blue skies”; when compounded with a major emergency, it could become a serious gap in capability. Mutual aid will be welcomed. Additional temporary contractual support will be necessary. However, it should be recognized that many positions; i.e. permitting and zoning, require a specific knowledge of the community and local regulations which

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will be difficult to augment from outside the communities. Cross-training is an essential element of the pre-disaster strategy.

Strategy B5.1: Maintain communication networks through Public Information Officers Group, Emergency Management Coordinators, and other appropriate staffs.

Strategy B5.2: Secure and renew agreements to accommodate mutual aid and temporary personnel support to facilitate the permitting, zoning and planning post-disaster activities.

Strategy B5.3: Ensure that there is sufficient cross-training of zoning and permitting functions to allow essential emergency functions to be performed.

ISSUE B6: REPAIR AND RESTORATION HISTORIC DISTRICTS AND STRUCTURES

Historic structures can be particularly vulnerable to damage due to their age, and repair of these structures must meet certain requirements to maintain their character and historic designation. Some loss of historic resources due to a disaster may be unavoidable, but others could occur accidently during recovery operations if procedures are not in place to minimize these impacts. The Historic Preservation Board will work with the county planning department and BDRS to identify public and private historic structures and properties in the county and develop strategies to protect and assist in repair of these cultural resources.

Strategy B6.1: Incorporate Historic Structures and Districts Redevelopment Plan(s) into the GIS system/Property Appraiser files in order to provide a County-wide inventory and assist damage assessors identify historic properties.

Strategy B6.2: Create a Reconstruction Policy and Pre-Disaster Mitigation Policy for Historically, Archaeologically and Culturally Significant Structures and Properties.

Strategy B6.3: Implement a Review Process and Special Permitting Process with Assistance to Property Owners
CHAPTER 7
INFRASTRUCTURE RESTORATION

A. Overview

Absolutely essential to recovery is the restoration of infrastructure and critical facilities. Typically, this is addressed in the Comprehensive Emergency Management Plan (CEMP), Continuity of Operations (COOP) Plans and the emergency response and short-term recovery operations plans of private utilities and companies. However, there are long-term considerations regarding infrastructure restoration which should be addressed in the Post-Disaster Redevelopment Plan.

Decisions concerning infrastructure reconstruction – whether to upgrade, mitigate or even relocate infrastructure or public facilities - should not be made in a vacuum. Those opportunities will be heavily influenced by decisions made regarding land use, environment, housing and economic redevelopment. In addition, the decisions made regarding infrastructure restoration and public facility redevelopment, investment or relocation will have a significant impact on private redevelopment decisions.

Florida pilot communities identified the fact that there are many agencies, jurisdictions and stakeholders involved in providing infrastructure, public facilities and utility services. It is estimated that 85% of the infrastructure...
including electricity, gas, and communications is privately owned. *Before and after a disaster, these private and public entities need to establish communication and coordination procedures to ensure that long-term recovery and redevelopment occurs in an efficient and organized manner... Coordination and communication are critical.*

As part of the vulnerability analysis, public facility and critical infrastructure were mapped using the Geographic Information System and vulnerabilities to flood (100- and 500 year events) and hurricane storm surge (categories 1-5) were identified. Critical Infrastructure and Public Facility Atlases were produced to assist in the deliberation of specific procedures and criteria for mitigation, improvement, relocation decisions.

The work group identified the following major issues to be addressed:

**Infrastructure Restoration/ Repair/ Mitigation/ Improvement/ Enhancement**

- **Restoration of Transportation Facilities (airports, ports, rail, causeways and bridges, roadways)**
  The repair of transportation systems in the community is essential to recovery and often necessary for other redevelopment efforts to take place. With prior planning the post-disaster reconstruction can be used as an opportunity to modify and improve transportation networks and facilities so that they are better able to withstand future events. (These systems fall under Public Assistance Categories C and G.)

- **Restoration of Potable water, Waste water, Stormwater, Solid Waste and Recycling**
  Like other infrastructure, the community can take advantage of the opportunity to rebuild and/or relocate facilities to include mitigation strategies, increase capacity and other improvements during repairs. (See Public Assistance Categories D and F).

- **Coordination with power, natural gas, and telecom company restoration efforts**
  Major utilities are essential for community recovery and economic restoration.

- **Public facility repair/mitigation/relocation**
  Critical decision-making regarding the rebuilding of public facilities such as schools, libraries and government offices is important for the PDRP to address. The county and its municipalities may want to investigate the cost/benefit of code-plus reconstruction, enhanced hurricane protection areas (EHPAs) or in some cases, relocation or consolidation of facilities. (These structures fall under Public Assistance Category E and mitigation costs may be eligible.)
The Infrastructure Restoration Work Group identified the following Strengths, Weakness, Opportunities and Threats (SWOT Analysis) in the kickoff meeting.

INFRASTRUCTURE SWOT ANALYSIS

**Strengths** of the existing entities, resources, infrastructure to deal with a catastrophe:

- Resiliency of some infrastructure / facilities in response to natural catastrophes due to hardening and security enhancements
- Expertise in infrastructure restoration that can advise on best techniques
- There are fully documented GIS/engineering maps of infrastructure systems so that damage can be assessed quickly
- Local/State/Federal funding programs in place for public assistance/repair and mitigation. (It was noted that agencies should ensure that projects are on LMS)
- Communication networks between public and private agencies with coordinated plans for restoration
- Other neighboring County or in-house recovery plans have already been established and can be used as a resource to identify projects and priority. These plans can improve resilience/transparency by identifying mitigation opportunities

**Weaknesses** of the existing entities, resources, infrastructure to deal with a catastrophe:

- Public/Private agency coordination is not 100 percent. Other agencies need to be on board such as: TBARTA, CXS, School District, and other local jurisdictions
- Pinellas County has geographic limitations (water on three sides) and a transportation dependency on bridges
- Limited available space that is not considered to be environmentally sensitive for debris storage/disposal and temporary housing
- Vulnerable fueling stations and the lack of Public fuel storage capacity. Also, fuel delivery limitations due to the geography of our region
- Some infrastructure, such as waste water systems rely on gravity to function and therefore, are located in surge/flood vulnerable locations
- Very little flexibility within local government infrastructure agencies’ budgets or staffing to respond to catastrophes
- Exposing private infrastructure can be considered a breach in privacy rights (due to Sunshine law) by divulging information that could be used competitively in the utilities industry
- Lack of communication/mechanism between infrastructure recovery, economic redevelopment, and land use
Pinellas County is currently a “built out” community with limited space for recovery operations and temporary housing.

**Opportunities** for long-term mitigation that may arise from a catastrophe:

- Prioritizing recovery of infrastructure. Bridges are highly ranked because of Pinellas County’s geographic limitations
- Upgrade infrastructure during response and recovery. Look at cost benefits between both short term temporary/immediate repairs and long term permanent installation. Example: undergrounding power lines
- Mitigation Funding and disaster public assistance could enable utilities and public works to replace older systems with more resilient ones
- Use Hillsborough County’s PDRP timeline response recovery to enhance collaboration
- Use trade associations such as the Edison Electric Institute to leverage coordination among utilities
- MacDill Air Force Base and the Bartow Power Plant can be used as strategic transfer/transport stations. These Facilities have the ability to become adaptive in disaster situations and can assist with deployment.
- Build enduring partnerships with neighboring communities to improve PDRP
- Introduction of sustainable new development
- Water borne transportation such as ferry type services can be used in the transport of people, goods, and equipment
- Acquisition of areas for open space where development cannot/should not reoccur would mitigate need to replace systems in vulnerable areas
- Every Public/Private entity needs to have a recovery plan. Public Coop plans should be enhanced
- Positive Political will
- Potential for facility redevelopment/ expansion through land acquisition of destroyed/abandoned properties
- Prevent the rebuilding of incompatible, inconsistent, and/or grandfathered structures

**Threats** to recovery that may arise from a catastrophe:

- Impacted workforce may not return to staff infrastructure recovery needs
- Tremendous pressure to repair/build back as quickly as possible diminishes opportunities to build sustainable, resilient systems/structures
- Many agencies have an unrealistic assessment of the level of responsibility and the time to restore services
- Regulations and Permitting fluctuate between jurisdictions, countywide
- Equipment loss and vulnerability
- Hazardous material disposal from Heavy industrial areas could impact the
environment during the recovery and restoration. In many instances environmental compliance waivers are given  
• Negative/unplanned Political pressure relating to expedite repair/rebuilding

B. Goals, Issues, and Strategies

The restoration of critical infrastructure is recognized by all Work Groups as key to disaster recovery. In order to restore the economy, workers must have habitable housing and businesses must have power, utilities, transportation, telecommunications, supply lines and access. Without the efficient restoration of the infrastructure, many residents will relocate, property values will plummet and tourism will not return. Given the extreme pressure to “get the lights back on” as well as all of the other modern conveniences, there remains an opportunity to reassess, harden, modernize, relocate, underground or expand damaged systems in both short-term and long-term recovery.

GOAL: Coordinate county-wide with public and private infrastructure providers to facilitate the restoration of critical infrastructure in a safe, efficient manner taking advantage of opportunities to mitigate against future disasters.

ISSUE C1: WORKFORCE LIMITATIONS: As in other work groups, the Infrastructure Work Group identified workforce limitations as a significant issue. The workforce necessary to repair/rebuild/operate/recover may not be available after a major disaster due to (1) loss of employees due to evacuation and/or housing loss; and (2) the need for increased labor to meet demand and lack of infrastructure to support them.

Strategy C1.1: Ensure that the county has sufficient personnel to respond in an emergency.

ISSUE C2: POLITICAL AND PUBLIC PRESSURE to build back quickly may diminish the opportunity to build back more resilient. There is a recognized need to position the county to reconstruct consistent with the goals and priorities related to safety, sustainability and resiliency. There is also the recognition that procedures are in place to take advantage of opportunities to implement long-range improvements during the recovery process.

Strategy C2.1: Ensure that an emphasis is placed on mitigation and planning for resiliency as part of the infrastructure restoration process.

Strategy C2.2: Implement resiliency improvements during the recovery process.
ISSUE C3: BUDGET LIMITATIONS: Local governments have limited budgets, with limited flexibility to respond to unanticipated disasters (e.g., ability to acquire land, relocate vulnerable facilities, mitigate structures and facilities, etc.)

Strategy C3.1: Coordinate with other governmental agencies (local, federal and state) and the private sector to identify pre- and post-disaster funding programs and mechanisms for infrastructure mitigation, relocation, hardening and rebuilding.

ISSUES C4: DISPLACED POPULATIONS/TRANSPORTATION SUPPORT. There will be a need to coordinate infrastructure and wrap-around services to meet the needs of a displaced population in temporary disaster housing.

Strategy C4.1: Establish necessary linkages including transportation to work and services for post-disaster displaced populations.

ISSUE C5: MINIMIZE ENVIRONMENTAL AND PUBLIC HEALTH IMPACTS ASSOCIATED WITH DISRUPTION OF UTILITY INFRASTRUCTURE SERVICES IN A POST DISASTER ENVIRONMENT. Debris clean-up, storage and disposal (short and long term), as well as recovery plans and decisions, are not necessarily coordinated with/consider environmental impacts.

Strategy C5.1: Ensure that plans are in place to address potential public health issues arising from the disaster through efficient and effective debris management and utility system restoration.

ISSUE C6: DOCUMENT PUBLIC NEED AND ECONOMIC BENEFIT OF PUBLIC FACILITIES: It is important to recognize and document the economic benefit and regional significance of critical infrastructure (e.g. airport, wastewater treatment plants, etc.) and physical vulnerabilities in light of current locations to avoid controversy in the post-disaster environment.

Strategy C6.1: Identify the county’s regionally significant infrastructure.

ISSUE C7: AVAILABILITY OF COMPREHENSIVE VULNERABILITY DATA: There is not a comprehensive vulnerability assessment of key infrastructure (i.e., vulnerability to storm surge, wind damage, storm-based erosion and flooding, etc.) - need to identify gaps in data, mapping, responsibility for maintenance of these inventories while we ensure we protect security interests, etc. We will need the best data to be able to quickly assess and determine build-back priorities following the storm.

Strategy C7.1: Organize available data and establish an effective method to maintain the data and information.
ISSUES C8: EFFECT OF GEOGRAPHY ON RECOVERY OPERATIONS. Pinellas County’s geography presents unique issues following the storm as far as getting goods and services into the county (e.g., transportation facilities, fuel delivery).

Strategy C8.1: Open the transportation corridors and re-establish access to the county as quickly as possible.

Strategy C8.2: Provide access to sufficient fuel supplies in the short-term recovery and long-term redevelopment phases.

ISSUE C9: SEA LEVEL RISE: Infrastructure planning and build-back decisions currently do not factor in the potential of sea level rise.

Strategy C9.1: Incorporate the potential for, and adaptation to, sea level rise in infrastructure build-back policies.
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A. Overview

The purpose of Emergency Support Function (ESF) 10 is to provide support to local governments in response to an actual or potential discharge or release of hazardous materials resulting from a natural, manmade, or technological disaster as well as other environmental protection issues. The Department of Environmental Protection, Bureau of Emergency Response, has developed a detailed Emergency Response Plan to provide a framework for responding to the full range of a potential hazardous material incident and other emergencies. The Emergency Response Plan promotes coordination between federal, state and local governments and the private sector when responding to hazardous material incidents and other threats to the environment and the public health. This response is coordinated by the Florida Department of Environmental Protection, the U.S. Department of Environmental Protection, U.S. Coast Guard and federal, state and local partners. (Please refer to the State of Florida Comprehensive Emergency Management Plan, Appendix X: Emergency Support Function 10 – Environmental Protection, 2010)

Additionally, Emergency Support Function 10 acts as the initiator for activating other resources within the Department of Environmental Protection that provide authorization and guidance for environmental protection issues that are the responsibility of that agency. As the PDRP focuses on the long term recovery of the county, the Environmental Restoration focused on the more long-term restoration of natural communities and regional significant environmental resources as opposed to response to hazardous materials. This is a function of the Natural and Cultural Resources Recovery Support Function. (National Recovery Guide, FEMA, 2011)

Beaches and dunes play a multi-faceted role in storm recovery that would require additional analysis to adequately address the significance of this resource in post-disaster redevelopment planning. Beaches and dunes do provide environmental services and support a coastal tourism economy. However, it is essential that restored beaches also be recognized as infrastructure and development projects.

In addition to working to re-establish the landward boundary of the public beach, clean up debris on the beach and in state-owned water and help communities identify potential hazard mitigation projects including the buyout of homes destroyed or damaged during the storm, coastal protection efforts will consist of beach nourishment project, dune rebuilding and restoration, estuarine habitat restoration, revetment repair and construction as well as the updating of critical
erosion rates and addressing sea level rise.

As part of the *Tampa Bay Catastrophic Plan*, a SWOT (Strengths, Weaknesses, Opportunities and Threats) analysis was conducted to determine the capabilities and gaps in the region for long-term environmental restoration. The Pinellas County PDRP Environmental Work Group revisited this analysis with respect to the county, prioritized the issues and identified gaps in data and resources.

**Strengths** of the existing entities, resources, infrastructure to deal with a catastrophe:

- Resiliency of natural systems in response to natural catastrophes
- There are fully documented maps of natural communities, bird rookeries and listed species habitat, sea turtle nest sites, so that damage can be assessed quickly
- Large areas in public ownership with existing management plans
- Expertise in habitat restoration that can advise on best techniques (Although this could be a weakness due to recent layoffs and reorganization)
- Local/State/Federal funding program in place for beach re-nourishment
- Existing beach re-nourishment programs and permitted projects
  - Sand sources identified for use in beach re-nourishment (However, this is a limited source and may not be sufficient in a major disaster. May need to map “hard bottom” offshore)
  - Ongoing beach profile monitoring to document loss

**Weaknesses** of the existing entities, resources, infrastructure to deal with a catastrophe:

- Limited policies in place to incentivize private landowners to relocate landward from eroding high-risk shorelines
- Very little flexibility within local government land management agencies’ budgets or staffing to respond to catastrophes
- Large number of exotic species in the area (e.g. Melaleuca, Brazilian pepper, Cogon grass, Japanese climbing fern, air potato and the continuing addition of others) which are dispersed during high winds and into disturbed areas
- Revisit local regulations to control “emergency” seawall repair or replacement / coastal armoring
- Beach re-nourishment permitting revision process is time-consuming
- Limited data on long-term beach nourishment needs based on future costs of dwindling sand resources, existing erosion rates, storm frequencies, and different sea level rise scenarios.
- Need to identify policies and procedures relating to submerged lands including “who” defines the new shoreline following a disaster.
Opportunities for long-term mitigation that may arise from a catastrophe:
- Acquisition of areas for open space where development cannot/should not reoccur
- Correct Stormwater Systems (grandfathered) and Wastewater Systems (including isolated pockets of septic systems)
- Connect greenways and wildlife corridors through acquisition
- Use of native species in reforestation
- 100% Federal funding of beach renourishment projects following a disaster (no local match)
- Volunteer involvement in exotics removal, rescuing hurt wildlife, monitoring damage and recovery of habitats and species
- If sufficient resources (funding and staffing) supplied to assist, can accomplish additional exotics removal to reduce future threat

Threats to recovery that may arise from a catastrophe:
- Use of publicly-owned, managed native habitat for a variety of potentially negative impacts of post-recovery efforts (e.g. temporary landfills, temporary housing)
- Hazardous Material contamination (flooded gas stations, boats and vessels, tanks, 302 facilities)
- Red mangroves, the first line of defense, can be killed in high winds by removal of the apical meristems. This may lead to sediment loss which increases coastal vulnerability.
- Invasion by exotic species due to abundance of disturbed habitat, dispersal by wind and water
- Waste Water System vulnerability and potential health issues (pockets of septic systems)
- Contamination from construction material debris including fuel, asbestos
- Potential public perception that it is of low priority to include natural resource recovery in the mix of post-disaster items
- Low dissolved oxygen levels, high nutrient pollution loads, and big red tide events after severe, wet hurricane seasons
- Debris removal activities could severely damage seagrass and mangroves.
- Lack of strong state or local regulations to prevent permanent or harmful beach armoring
- Inability to restore beaches and dunes in a timely manner following a catastrophic storm event
- Sand sources becoming limited with increased demand
- Failure of the public to view beaches as infrastructure requiring long-term maintenance and restoration
- Staff resources being diverted from exotics and erosion control to other tasks off-site
- Impacts to wildlife and habitats
Unlicensed/unqualified contractors doing more harm than good.
Strong risk of Wildfire in next dry season

This analysis provided an excellent starting point for the committee to identify the major issues to be addressed in the Post-disaster Redevelopment Plan.

The Work Group identified the following major issues:

**Short Term Recovery**
- Waterway debris removal and pollution control
- Water and Air Quality monitoring and remedy
- Plan to quickly assess and manage areas contaminated by hazardous materials release, debris contaminates, etc.
- Monitor/regulate debris removal from environmentally sensitive areas
- Environmental review of temporary sites (temporary housing, debris management)
- Work with partners and volunteer organizations to implement response plan involving exotics removal, rescuing hurt wildlife, monitoring damage and recovery of habitats and species

**Long Term Recovery**
- Acquisition of areas for open space where development cannot/should not reoccur
- Identification of incentives for private landowners to relocate landward from eroding high-risk shorelines
- Public information to foster support for natural resource recovery in the mix of post-disaster items
- Process to efficiently identify opportunities and project funding for wetland and beach restoration, removal of exotics, restoration of urban forests
- Review state and local regulations and emergency permitting processes to prevent permanent or harmful beach armoring
- Maintain management protection of coastal areas, conservation lands, parks, etc.
- Identify potential sea level rise scenarios and adaptive strategies

**B. Goal, Issues and Strategies**

The Work Group defined the Environmental Goal as:
**GOAL:** Recovery must include the protection of natural resources including the protection of habitats and wildlife, clean water and air, and conservation of lands and natural mechanisms to mitigate future disasters.
ISSUE D1: ADEQUACY OF LAND USE/LAND DEVELOPMENT REGULATIONS: Current land use/land development regulations, and/or incentives, may not adequately address when or when not to allow build-back of sea walls or other coastal armoring structures, and do not address “relocation” of impacted properties landward from eroding shorelines, etc.

Strategy D1.1: Develop criteria and regulations to control build-back of vulnerable coastal structures and properties, including recognition of property owners’ need to protect their property after a storm (i.e., the need to make emergency repairs), but also the need to ensure appropriate materials and techniques are used for shoreline protection and that coastal resiliency is enhanced.

Strategy D1.2: Regulate land use types and intensities within vulnerable areas through the comprehensive plan and supportive regulations, including incentives for protecting/enhancing natural site features that contribute to resiliency and reduce development densities and intensities in hazardous areas.

ISSUE D2: AVAILABILITY OF ENVIRONMENTAL DATA: Develop and maintain quality data to assess impacts & gauge recovery of natural communities, bird rookeries, species habitat, sea turtle nesting sites, hard bottom habitat, beach profiles, etc.

Strategy D2.1: Develop and maintain an accurate environmental database (e.g., maps, resource inventories, etc) including information on what agency(cies) are responsible for maintaining the inventory.

ISSUE D3: EFFECTS OF HAZARDOUS MATERIALS AND DEBRIS: The vulnerability of air, water and soils to contaminants as well as the public health of residents and emergency responders is a critical issue in the post-disaster environment.

Strategy D3.1: Develop and maintain accurate hazardous materials databases, including agency(ies) responsible for maintaining current and accurate data.

Strategy D3.2: Encourage ongoing training and education to better prevent, minimize and control certain types of post disaster hazardous spill and disposal issues.

ISSUE D4: CONSIDERATION OF DEBRIS MANAGEMENT, PUBLIC HEALTH AND THE NATURAL ENVIRONMENT DURING RECOVERY AND REDEVELOPMENT EFFORTS: Post-disaster cleanups, debris cleanup and storage, and the placement of temporary
housing, etc., have the potential to affect public health and the integrity of the natural environment (including air quality).

**Strategy D4.1:** Ensure that the removal and disposal of debris is handled in an environmentally-sound and efficient way to minimize impacts to sensitive resources, protect environmental systems and the public’s health.

**ISSUE D5: LAND ACQUISITION PLANNING:** Address the lack of acquisition plans/priorities for after a disaster event (i.e., maximize the ability to take advantage of opportunities presented by the disaster to implement other environmental and resiliency goals).

**Strategy D5.1:** Position the county and municipalities to enhance environmental resources, promote resiliency, and foster quality redevelopment in the post-disaster environment.

**ISSUE D6: BUDGET LIMITATIONS:** There is limited flexibility in local budgets and public policy priorities to respond to disasters, and to take advantage of the opportunities presented by disasters (land acquisition, etc.).

**Strategy D6.1:** Leverage funding opportunities by identifying necessary resiliency improvements and acquisitions in local capital improvements plans, comprehensive plans, the local mitigation strategy, etc.

**ISSUE D7: VULNERABILITY OF NATURAL RESOURCES:** The County’s natural lands are often the first line of defense in a storm and are foundational to the County’s character and quality of life, a cornerstone of the local economy and critical contributors to regional biodiversity and the function of the larger ecosystem. Post storm, the entire environmental landscape could change overnight.

**Strategy D7.1:** Strengthen the protection of the County’s natural resources. Upland and coastal forests, preserves, habitats, shoreline, waterways, wetland and aquatic habitats will be vulnerable to extreme damage from wind, wind/water driven debris, and invasive exotics after a storm.

**Strategy D7.2:** Prioritize recovery efforts for those areas that have the most ecological value so that limited resources can be directed towards the most viable habitats and communities first.

**ISSUE D8: POST-DISASTER SHORELINE DEFINITION:** Policies or procedures need to define submerged lands, including who delineates the new shoreline after a disaster. In the case of sudden shore loss, subsidence or future sea level rise, it is critical to allow sufficient setback of coastal environments. This will require inter-jurisdictional coordination and consensus building in the community.
Strategy D8.1: Create policies and/or procedures regarding the treatment of altered submerged lands after a disaster.
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CHAPTER 9
ECONOMIC REDEVELOPMENT

A. Overview

1. Background
Economic resiliency and redevelopment plans are essential for long-term recovery. The vulnerability of businesses (large and small) to business interruption and loss of assets will have cascading impacts in the community; i.e. unemployment, vacant/abandoned buildings, company relocation, etc. The return of jobs, tourism, capital investments and other indicators of economic health are interdependence with housing recovery, infrastructure restoration, environmental restoration and health and social service provision.

The Economic Redevelopment Work Group represents the public-private partnership existing within the County building upon the existing plans developed over the last few years. This work group considered the different obstacles that could potentially hinder economic recovery, such as assistance for small business, the retention of large employers and corporate headquarters, opportunities for sustainable diversification of the economic base and the job training and workforce recruitment to meet the changed market conditions after a major disaster.

The current plans for economic development, redevelopment and tourism include the following:

**Comprehensive Planning** – In 2009, an Economic Development Element for the County’s Comprehensive Plan was adopted. This allowed many of the principles of Pinellas By Design and its related studies to be codified. See [Economic Element](#)

**Economic Element of the County’s Comprehensive Plan**
- Priorities and parameters for attracting high-wage primary employers, particularly targeted industries that have been identified as well-suited for Pinellas County’s unique characteristics;
- Strategies for maintaining and enhancing industrial lands;
- Continuing support and assistance for small businesses, new start-ups and entrepreneurs;
- Assurances that land development regulations are designed in such ways that help facilitate revitalization and redevelopment with needed flexibility in a positive manner that improves environmental conditions and contributes to quality communities and neighborhoods;
- Support for existing business expansion, retention and overall economic diversity that help assure a strong economic base that is well-equipped to weather economic downturns and recessions;
- Promotion and support for the tourism industry as a continuing vital component of Pinellas County's overall economy; and
- Support for economic initiatives on a regional level and cooperation with adjacent governments, as regional decisions can have important impacts on the local economy.

**Pinellas by Design:** Adopted in 2005, Pinellas by Design: An Economic Development and Redevelopment Plan, is the county's redevelopment strategy to foster business development, while managing population growth and preserving our quality of life. The purpose of Pinellas by Design was to identify the means by which the county can maintain and enhance its long-term economic vitality, which is threatened by the disappearance of developable vacant land.

**Pinellas’ Tourism Industry** - The St. Petersburg/Clearwater Area Convention & Visitors Bureau (SPACVB) is a department of Pinellas County government and is the official tourism marketing and management organization for the county. The SPCACVB is charged with enhancing the county's economy by increasing direct visitor expenditures and job development, training and retention in the tourism industry. It works domestically and internationally to develop and enhance consumers, travel media, the travel industry, meeting and conference planners, sports promoters and film producers with research-driven marketing programs focusing on beaches, sports, arts and culture and nature-based opportunities. The SPCACVB also leads a community-based team to market the benefits of tourism to local residents while working with varied interests to assist in the development of new attractions and the redevelopment of others. [2009 St. Petersburg/Clearwater Destination Profile](#)

**Pinellas By Design Plan Implementation Progress**

Adopted in 2005, Pinellas By Design: An Economic Development and Redevelopment Plan, is the county's redevelopment strategy to foster business development, while managing population growth and preserving our quality of life. The purpose of Pinellas by Design was to identify the
means by which the county can maintain and enhance its long-term economic vitality, which is threatened by the disappearance of developable vacant land. Almost every local government has passed a resolution in support of the plan, which was designed so that each community will be able to define its future vision within a shared planning framework. For detailed information on the five year planning process, including community input, analysis, and related studies go to www.pinellasbydesign.org.

Pinellas by Design estimated that some 50,000 new jobs at salary levels approximately thirty percent above the average wage will need to be created over the twenty year period through 2025 to maintain the same level of economic health that the county has enjoyed over the previous twenty years. Absent a concerted effort and coordinated public policy it will be difficult to achieve this goal, particularly as we reach build out, and the ability of the private sector to find and utilize the land necessary to locate and expand business opportunities is limited.

The multi-faceted implementation includes regulatory/urban design, transit planning, real estate and economic development programs that will ensure adequate opportunity to preserve and expand the potential for high-wage job creation.

Regulatory/Urban Design:

Regional Planning – One Bay is an effort to develop a shared regional vision for the seven-county Tampa Bay region to answer the question: how can the overall region prosper from a position of strength, diversity, opportunity, and economic vitality over the long term as we continue to grow? The regional visioning process began in 2007 with Reality Check, a day-long event at the Tampa Convention Center where citizens from across the region came together to vision for the future of Tampa Bay. Since Reality Check, a series of public input events and presentations engaging over 6000 citizens across the seven-county region has resulted in the development of four distinct scenarios of potential growth patterns for the region. See One Bay

Transit Oriented Development – Currently, the County and its municipalities are readying for future transit development through the creation of transit oriented policies and codes. See PPC TOD work program

Livable Communities – Pinellas County approved a set of model comprehensive plan policies and land development codes designed to implement livable community features in the design and construction of streetscape improvements and land development projects. The term “livable communities” is used to describe urban environments where walking,
bicycling and transit service is safe, comfortable and efficient and where the physical environment offers an interesting and unique experience from the standpoint of street, land and building design. Another key aspect of livable communities is the mixing of land uses which allows people to live closer to their points of destination such as shopping and work locations. See Pinellas County Livable Communities

**Redevelopment Land Use Categories** - A Countywide Rule amendment created four new future land use categories, which are designed to allow local governments flexibility in planning for redevelopment through special area plans. The new “Planned Redevelopment” categories include Residential, Mixed Use, Commercial and Industrial. [http://www.co.pinellas.fl.us/PPC/default.htm](http://www.co.pinellas.fl.us/PPC/default.htm)

**Hotel Densities** - A Countywide Rule amendment allows temporary lodging densities in some future land use categories to be increased if certain conditions are met. Depending on the size of the site and other conditions, 50 to 150 percent more hotel rooms can be built per acre. The changes will allow each community in Pinellas to have the option to either increase density for hotels, subject to certain guidelines, or keep the status quo. [http://www.co.pinellas.fl.us/PPC/default.htm](http://www.co.pinellas.fl.us/PPC/default.htm)

**Transit Planning:**

**High Speed Rail** - Florida has received $66.6 million in federal grant funding from the U.S. Department of Transportation to develop a brand new high speed rail system between Orlando and Tampa. Florida’s first funding installment is part of the $1.25 billion grant to the state announced by the Administration in January 2010. See [http://www.floridahighspeedrail.org/](http://www.floridahighspeedrail.org/)

**Regional** - The Tampa Bay Area Regional Transportation Authority (TBARTA) was created by the Florida State Legislature in 2007 to develop and implement a Regional Transportation Master Plan for the seven-county West Central Florida region consisting of Citrus, Hernando, Hillsborough, Manatee, Pasco, Pinellas and Sarasota Counties. See TBARTA web site

**Pinellas County** - The Metropolitan Planning Organization completed an update of the Long Range Transportation Plan, which will guide decision making for transportation improvements needed through 2035. See Long Range Transportation Plan
The most significant plan has already begun with a $4 million Alternative Analysis (AA) that is expected to be complete in 2011. An AA is an independent and extensive evaluation of local transit corridors that will help us determine the placement and type of transit options that are most suitable for Pinellas County, and that qualify for federal funding. One of the areas to be reviewed will be the corridor from downtown Clearwater to the Gateway area to downtown St. Petersburg. The other will be a connection from Pinellas County via the Howard Frankland Bridge to the planned High Speed Rail (HSR) line and the proposed local light rail system being developed in Tampa. See PCED Transit Web Site

Real Estate:

Toytown – On August 1, 2008 the Pinellas Board of County Commissioners approved the purchase and sale agreement for Toytown, a 240-acre historic landfill in mid-county with excellent interstate access. An extensive due diligence and development review process is now underway to further determine the feasibility of the plan to create an entirely new planned community – Villages at Gateway Fields. This ambitious project proposes to remake Toytown into a mixed-use village that will allow residents to live, work, play and shop within a livable community designed to encourage walking, biking and mass transit. The proposal conceived by Florida Gateway Development LLC plans to create 2 million square feet of office space; 1.5 million square feet of retail; 375 hotel rooms with 50,000 square feet of meeting and convention space; and a residential village with a workforce housing component. Importantly, the proposal also includes 70 acres of new parks and recreation facilities. www.pced.org/toytown

Airco – On October 28, 2008, the Pinellas Board of County Commissioners received the Market and Feasibility Analysis and Implementation Recommendations for the county-owned Airco Golf Course. The County Commission agreed to explore closing the course and using its 123 acres for aviation, office, industrial and hotel uses based on report’s findings. The study recommended that approximately 45 acres be reserved for aviation uses including 25 acres for various bulk hangars and 20 acres for aprons and taxi areas; and the remaining 78 acres be used for office, industrial uses and hotel uses. The office and industrial would be the economic development focus of any realized redevelopment of the site – providing nearly one million square feet of new space to support high-wage job creation. This long term project will be dependent on extensive planning, permitting and infrastructure improvements, including significant transportation related issues. The Airco Golf Course will continue to operation as usual into the foreseeable future. Go to www.pced.org/airco
**Brownfield Program** – Pinellas County and its municipalities have developed a strong Brownfield Land Recycling program. The County has established a process and procedures to assist a qualifying Brownfields project applicant to obtain designations and approvals for status as a Brownfields area pursuant to the Florida Brownfields Redevelopment Act. Administrative, regulatory, technical assistance and financial incentives are available. See [Brownfield Program Web Site](http://www.pced.org/download/document/20080415_100058_19695.pdf)

**Industrial Land** - A detailed study of the supply and demand of industrial land in Pinellas County begun in 2006 was approved by the Board of County Commissioners in May 2008. More than 2,000 businesses in targeted industry clusters were surveyed about their use of and need for industrial-designated land and other types of real estate for the **Target Employment and Industrial Land Study**. The feedback was combined with an analysis of the existing land supply using geographic information system (GIS) technology. The final report recommends long-term regulatory and economic strategies for ensuring a supply of appropriately located, economically viable real estate that can accommodate high-wage primary employers. To view a copy of the final report, go to [http://www.pced.org/download/document/20080415_100058_19695.pdf](http://www.pced.org/download/document/20080415_100058_19695.pdf)

**Real Estate Listings** - Property owners can advertise their shopping centers, hotel/motels and retail properties on the County’s real estate database providing excellent opportunities for redevelopment - [www.pced.org/realestate](http://www.pced.org/realestate).

**Economic Development**

Pinellas by Design identified two important measures by which the local economy should be evaluated: size determined by the total earnings of all the workers in the county, and quality, determined by the average earnings per worker. In order to sustain the level of prosperity that the county currently enjoys, it will be necessary to enhance both size and quality. The plan established preliminary estimates and projections for future employment growth, based both on the overall number of jobs (which influences the size of the economy), and the number of jobs provided by high-wage primary businesses (which affects the quality of the economy). Primary businesses are defined as those that import at least 51 percent of their annual revenues from outside the local area, while high-wage jobs are those that pay at least 130 percent of the average annual wage. The plan concluded that to maintain growth in the size and quality of the county’s economy, it will be necessary to create approximately 278,000 new jobs of which 50,000 are primary high-wage jobs over the next twenty years. See [PCED Success Stories](http://www.pced.org/realestate).
Partnerships and Awareness:
Pinellas by Design recognized that the county can not implement a redevelopment strategy on its own. Partnerships with local municipalities, regulatory agencies, community development groups and the private sector will be needed for a successful redevelopment program. Ultimately the county seeks to encourage high quality projects that match the vision of each community. To assist the many agencies and individuals promoting redevelopment in Pinellas County, the county has produced educational and promotional information focused on redevelopment. See PCED Redevelopment Web Site

Pinellas County’s Targeted Industries include:
- Advanced Manufacturing
- Aviation & Aerospace
- Business & Financial Services
- Information Technology
- Life Sciences & Medical Technology
- Microelectronics & Nanotechnology
- Modeling & Simulation
- Optics & Photonics

2. Major Issues and Priorities

In review of the existing plans and profile documents, the Work Group identified the following major issues:

- Business resumption and retention
The rapid resumption of existing businesses especially major employers is key to a community’s economic recovery after a disaster, especially as employment provides a reason for most residents to return and rebuild quickly. Typically, the major employers in Pinellas County have business continuity plans and will not need the basic disaster preparedness education and assistance necessary for smaller businesses. These companies tend to work with the local government as partners in planning for post-disaster redevelopment and provide insight as to what government assistance they could use to ensure rapid resumption as they do in Pinellas County. Major employers typically have the means to assist in actions to support workforce retention if included in the planning process. While large company recovery assistance varies based on the industries themselves and their locations, typically businesses located in hazardous areas or older structures may need assistance to reopen or relocate, temporarily or permanently, within the area.
If businesses do not feel a sense of connection to the community or fear that recovery will not be successful or will take many years, there is a chance that they will relocate their company elsewhere after a disaster. This is especially the case for corporate headquarters and industries that are not location-dependent or whose location choice is tied to quality of life factors. The PDRP can provide the private sector with confidence in the community’s ability to recover and continue providing the market environment necessary for them to conduct their business. Some factors that may aid the retention of major employers include a high level of communication before and after a disaster about post-disaster redevelopment goals and expectations and/or incentives to ensure retention, if necessary.

- **Small Business Assistance**
  A “small business” is often perceived as a family-owned business that provides services solely to the local community. In reality, small businesses usually comprise the majority of businesses in a community and are a component of most industry sectors in Florida. Small businesses are more likely than large businesses to either never reopen after a major disaster or fail shortly after reopening. Several factors may be involved in these failures, including the extent of damage to a community, timing of reopening, and lack of financial reserves.

Short periods without cash flow can be damaging, and small businesses often find that restrictions and timing of loans do not meet their needs. The Florida Small Business Emergency Loan Program can assist businesses in the struggle to stay afloat until normal economic conditions resume or a longer-term loan can be secured. It offers State-funded bridge loans to businesses with 100 or fewer employees, lending companies up to $25,000 interest free for 6 months. However, in order to qualify for a bridge loan, a business must have suffered “physical” damage (i.e., damage to a facility, loss of equipment, inventory, etc.). Small businesses without interruption insurance and who only experience indirect disaster impacts may still struggle during short-term recovery. The SBA gives disaster loans to small businesses with up to 500 employees that qualify. Qualifying businesses must have reasonably good credit; but, if the business has assets and credit that exceed a threshold, the business is required to get a commercial loan. Loans are typically based on the pre-event business and tax returns of the firm and require extensive collateralization. Post-disaster market changes, however, may mean the company isn’t able to do as well as it did pre-disaster, and the loan, even at below-market interest rates, sometimes becomes a burden to the long-term survivability of the business (Alesh et al., 2001, pg. 85-86).
• Workforce Retention and Assistance
At the same time as trying to retain existing businesses, efforts must also address retaining the workforce that supports those businesses. Actions such as ensuring that schools reopen and childcare is available, allowing temporary on-site housing for employees, and communication of a community’s post-disaster plan can assist in getting employees back to jobs as soon as the businesses have reopened. Types of assistance include:

After a disaster, the market for certain businesses may decrease or be eliminated due to financial troubles or customer demand changes. However, other industries may provide employment opportunities, such as the construction industry and the retail industry, which will boom temporarily due to rebuilding needs. Workforce training programs are important to provide residents with appropriate skill sets to fill newly available positions due to recovery efforts and to adjust workforce skills to other industries that may take a more permanent hold in the community due to post-disaster business recruitment efforts. Providing locals with first preference for temporary recovery work is important for keeping workers in the hospitality industry that may be temporarily out of work until tourism levels rebound from moving out of the area.

• Recovery of the Tourism Industry
Like many Florida communities’ economies, Pinellas County is dependent on tourism and will need to re-establish this revenue stream as soon as possible. The Convention and Visitor’s Bureau will develop a strategy to phase the restoration of the industry and roll out the media message as the facilities and communities come back online. Hotel/motel/condominium units will need to repair quickly in order to provide temporary housing for displaced residents as well as emergency workers. As the short term recovery winds down, these units will be permanently rehabilitated to make ready to once again receive visitors.

Redevelopment strategies should not overlook aspects of the community that draw tourism and visitors. In Pinellas County, the major draw is the miles of white sand beaches and the recreational opportunities. Therefore, both the Economic Redevelopment and Environmental Restoration Work Groups have a mutual interest in the restoration/protection of the coastal beaches and managed lands in the county. Pinellas County will also need to assess whether tourism-based businesses, such as accommodations and service industry establishments, need technical or financial assistance.

When ready, coastal communities in the county (and the region) will employ a unified marketing strategy that maximizes the use of marketing dollars -
publicizing the areas and markets that have successfully recovered and reopened their doors for business.

According to the State PDRP Guidance, *while spending time and energy organizing local festivals and cultural activities may seem like a low priority in the aftermath of a disaster, these events are good opportunities to attract positive media attention and tourists to the area while showcasing the successes of recovery and redevelopment efforts. Celebrations are also beneficial to residents as they restore a sense of normalcy to the community.*

**Physical Economic Redevelopment Projects**

In some circumstances, opportunities may arise after a disaster to move forward with planned physical economic development projects or to create new projects that take advantage of post-disaster funding, available land, or public will. Economic development projects that are disaster-resilient and fill a need in the community after a disaster should be a priority for post-disaster funding. In addition, the community can prioritize projects that incorporate energy efficiency and other “green” building design considerations. Community Redevelopment Agency districts, Enterprise Zones, and other business districts can be prime locations to focus post-disaster redevelopment projects since these districts offer financial tools or incentives, such as tax increment financing, reductions on impact fees, and State tax incentives. Economic leaders can also consider ways to expand these business districts and leverage funding that would be available through disaster programs from several Federal agencies, including the Community Development Block Grant program and Economic Development Administration disaster assistance program.31

**Economic Diversification and Expansion**

Retaining existing businesses is the first priority after a disaster; however, post-disaster redevelopment may also present an opportunity for businesses to assess their long-term applicability in the local market and take advantage of any changes in demographics or business incentives that may occur due to disaster impacts and an influx in outside funding to the area. For instance, a business that was already struggling before the disaster may need to rethink its business plan and use the disaster as an entrepreneurial impetus unless it happens to be engaged in one of the few economic activities that benefit from a disaster, such as the development industry. Inevitably, some large and small businesses that receive a significant amount of damage or indirect losses are going to fail or choose to relocate after a major disaster. This can affect the unemployment rate of the county if new businesses do not replace those that relocate.

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31 Source: Post-disaster Redevelopment Planning – A Guide for Florida Communities, 2010
Ideally, a community would have a diverse spectrum of businesses so that if one industry sector is severely impacted by a disaster, the majority of the workforce will not be affected. Efforts to diversify the local economy with industries that are less vulnerable to disasters can be integrated into typical ongoing economic development activities. Industries targeted for attraction and incentive programs after a disaster should be those that will provide a more disaster-resilient and sustainable economy for the community and are appropriate for the post-disaster circumstances. Many of the leading industry clusters for recruitment in Florida can be sustainable with business continuity and mitigation planning, such as clean technology, life sciences, information technology, manufacturing, and homeland security and defense (Florida Enterprise, Inc., 2010). These industries, however, are very dependent on a skilled workforce and quality of life factors that will attract talented workers. Therefore, in order to pursue new economic opportunities after a disaster, the PDRP needs to plan for a holistic recovery of all aspects of the community and post-disaster opportunities for community improvements.

B. Goal, Issues and Strategies

The Work Group identified the Purpose of this section of the PDRP:

GOAL: Develop Strategies, Programs and Alliances to Promote Economic Resiliency and Recovery in Pinellas County.

ISSUE E1: BUSINESS RESUMPTION AND RETENTION – Following a disaster, business resumption and retention is a major issue. Business interruption is a major impediment to community economic recovery. In order to mitigate the impact on both small and large businesses, the County has a detailed plan to assist businesses with opening their doors. This includes an outreach program, business continuity planning assistance, as well as strategies to provide assistance immediately following the event.

Strategy E1.1: Pre-Disaster outreach to businesses to include assistance in development of Business Continuity Plans, communication networks (emergency

Business reopening is generally dependant on three variables:

1. Ability to recover assets lost in the disaster;
2. Extent of adverse effects to business dependencies (e.g., suppliers, customers, employees); and
3. Ability to adapt quickly and appropriately to new realities in a post-event environment.

Alesch, 2008, pg. 50
notification system), and knowledge of county emergency response/recovery plans, etc.

Strategy E1.2: Establish Business Recovery Centers to include physical and virtual business assistance centers.

Strategy E1.3: Identify and help to facilitate acquisition of temporary space for businesses, if necessary.

Strategy E1.4: Assist businesses in obtaining access to financial assistance programs.

Strategy E1.5: Develop strategies to keep companies local after a disaster.

Strategy E1.6: Clarify and expedite permitting issues and processes; i.e. repairs and rebuilds, temporary sign permits, health inspections, temporary use, etc.

Strategy E1.7: Assist businesses transition from short to long-term recovery.

Strategy E1.8: Promote and prioritize use of local businesses and workers in disaster recovery, including public relations campaigns to support local businesses.

Strategy E1.9: Recognize the importance of effective communication and maintain a consistent message.

In regard to this strategy, it was recognized that economic recovery was dependent on the restoration of infrastructure and supply chains. These strategies were referred to the Infrastructure Work Group for deliberation:

- Re-establish telephone, cellular and Internet communications
- Re-establish supply chains to and from the community
- Re-establish critical utilities: power, sewer and water

ISSUE E2: WORKFORCE RETENTION AND ASSISTANCE – During recovery, it will be necessary to support the workforce in order to ensure they are able to assist in the community reconstruction and restoration. It is assumed that for employees to remain in the area there must be a job to return to, the assurance of care for family, food and clean water, safe housing, transportation, opportunity and the ability to envision the reconstitution of the community.

Strategy E2.1: Expanded provision of childcare and assistance to the County School Administration in re-opening of schools.
Strategy E2.2: Support the County Disaster Housing Program and, if appropriate encourage on-site temporary workforce housing.

Strategy E2.3: Establish a central depository for employment announcements distributed throughout the county through multi-media outlets as well as the Disaster Recovery Centers (DRCs), county offices, chambers of commerce and social media.

Strategy E2.4: Continue and expand employment counseling services and make use of workforce training programs.

ISSUE E3: TOURISM RESUMPTION
As a key sector of the Pinellas County economy and employer of thousands of citizens, restoring Pinellas’ tourism industry will be crucial to the community’s recovery. Coordinating the resumption of tourism activities should coincide with the departure of recovery personnel utilizing lodging on a temporary basis.

Strategy E3.1: Prioritize the recovery of the hospitality industry and the reconstruction of tourist attractions and accommodations.

Strategy E3.2: Roll out marketing campaign(s) to promote tourism in stages as facilities/communities come back online.

ISSUE E4: RESTORE ECONOMIC VITALITY AND RESPOND TO CHANGES IN THE MARKET – Private investment follows public dollars (EDA and recovery funds), so it will be important to solicit input from citizens and the business community when prioritizing the reconstruction of public spaces in order to maximize private sector funding. As a disaster may provide an opportunity to rebuild a more resilient built environment, it may also provide an opportunity to restore a more resilient economy.

Strategy E4.1: Reassess the inventory of industries and businesses located in the County after a disaster.

Strategy E4.2: Identify opportunities to further implement existing strategies to diversify the local and regional economies.
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A. Overview

On any given day more than 250,000 residents in Pinellas County rely on some type of health care and/or social services. Due to their demographics, Pinellas County has developed networks of service providers and coordinates at the county and regional level. The public-private partnerships including government, non-profit, faith-based and private sector stakeholders regularly meet and plan together to ensure that funds are prioritized and maximized to ensure that health and human services needs are met.

The health and human service community also realize the need to prepare for emergency response and recovery. Planning, training and exercise, and communications are essential components of the county’s effort to ensure that these needs are met in “blue skies” as well as in the post-disaster environment.

The identification of major issues and strategies confirms the consistency of recovery goals identified in the National Recovery Framework (FEMA 2011) as follows:

- Promote self-sufficiency and continuity of the health and well-being of affected individuals; particularly the needs of children, seniors, people living with disabilities whose members may have additional functional needs, people from diverse origins, people with limited English proficiency, and underserved populations.
- Assist in the continuity of essential health and social services, including schools.
- Reconnect displaced populations with essential health and social services.
- Protect the health of the population and response and recovery workers from the longer-term effects of a post-disaster environment.
- Promote clear communications and public health messaging to provide accurate, appropriate and accessible information; ensure information is developed and disseminated in multiple mediums, multi-lingual formats, alternative formats, is age-appropriate and user-friendly and is accessible to underserved populations.
B. The Collaborations of Service Providers

1. Health and Human Services Coordinating Council

The Health and Human Services Coordinating Council for Pinellas County (HHSCC) works with funders and providers across the community to develop improved systems of care through aligning resources and increasing the provision of evidence-based services. Comprised of three major components: a Policy Board, an Administrative Forum, and five Leadership Networks, its structure is designed to engage a broad array of stakeholders to achieve collective impact.

   a. The **Policy Board** provides guidance to the HHSCC and it connects the HHSCC to the major governing bodies in the County. It consists of County Commissioners, Juvenile Welfare Board members, and the County Sherriff.

   b. The **Administrative Forum** is a vehicle for sharing knowledge and developing consensus around a common agenda for Pinellas County. They produce and analyze data that ties community investments to desired results. Members of the Forum include senior executives from the county’s major funders of health and human services. The results-based framework and level of coordination helps the collaborative efforts of the five Leadership Networks.

   c. **Leadership Networks**

   The **Leadership Networks** are where interested policy makers and operational managers address issues related to specific outcomes in: 1) health and behavioral health, 2) homelessness, 3) affordable housing, 4) disaster recovery, and 5) education.

   - **Health and Behavioral Health Leadership Network**

   The **Health and Behavioral Health Leadership Network (HBHLN)** promotes health and works to provide access to health care for vulnerable populations including low-income individuals, those that are currently uninsured, homeless individuals and those with chronic diseases including behavioral health. The objectives of the Network are to:

     - Promote the health of the residents of Pinellas County,
     - Assure access to health care and quality of services to vulnerable populations, and

- Support research and technologies that improve the health care system and population health.

Membership includes senior executives from the major hospital systems, Pinellas County Department of Health, Pinellas County Health and Human Services, Community Health Centers, and the major for-profit and not-for-profit providers of physical health, behavioral health, and substance abuse treatment.

- **Homeless Leadership Board**
The **Homeless Leadership Board (HLB)** mission is to prevent, reduce, and end homelessness in Pinellas County. Membership includes elected officials from the Board of County Commissioners as well as some of the major municipalities. In addition, the Board includes representatives from JWB/Children’s Services Council, faith-based organizations, service experts, business, health care, and homeless/formerly homeless individuals. A **Providers Council**, representing providers, and a **Funders Council**, representing funders, make recommendations on behalf of their constituencies to the HLB.

- **Low Income Housing Leadership Network**
The **Low Income Housing Leadership Network (LIHLN)** provides leadership to the community to facilitate access, preserve, and expand housing for low income service workers and other households whose income is at or below 80% of the area median income. It strives to develop housing in coordination with service providers so that those persons needing supportive services are provided those services.

- **Disaster Recovery Leadership Network**
The **Disaster Recovery Leadership Network’s (DRLN)** mission is to ensure that priority human services are made available to the public at the earliest opportunity should a major disaster occur in Pinellas County. The DRLN served as the steering committee for the Health and Human Services component of the Pinellas County PDRP.

The Disaster Recovery Leadership Network (DRLN) is made up of representatives from funding agencies, government bodies, and health and human services agencies that are county-wide in scope and/or play a major role post-disaster.
Members of the DRLN include representatives of:

- Area Agency on Aging of Pasco-Pinellas
- American Red Cross (Tampa Bay Chapter)
- Central Florida Behavioral Health Network
- City of St. Petersburg
- Department of Children and Families (Suncoast Region)
- Early Learning Coalition of Pinellas
- Juvenile Welfare Board of Pinellas County
- Personal Enrichment through Mental Health Services
- Pinellas County Emergency Management
- Pinellas County Health and Human Services
- Pinellas County Health Department
- Pinellas County Schools
- Salvation Army (St. Petersburg Area Command)
- Tampa Bay Health Collaborative
- Tampa Bay Regional Planning Council
- United Way of Tampa Bay
- 2-1-1 Tampa Bay Cares

C. Community Goals and Service Domains

Post-disaster planning will follow a “blue sky” approach in order to ensure that resources, needs and services will be coordinated from preparedness to response to recovery and mitigation. This will also facilitate recovery tracking of health and human services in the long-term recovery of the community using a consistent methodology and approach.

The HHSCC uses a results-focused approach to community planning. Four desired results and six service domains were identified and data are collected to monitor funding and measure progress in improving quality of life. Service domains quantify effort and desired results quantify outcomes.

The four desired results identified by the HHSCC are:

1. **Every person has the Opportunity to Learn and Succeed.** All people in Pinellas County have the opportunity to acquire the skills, training and education needed to be economically self-sufficient, productive contributors to society.

2. **Every person is Physically and Mentally Healthy.** All people in Pinellas County have the means and ability to achieve a state of physical and mental well being.
3. **Every person lives in a Safe and Sustainable Community.** All people in Pinellas County live in a socially supportive, crime-free neighborhood that is part of an economically vibrant community.

4. **Every person has Stable and Affordable Housing.** All people in Pinellas County have an affordable, sturdy home that is free of hazards.

The six service domains are:

1. **Physical Health** (includes outpatient, inpatient, diagnostic and health supportive services)
2. **Basic Needs** (includes food, housing, material goods, transportation and temporary financial assistance for individuals with low or fixed incomes)
3. **Behavioral Health** (includes agency-based inpatient, outpatient and residential mental health and substance abuse treatment services, counseling services and hospital-based behavioral health programs)
4. **Individual and Family Life** (includes social development and recreational programs)
5. **Education and Child Care** (includes subsidized child care and early childhood education. School district programs and academic institutions are not included in the HHSCC purview, but will be addressed by the Pinellas County School District)
6. **Organizational/Community/International Services** (includes a broad spectrum of services for the entire community)

Service domains can be further divided into service types that allow for the exploration of funding within the continuum of services that make up each domain.
D. Physical Health Care System

1. Overview

The recovery and resiliency of the community’s health care system which includes outpatient, inpatient, diagnostic and health supportive services is vital to the community. The physical health care system in Pinellas County includes a web of services provided by health care professionals and facilities in established facilities; e.g. hospitals, skilled nursing facilities, surgical centers, walk-in clinics, hospice, treatment facilities such as renal dialysis, residential treatment facilities, etc. There are approximately 1500 facilities and/or agencies providing health care services with approximately 21,300 licensed beds in Pinellas County on the Agency for Health Care Administration (AHCA) health care facility inventory.

Table 10-1

<table>
<thead>
<tr>
<th>Facility Type</th>
<th>Number of Facilities</th>
<th>Licensed Beds</th>
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</thead>
<tbody>
<tr>
<td>Abortion Clinics</td>
<td>5</td>
<td>0</td>
</tr>
<tr>
<td>Adult Day Care</td>
<td>6</td>
<td>243</td>
</tr>
<tr>
<td>Adult Family Care Home</td>
<td>17</td>
<td>64</td>
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<tr>
<td>Ambulatory Surgical Centers</td>
<td>27</td>
<td>0</td>
</tr>
<tr>
<td>Assisted Living Facilities</td>
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<td>8198</td>
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<tr>
<td>Birth Center</td>
<td>3</td>
<td>0</td>
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<tr>
<td>Clinical Laboratory</td>
<td>184</td>
<td>0</td>
</tr>
<tr>
<td>Crisis Stabilization Unit/ Short Term Residential Treatment Facility</td>
<td>4</td>
<td>92</td>
</tr>
<tr>
<td>Community Mental Health - Partial Hospitalization Program</td>
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<tr>
<td>Comprehensive Outpatient Rehabilitation Facility</td>
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<td>0</td>
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<tr>
<td>End-Stage Renal Disease Center</td>
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<td>0</td>
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<tr>
<td>Health Care Clinic</td>
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<td>Home Health Care Agencies</td>
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<tr>
<td>Home Medical Equipment and Service</td>
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<td>Homemaker and Companion Service</td>
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<tr>
<td>Hospice</td>
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<tr>
<td>Hospitals</td>
<td>17</td>
<td>4153</td>
</tr>
<tr>
<td>Intermediate Care Facility for the Developmentally Disabled</td>
<td>6</td>
<td>0</td>
</tr>
</tbody>
</table>
Facility Type | Number of Facilities | Licensed Beds
--- | --- | ---
Nurse Registry | 18 | 0
Skilled Nursing Homes | 74 | 8075
Organ And Tissue Procurement | 1 | 0
Portable X-Ray | 5 | 0
Prescribed Pediatric Extended Care Center | 3 | 151
Rehabilitation Agency | 20 | 0
Residential Treatment Center for Children and Adolescents | 3 | 36
Residential Treatment Facility | 12 | 179
Total | 1,530 | 21,293

Public Health

In addition to the need to assess damage and interruption of health care services, public health has a role in the post-disaster environment. Public Health is the science of protecting and improving the health of communities through education, promotion of healthy lifestyles, and research for disease and injury prevention. Public Health addresses the health of the community as a whole rather than the health of an individual. Therefore, bio- and environmental hazards will need to be assessed and coordinated through ESF8 (Health) through the EOC.

2. Background

Metropolitan Medical Response System (MMRS)
The MMRS committee in Pinellas County has been touted as the “most successful MMRS in the country” according to the federal regulating agency. MMRS members are represented at Urban Area Security Initiative (UASI) meetings and several state working groups, including the Regional Domestic Security Task Force (RDSTF). MMRS meets regularly and represents a strong collaboration between the involved agencies.

Medical Reserve Corps (MRC) of Pinellas County
The Medical Reserve Corps (MRC) of Pinellas County is a locally-based group of volunteers who use their education, training and volunteer service to make their communities safer, stronger, and better prepared to respond to threats of terrorism, public health problems, and disasters of all kinds. Volunteers are pre-identified, trained, prepared and ready to respond to a medical and or public health emergency. The MRC is sponsored through the United States by the Office of the U.S. Surgeon General and supported in Florida by the Florida Department of Health.
During 2008-2009 there were 121 volunteers joining the Medical Reserve Corp in Pinellas. Physicians 20; Physician Assistants 4; Nurse Practitioners 6; Nurses 52; Pharmacists 1; Dentists 2; Mental Health professionals 8; EMS Professionals 4; Respiratory Therapists 1; Other Public Health 10; Non-medical 13. However, in a significant event in Pinellas, MRCs from other areas in the country would be dispatched to Pinellas County as the health care professionals would be directly involved in the local recovery operations.

**Pinellas County Department of Public Health (DOH)**

The Pinellas County Department of Public Health plays a key role in both the coordination of the response and recovery of the health care system as well as the assessment, public notices and outreach, monitoring and cleanup of environmental hazards in the community. This responsibility requires collaboration with the health care providers in the county – both non-profit and for-profit – as well as the local jurisdictions, and state and federal partners. It is the DOH which will sit at the ESF 8 desk of the EOC coordinating operations for both health and human services.

3. **Vulnerability Assessment**

A Vulnerability Analysis of the health care facilities was conducted as part of the *Statewide Regional Evacuation Study for the Tampa Bay Region* (2010) and updated as part of the PDRP planning process. The inventory of facilities was provided by the Agency for Health Care Administration (AHCA). These facilities included:

- Hospitals
- Skilled Nursing Facilities
- Assisted Living Facilities
- Adult Family Care Homes
- Ambulatory Surgical Centers
- Clinical Laboratories
- Hospice Facilities
- End-Stage Renal Disease Facilities
- Crisis Stabilization Units (includes Behavioral Health Facilities)
- Intermediate Care facilities (includes Behavioral Health Facilities)
- Transitional Living Facilities (includes Behavioral Health Facilities)
- Residential Treatment Facilities (includes Behavioral Health Facilities)

The vulnerability assessment was conducted using the geographic location of the facilities and known hazards including storm surge (hurricane categories 1-5), freshwater flooding (100- and 500-year events) and the urban wildfire interface. The data is provided on a spreadsheet which lists facility information,
4. Communication and Coordination in Response and Recovery

As required by state statute, Hospitals, Skilled Nursing Facilities and Assisted Living Facilities (ALFs) must develop an Evacuation Plan for their facilities. These plans are reviewed by the Pinellas County Emergency Management Administration and submitted to AHCA.

AHCA Emergency Status System (ESS)

The AHCA Emergency Status System (ESS) is a web-based application designed to track the status of 24-hour care providers regulated by AHCA. The system allows direct data entry by provider staffs that have an active user agreement with AHCA. Data entry may include details of impacts and damages, evacuation status, available beds, special medical client needs, and names and phone numbers of emergency contacts.

ESS data is organized around Events. Events are specific emergencies (hurricane) or activities (Super bowl) that require tracking of information. For example, a hurricane would be an event and would be given a name consistent with a storm such as "Jeanne". This enables all activities (evacuation, impact and needs) to be associated with a specific event and when an event is complete or closed, those activities are archived with that event. ESS is always available but some information can only be entered when an event is open. Emergency contact information and generator information can be entered at any time. The ESS web address is http://ess.myflorida.com

In the aftermath of a disaster, the DRLN Communications Plan requests that all health care providers/agencies report their status (facility and staff) to the Recovery Management Center (RMC) as soon as Pinellas County Emergency Management indicates that it is safe to travel. Submitting an Agency Status Report is accomplished via phone, by calling 2-1-1 from within the County or 727-210-4211 from outside of Pinellas. The status reports can also be submitted on-line using forms posted to the HHSCC homepage. Information contained in the status reports are analyzed and synthesized by the RMC team. The Pinellas County EOC through ESF 8 (Health Care) also provided access to these data. This will allow the coordination of resources to support the restoration of the facilities and operations.
5. Major Issues and Strategies

ISSUE F1: The RESTORATION OF CRITICAL HEALTH CARE FACILITIES including hospitals, skilled nursing facilities, clinics and treatment facilities, as well as the continuity of care is critical in the post-disaster environment. The resumption of excellence in our health care system is identified as a priority for emergency response, as well as long-term recovery. In order to meet the challenges of recovery, strategies including the vulnerability analysis of critical facilities (and mitigation strategies); Exercise and Training of personnel and the development of communication pathway between public and private health care providers and the Emergency Operations Center (EOC) were identified as key actions.

Strategy F1.1: Prioritize and facilitate the restoration of hospitals and other health care facilities in the county and provide for the continuity of care of patients throughout the emergency response and recovery phases.

Strategy F1.2: Coordinate with ACHA and local nursing homes, treatment facilities and assisted living facilities to insure a continuity of care within those facilities and to prioritize their restoration, where feasible.

ISSUE F2: AN INTERRUPTION IN THE SUPPLY OF PHARMACEUTICALS, MEDICAL EQUIPMENT AND SUPPLIES as well as the loss of pharmacies or treatment facilities could pose a significant health concern in both short and long-term recovery. This issue was identified as a major concern affecting both physical health and behavioral health care. All health care providers should identify supply chains – especially of pharmaceuticals and medical supplies; private sector resources including services (laundry/housekeeping). This issue may require coordination with the state through ESF 8 (Health) and ESF 18 (Private Sector).

Strategy F2.1: Ensure there is a sufficient plan in place to provide/coordinate the secure access to pharmaceuticals, medical equipment and supplies and that medical personnel are knowledgeable of the emergency procedures.

Strategy F2.2: Maintain, expand and support electronic health records of survivors and displaced populations

ISSUE F4: PERSONNEL RETAINMENT AND RECRUITMENT
Following a major event, there is the possibility that a certain percentage of the population may choose to leave the area (either temporarily or permanently) especially if their homes/jobs/schools/neighborhoods are significantly damaged or if the infrastructure or utilities is disrupted. However, there will be increased demand for emergency responders and caretakers including health care/behavioral health/ medical personnel.
Strategy F4.1: Implement a plan/strategy to assist health care providers retain and recruit personnel, as necessary to support the health care needs in the community.

E. Basic Needs: Food and Shelter

1. Overview

The Basic Needs service providers focus on the homeless and those families which need the most basic needs of food and shelter. These service networks include:

- Food (Food Banks)
- Food (Soup Kitchens)
- Material Goods (Personal)
- Transportation
- Housing/Shelter
  - Emergency
  - Transitional
  - Permanent Supportive
  - Outreach
  - Temporary Financial Assistance

The Pinellas County Homeless Leadership Board has developed a Homeless Evacuation/Sheltering Plan (June 2011). This plan sets forth the requirements for implementing, activating and operating the homeless evacuation and shelter assistance plan for Pinellas County. This plan will be implemented in Pinellas County to help the homeless population respond to the need for evacuation assistance and shelter specifically during a hurricane. It includes education, notification, transportation assistance, “homeless-support” sheltering and recovery. Parts of this plan will be implemented throughout the year, for education purposes. Other parts will be implemented when there is a hurricane threat in coordination with other county emergency actions.

2. Background

According to the 2011 Homeless Point-in-Time Survey, conducted by the Pinellas County Coalition for the Homeless, there were 5,887 homeless adults and children living in Pinellas County. Although the highest concentration of homeless persons is in St. Petersburg and Clearwater, the population is fairly well distributed across the county.
Table 10-2
2011 Pinellas County Homeless Population

<table>
<thead>
<tr>
<th>Total Count</th>
<th>Men</th>
<th>Women</th>
</tr>
</thead>
<tbody>
<tr>
<td>5,887</td>
<td>79%</td>
<td>21%</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Main City of Residence</th>
<th>% of Homeless Population</th>
</tr>
</thead>
<tbody>
<tr>
<td>St. Petersburg and south county</td>
<td>49%</td>
</tr>
<tr>
<td>Clearwater and surrounding area</td>
<td>22%</td>
</tr>
<tr>
<td>Largo, Pinellas Park, Lealman, Tarpon Springs</td>
<td>20%</td>
</tr>
<tr>
<td>Other locations</td>
<td>9%</td>
</tr>
</tbody>
</table>

Other pertinent data from the 2011 Homeless Survey:

- 279 Chronic homeless
- 55% report having mental health and/or depression issues
- 29% report having drug or alcohol abuse issues
- 66% have lived in Pinellas County for over a year
- 22% are veterans

3. Vulnerability Assessment

A Vulnerability Analysis of the facilities and agencies providing for basic needs was conducted as part of the PDRP planning process and human services component. The inventory of facilities was provided by the Health and Human Service Coordinating Council and the Homeless Leadership Network service providers. These facilities included:

- Food Banks

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33 Source: Pinellas County Coalition for the Homeless-2011 Point-in-Time Survey
The vulnerability assessment was conducted using the geographic location of the facilities and known hazards including storm surge (hurricane categories 1-5), freshwater flooding (100- and 500-year events) and the urban wildfire interface. The data is provided on a spreadsheet which lists facility information, contact information and specific vulnerability. A Storm Tide Atlas with human service provider facilities was developed and provided online to provider agencies and the HHSCC.

4. **Response and Recovery Communication and Coordination**

An Evacuation Plan for the homeless individuals and families – including those living on the streets as well as in temporary shelters - has been developed. In addition the agencies responsible for addressing basic needs within the community have developed Continuity of Operations (COOP) plans to address the restoration of operations following an emergency.

In the aftermath of a disaster, the DRLN Communications Plan requires agencies to report their status (facility and staff) within the first 24 hours to 2-1-1 Tampa Bay Cares through, if activated, the Disaster Recovery Center. This information is transmitted to the Pinellas County EOC through ESF 8 (Health). This will allow the coordination of resources to support the restoration of the facilities and agency operations.

5. **Major Issues**

a. **Communication:** Messages communicated through the mainstream media may not reach those who have no permanent residence. Many of these individuals have no access to television, and some may be illiterate or non-English speaking, so that written communications may also be ineffective with a subset of this population. Some homeless individuals may be able to be reached through radio, but the most common form of communication in this population is word-of-mouth, leading to the spread of inaccurate

34 Pinellas County Homeless Evacuation/Shelter Plan, June 2011
rumors and misunderstandings that may have serious consequences during an emergency.

b. **Transportation:** Many homeless individuals have difficulty with transportation and may not be able to reach an evacuation shelter in a timely manner without transportation assistance.

c. **Mental Health, Substance Abuse and Medical Legal Issues:** According to the Pinellas County Coalition for the Homeless (2011), 55% report having mental health, 29% substance abuse problems, and 32% report having physical disability. Mental illness may make communication with some members of this population more difficult. Other homeless individuals with substance abuse problems or legal issues may make their safe integration into a mainstream risk shelter as well as disaster housing environments difficult.

d. **Interpersonal Issues:** Some homeless individuals may have difficulty interacting with the mainstream shelter population due to the issues already discussed, or related to other lifestyle/cultural issues. In the stressful and (relatively) intimate setting of a disaster shelter, the consequences of such issues may be amplified.

6. **Additional Recovery Issues**

   a. **Restoration of Facilities:** Due to the anticipated need in the community to address basic needs, it is expected that facility restoration will have priority in terms of assistance with facility restoration through the direction of volunteer and donated resources to provide emergency repairs. However, it is recognized that demand may exceed supply in the post-disaster environment. In addition, alternative facilities may be needed to replace services in heavily-damaged facilities. The coordination element of the Communications Plan will help to transfer resources (equipment, staff, and supplies) from one agency to another in order to provide the continuity of care in the community.

   b. **Coordination with Disaster Housing Task Force:** If the event requires the activation of the Disaster Housing Plan, the agencies involved in the provision of basic needs should participate in the County Disaster Housing Task Force to lend their expertise in the field of housing, counseling and assistance and to ensure that the existing homeless population – especially those in damaged homeless shelters will have adequate housing.
7. Issues and Strategies

ISSUE F7: RESTORATION OF BASIC HUMAN SERVICE PROVIDERS FACILITIES AND OPERATIONS is essential to address the needs of the community and to facilitate recovery. It is assumed in the post-disaster environment, there will be a significant increase in vulnerable populations and citizens with basic needs so the challenge will be to not only address current (pre-disaster) needs as well as the surge of new clients.

Strategy F7.1: Prioritize and facilitate the restoration of human service facilities/programs including homeless shelters, soup kitchens, housing and transit within the community.

Strategy F7.2: Through the Disaster Housing Task Force, work to restore housing within the community and ensure that basic needs and wrap-around services are provided to the displaced population.

F. Behavioral Health

1. Overview

Providing continuity of essential Behavioral Health services is critical to the recovery of the community. Continuity of services is particularly important to meet the needs of children, seniors, people living with disabilities whose members may have additional functional needs, people from diverse origins, people with limited English proficiency, and underserved populations. No small task, restoration of services will require the repair of facilities, support of staff, sufficient supplies and pharmaceuticals, as well as reconnecting displaced populations with essential services.

In addition, the community itself will look toward the behavioral health community to assist residents cope with the disaster or traumatic event. Disaster behavioral health is the provision of mental health, substance abuse, and stress management to disaster survivors and responders.

   a. Behavioral Health Concerns Affecting Survivors and Responders

   Following an emergency event it is common for individuals and families in and around the affected region to experience distress and anxiety about safety, health, and recovery. Previous exposure to large scale events,

35 http://www.bt.cdc.gov/mentalhealth/
such as a severe hurricane or flood, may place residents and responders who experience a new disaster at greater risk for adverse stress reactions. People may display symptoms and reactions such as:

- Emotional symptoms such as irritability or excessive sadness.
- Cognitive dysfunction such as difficulty making decisions or following directions.
- Physical symptoms such as headache, stomach pain, or difficulty breathing.
- Behavioral reactions such as consuming more alcohol or interpersonal conflict.
- Failure to adhere to needed physical or psychiatric medication needs.

Other factors that can influence how people respond to disaster include:

- Residents of disaster affected areas may be displaced, living in temporary emergency shelters, and separated from their usual support systems.
- Circumstances may make it difficult to learn the status of recovery efforts or to find out the condition of friends, family members, and communities.
- The exposure of disaster responders and volunteers to widespread destruction, the injury or death of others, or to hazardous materials may result in distress or a need for support.

(1) Long-term Need for Disaster Behavioral Health Capabilities:
Natural disasters, terrorist attacks, and other emergencies of the last several years, as well as the growing research on the impacts of these events, have highlighted the need for behavioral health capabilities.

- Research shows a link between exposure to trauma and the onset of other health care needs immediately following an emergency event, and often for many years after.
- Studies correlate trauma with later cardiovascular, musculoskeletal, and neurological illness, as well as psychiatric diagnoses such as Post-Traumatic Stress Disorder (PTSD), anxiety, depression, and substance abuse disorders.

Costs associated with the treatment of those problems also increase.

(2) **Disaster Behavioral Health Response:**
Behavioral health professionals trained in disaster response often work in shelters, medical and psychiatric facilities, or may engage in outreach and educational activities in communities to facilitate the resiliency and recovery of survivors and responders by:

- Providing psycho-education and information on physical and environmental hazards.
- Engaging in supportive listening.
- Screening individuals who are at greater risk for longer-term adverse reactions.
- Ensuring referral to appropriate medical, psychological, or tangible services.

2. **Central Florida Behavioral Health Network (CFBHN)**

CFBHN is a not for profit 501 (c ) (3) community services network incorporated in 1997 as a collaboration of substance abuse providers in Hillsborough County. Currently CFBHN contracts with fifty-two provider organizations to offer a full array of mental health and substance abuse services in eleven counties to an estimated 95,000 plus individuals. The geographic areas served spans from Pasco in the north, throughout the Tampa Bay area and south from Desoto to Lee counties. The range of services includes acute care, residential treatment, housing, medical, outpatient and recovery support services. Substance abuse prevention services are also provided to over 785,000 at risk children.

The mission of the CFBHN is to ensure and enhance an array of behavioral health and other human services for the citizens of the communities served.

**Core Functions**

- Network Management
- Strategic Planning
- Quality Improvement
- Financial Management
- Information Management
- Provider Services

The regional CFBHN strives to maximize revenues and improve access to services, as well as the quality of those services, provided by both the
individual agencies and throughout the system of care. CFBHN's administrative office in Tampa, Florida maintains departments for program development, quality management, contracting, finance and accounting, billing, management information systems, purchasing and resource management functions, and provider services.

Suncoast Region Behavioral Providers include those agencies providing services in Pasco, Pinellas, Manatee, Sarasota, DeSoto, Hillsborough, Charlotte, Glades, Hendry, Lee and Collier. The network will soon expand to also include Polk, Highlands and Hardee counties.

a. Family System of Care (FSOC)
Funded by the Juvenile Welfare Board of Pinellas County (JWB), the Family System of Care (FSOC) provides a comprehensive, continuous, integrated, and readily accessible System of Care to serve Pinellas County families in need of behavioral health services. The FSOC program offers community-based services that are individualized, culturally competent, built on strengths, and designed to meet the needs of children and families across multiple life domains to promote success, safety, and permanence in home, school, and community.

FSOC serves children and families residing in Pinellas County in need of support services. The program empowers families to work with providers to develop a personalized service plan based on an assessment of the family's strengths, needs, and goals. The greater intent is to encourage family resiliency, enhance individual, family, and community resources, and firmly link families with natural community supports.

Program Elements:
- A one-stop single entry access system to a full continuum of social supports and nontraditional services, including those related to health and wellness.
- Systems Navigators to work with families for the duration of services, ensuring successful linkage, removing barriers to access, facilitating transition plans for youths age 17, and acting as advocates and consistent points of contact for the family
- Family Team Conferencing to develop effective, empowering service plans
3. Vulnerability Assessment

A Vulnerability Analysis of the facilities and agencies providing behavioral health services was conducted as part of the human services component of the PDRP planning process. Many of the facilities (treatment and residential) were included in the Health Care inventory; however, many of the entities licensed by the Department of Children and Families (as opposed to AHCA) were not. So a separate behavioral health facilities assessment was conducted as part of the human services inventory. The inventory of facilities was provided by the Health and Human Service Coordinating Council and the Central Florida Behavioral Health Network. These facilities included the FSOC Providers and the CFBHN service providers.

The vulnerability assessment was conducted using the geographic location of the facilities and known hazards including storm surge (hurricane categories 1-5), freshwater flooding (100- and 500-year events) and the urban wildfire interface. The data is provided on a spreadsheet which lists facility information, contact information and specific vulnerability. A Storm Tide Atlas with health and human service provider facilities was developed and provided online to provider agencies, the CFBHN and the HHSCC.

4. Communication and Coordination in Response and Recovery

Each of the approximately 52 individual behavioral health providers must develop a Disaster Plan for their agency including an evacuation plan and COOP Plan. These plans are reviewed by the CFBHN which has three professional risk managers on staff.

In the aftermath of a disaster, the DRLN Communications Plan requires agencies to report their status (facility and staff) within the first 24 hours to 2-1-1 Tampa Bay Cares through, when activated the Disaster Recovery Center. This information is transmitted to the Pinellas County EOC through ESF 8 (Health Care). This will allow the coordination of resources to support the restoration of the facilities and agency operations.

5. Major Issues and Strategies

A Survey was conducted in the fall of 2010 to identify the major issues and strategies related to Behavioral Health Care. The major issues identified included:

- Prioritization and Restoration of Critical Behavioral Health Care Facilities
- Availability to pharmaceuticals, medical equipment and supplies (identified by the physical health providers as well)
- Availability of transportation assistance to displaced and transportation dependent clients
- Personnel Retainment and Recruitment including MRC Volunteers (also identified by the physical health care providers as well)
- Communication and Coordination (DRLN Disaster Communications Plan)
- Addressing Functional Needs of the Community in the post-disaster environment, including “wrap-around” services needed for relocated survivors (disaster housing)
- Long-term redevelopment – Rebuilding an integrated health and behavioral health care system to include a holistic approach which emphasizes a more efficient delivery of services in structurally hardened, multi-purpose facilities.

**ISSUE F6: RESTORATION OF BEHAVIORAL HEALTH SERVICE PROVIDER FACILITIES AND OPERATIONS** is essential to address the needs of the community and to facilitate recovery. It is also assumed in the post-disaster environment, there will be a significant increase in population with behavioral health needs including trauma counseling.

**Strategy F6.1:** Prioritize and facilitate the restoration of critical behavioral health facilities including crisis units, treatment facilities, etc.

**Strategy F6.2:** Coordinate the screening and provision of trauma counseling for disaster survivors.

**Strategy F6.3:** Coordinate and communicate with out-patient behavioral health providers

**Strategy F6.4:** Working with Volunteers and Donations, coordinate the screening and assignment of volunteer mental health providers.

**ISSUE F3: MEETING THE FUNCTIONAL AND ACCESSIBILITY NEEDS OF VULNERABLE POPULATIONS** in the post-disaster environment may be a challenge. Sufficient planning is required to ensure that these needs are addressed.

**Strategy F3.1:** Develop a holistic collaborative to coordinate the provision of functional and special needs in post-disaster emergency/congregate shelters and within the context of wrap-around services within the Disaster Housing Plan.
G. Individual and Family Life

1. Overview

Individual and Family Life service providers focus on those services which meet special needs within our community including children, the elderly and those with disabilities. Specific service categories include:

- Child Welfare Services
- Developmental Disabilities Services
- Social Development
- Recreation & Camps
- Senior Services

Individuals and families rely on these services so it is incumbent that service providers establish the necessary plans to (1) communicate with their clients to ensure they are prepared and (2) to restore their operations as soon as possible. In addition, it is important that (3) service providers position their agency to prioritize/expand services as there is an anticipated increase in demand for services in the post-disaster environment.


The future for poor and working class families, as well as at-risk children in our community is not at all certain. In the post-disaster environment, children and families are often hit the hardest and have the least resources to bring to bear.

Eckerd Community Alternatives is the lead agency (system manager) for community-based child welfare services in Pinellas and Pasco counties and manages one of Florida’s largest systems of care, serving about 3,100 children and teens each day. Governed by a community-based board, Eckerd has developed a collaborative system of care for the safety, well-being and permanency of vulnerable and at-risk children, while strengthening and supporting families. Eckerd Community Alternatives is a program of Eckerd, a national nonprofit organization that has given second chances to more than 100,000 children and families since its founding by Jack and Ruth Eckerd in 1968.

In its role as lead agency, Eckerd provides adoption support; child abuse prevention; child placement; contract and fiscal oversight; foster home
management; performance and data management; resource development; and utilization management.

Eckerd’s system of care is comprised of a network of providers and community partners committed to a common goal of ensuring the safety, well-being and permanency of children and helping strengthen and support families.

**Eckerd Community Alternatives System of Care**

Florida’s Pinellas & Pasco Counties | Circuit 6

**Eckerd’s Partnership Network**

Eckerd’s network of key system and community partners provide a full range of resources and supports to augment and enhance the local system of care.

Eckerd’s key system partners, an integral part of the local child welfare system, include the Dependency Court System, Child Protective Investigations, Child Welfare Legal Services, Foster Parents, Guardian ad Litem Program, and Children’s Services Council. In addition, Eckerd has established numerous community partnerships with corporate, nonprofit, government, faith-based and civic organizations.

**Eckerd’s Provider Network**

Eckerd has developed a provider network with the capacity to deliver a full array of family-centered, community-based, outcome oriented, and culturally competent services and resources for children and families. The network consists of two basic types of providers: those subcontracted with Eckerd to provide specific services and those to whom Eckerd refers children and families.
for services although no formal contractual relationship exists. Eckerd subcontracts with dozens of Pinellas and Pasco community-based service providers, including its primary subcontracted providers that offer Diversion, Case Management, Family Reunification and Independent Living services to children, teens and families.

**Pinellas County Children’s Services Council**

Pinellas County has taken action to expand community awareness and build community connections to keep children safe and help families. The Juvenile Welfare Board (JWB) is the first Children’s Services Council in Florida – and has been a model for the other 10 CSCs throughout the state. CSCs now fund services to more than 60% of Florida’s most vulnerable children. The mission of the Pinellas County Juvenile Welfare Board (JWB) is to support the healthy development of all children and their families in Pinellas County through advocacy, research, planning, training, communications, coordination of resources and funding. JWB is not a direct service provider, but contracts with agencies to deliver services necessary to improve the lives of Pinellas County's children. Funded services, or programs, are designed to address three priority areas of need: child maltreatment, children not ready to start school, and children not succeeding in school. These programs are vitally important in “blue skies”. In the post-disaster environment they are critical.

**Ending Child Maltreatment**

Child maltreatment refers to child abuse and/or neglect. Often child maltreatment is so severe that a child must be placed in a foster home or other out-of-home placement. Removal of a child from their home is traumatic in itself and in most cases not necessary. Quality programs like those summarized below can treat the potential causes of child maltreatment in addition to protecting children from danger.

**Directions - Children’s Outpatient** program allows children and families with mild to severe problems to achieve the highest level of emotional health possible through a holistic, effective approach to therapy. Services are offered in the office and in the community.

**Operation PAR - COSA at the Child Development and Family Guidance Center** COSA stands for Cornerstone of Successful Achievement and serves substance abusing pregnant and parenting women whose infants and preschool children are often developmentally delayed. The program provides day treatment, outpatient treatment, drug screens, early intervention, group case management and continuing care.

**PARC - Respite and Family Support Services** improves a family’s ability to cope with the daily stress of providing for a loved one with a disability.
The program provides quality respite care to individuals from birth to 18 years of age with any developmental disability. 

**PCHD - Healthy Families Pinellas** is a home visiting family support program for families with pregnant mothers and newborns. Families may stay in the program for up to five years while receiving services like parent education, tracking and assessment of child development, bonding and attachment, immunizations, family centered coordinated case management, transportation, development of a Family Support Plan, crisis intervention, and referral to medical and other community-based services.

**PEMHS - Emergency Response Team** promotes the health, safety and well-being of at-risk children by providing immediate crisis and early intervention services. ERT also promotes family stability through community-based abuse and neglect prevention and referral to long term programs and services such as Total Family Strategies.

**Suncoast - Family Services** provides a broad range of community based programs for children and families designed to develop and enhance family support resources, and to resolve emotional and behavioral problems arising from mental health, substance abuse, child abuse and neglect, trauma, and much more.

**The Children's Home - Kinship Services Network of Pinellas** provides an extensive network of local service providers to coordinate a larger system of care for relative care givers (grandparents, aunts uncles, etc.) in Pinellas County. The services provided are network navigation, case management, support groups, family activities and referrals to needed community resources.

(2) **School Readiness**
Children who enroll in school without the foundational literacy and learning skills necessary will fall behind their peers, often leading to other negative outcomes in life. Much can be done in the pre-kindergarten years, or even the months before birth to influence a child's readiness for school. These programs are summarized in the section pertaining to Early Learning and Child Care.

(3) **Safety Net**
These programs may not address one of the three priority areas specifically, but have been deemed necessary supports for Pinellas County's families. They include residential programs for homeless pregnant women and new mothers, domestic abuse victims and child care and before/after school programs for low income and at-risk students.
b. Senior Services
Although a small urban land mass (280 square miles), Pinellas County has the larger total population of those aged 60+ in the PSA. There are 262,991 persons aged 60+ who reside in Pinellas County, comprising 27.4 percent of the county population. The 60+ population growth has declined three percent over the past 18 years. More seniors are migrating to less congested areas of the state. The 85+ population accounts for 3.7 percent of the total population and 13.6 percent of the 60+ population. The 85+ population increased 12.8% over the last five years. Clearwater, Largo and St. Petersburg make up the greatest populated areas. Pinellas County contains the larger number of 60+ persons who are low income in the PSA, although its 8.5 percent is lower than the statewide average of 9.3 percent. The largest concentration of poor elderly live in St. Petersburg. The minority elderly population of 21,092 represents eight percent of the county's 60+ population. There are 4,494 minority residents over age 60 that are low income. Concentrations of minority elderly are primarily found in the south side of St. Petersburg and in Clearwater.

The Area Agency on Aging of Pasco-Pinellas Inc. (AAAPP) is incorporated as a 501(c) 3, serving the Planning and Service Area of Pasco and Pinellas counties (PSA 5). We began in 1974 to administer social service programs for seniors. The AAAPP is backed by a committed Board of Directors, Advisory Council, staff and volunteers who contribute a wealth of experience in diverse areas supporting the Agency's mission. As a designated Aging and Disability Resource Center (ADRC) our service delivery system has expanded and has improved access to information for all persons seeking long-term support in Pasco and Pinellas counties.

The Area Agency on Aging of Pasco-Pinellas, Inc. (AAAPP) is a 501(c)(3) private non-profit agency serving seniors and their caregivers in Pasco and Pinellas counties in Florida since 1974. Designated by the Department of Elder Affairs as the Area Agency on Aging for Planning and Service (PSA) Area 5, the agency's focus is on funding, advocacy, services and programs for seniors in the two-county area of west central Florida. Its mission is to advocate, educate and serve seniors and their caregivers in partnership with the community.
Table 10.3
Characteristics of the 60+ Low Income Population

<table>
<thead>
<tr>
<th></th>
<th>PSA5</th>
<th>Pasco County</th>
<th>Pinellas County</th>
</tr>
</thead>
<tbody>
<tr>
<td>Total Population</td>
<td>397,578</td>
<td>134,587</td>
<td>262,991</td>
</tr>
<tr>
<td>Percent of Total Population</td>
<td>28.2%</td>
<td>29.9%</td>
<td>27.4%</td>
</tr>
<tr>
<td>Low Income Level Aged 60+</td>
<td>33,226</td>
<td>10,964</td>
<td>22,262</td>
</tr>
<tr>
<td>Percent of 60+ Population</td>
<td>8.4%</td>
<td>8.1%</td>
<td>8.5%</td>
</tr>
<tr>
<td>Near Low Income Level Aged 60+</td>
<td>51,181</td>
<td>17,020</td>
<td>34,161</td>
</tr>
<tr>
<td>Percent of 60+ Population</td>
<td>12.9%</td>
<td>12.6%</td>
<td>13.0%</td>
</tr>
<tr>
<td>Low Income Minority Aged 60+</td>
<td>5,553</td>
<td>1,059</td>
<td>4,494</td>
</tr>
<tr>
<td>Percent of 60+ Population</td>
<td>1.4%</td>
<td>0.8%</td>
<td>1.7%</td>
</tr>
<tr>
<td>Near Low Income Level Minority Aged 60+</td>
<td>7,587</td>
<td>1,495</td>
<td>6,092</td>
</tr>
<tr>
<td>Percent of 60+ Population</td>
<td>1.9%</td>
<td>1.1%</td>
<td>2.3%</td>
</tr>
</tbody>
</table>


The Area Agency on Aging funds a variety of services for seniors. To see the list of agencies that are funded to provide services, click on each service type or program listed below.

- [Adult Day Care](#)
- [Alzheimer's Disease Initiative](#)
- [Caregiver Program](#)
- [Chore Program](#)
- [Community Care for the Elderly](#)
- [Counseling](#)
- [Disease Prevention and Health Promotion Services](#)
- [Emergency Alert Response](#)
- [Emergency Home Energy Assistance for the Elderly Program (EHEAEP)](#)
- [Grandparents Caring for Grandchildren - Caregiver Program](#)
- [Homemaker Program](#)
- [Home Care for the Elderly Program](#)
- [Information and Assistance/Referral](#)
- [Legal Assistance](#)
2. Vulnerability Assessment

A Vulnerability Analysis of the facilities and agencies providing for these services was conducted as part of the PDRP planning process and human services component. The inventory of facilities was provided by the Health and Human Service Coordinating Council and the Area Agency on Aging. These facilities included:

- Child Welfare Services
- Development Disabilities Services
- Social Development
- Recreation and Camps
- Senior Services

The vulnerability assessment was conducted using the geographic location of the facilities and known hazards including storm surge (hurricane categories 1-5), freshwater flooding (100- and 500-year events) and the urban wildfire interface. The data is provided on a spreadsheet which lists facility information, contact information and specific vulnerability. A Storm Tide Atlas with human service provider facilities was developed and provided online to provider agencies and the HHSCC.

3. Communication and Coordination in Response and Recovery

In the aftermath of a disaster, the DRLN Communications Plan requires agencies to report their status (facility and staff) within the first 24 hours to 2-1-1 Tampa Bay Cares through, when activated, the Disaster Recovery Center. This information is transmitted to the Pinellas County EOC through ESF 8 (Health). This will allow the coordination of resources to support the restoration of the facilities and agency operations.

For senior service providers, there is a requirement to report to the Area Agency on Aging who consolidates data and provides both to 2-1-1 Tampa Bay Cares/ County EOC as well as the State Department of Elder Affairs.
4. Major Issues and Strategies

ISSUE F8: RESTORATION CHILD WELFARE, DEVELOPMENTAL DISABILITY AND SENIOR SERVICE PROVIDERS FACILITIES AND OPERATIONS is essential to address the needs of the community and to facilitate recovery. It is assumed in the post-disaster environment, there will be a need to maintain/restore services as well as a significant increase in vulnerable populations and citizens with these service needs.

Strategy F8.1: Prioritize and facilitate the restoration of human service facilities/programs including child welfare, developmental disabilities and senior services within the community.

Strategy F8.2: Identify volunteers and, to the extent possible, provide training to augment staffs during disaster recovery.

Strategy F8.3: Ensure that a continuity of children/family services is provided to clientele and that additional needs of survivors are addressed, as appropriate.

H. Education and Child Care

1. Overview

Child Care providers and educators play an extremely important role in the post-disaster environment. Without adequate childcare (and adult day care) as well as the resumption of schools (public and private), parents and other care givers can not return to work. This is recognized as a key trigger for recovery in the community. Specific components of this service category include:

- Voluntary Pre-K
- Head Start
- Subsidized Child Care
- Parent Training
- Vocational Training
- School System

The Early Learning Coalition of Pinellas County\(^{37}\) is a not for profit planning and funding agency focused on early care and education. The goal of the Early

\(^{37}\) http://elcpinellas.net/about.php
Learning Coalition is to prepare all children to enter kindergarten ready to succeed. Additionally, the Coalition supports school age children in continuing academic achievement. The coalition achieves these goals in collaboration with community partners by providing:

- Child care scholarships
- VPK- Florida's FREE Voluntary Prekindergarten program for 4 year olds
- Training and technical assistance for child care providers
- Developmental, vision and hearing screenings
- Resource and referral information for families looking for child care

Early care and education goes much deeper than supervision and socialization. The coalition supports families and providers in developing a child's skills in the following areas:

- Physical Health
- Approaches to Learning
- Social and Emotional Development
- Language and communication
- Emergent Literacy
- Mathematical and Scientific Thinking
- Social Studies and The Arts
- Motor Development

The Early Learning Coalition is committed to efficient communication and collaboration with the child care providers to ensure optimal services for the families of Pinellas County.

The Developmental Services Department provides developmental services to all children enrolled in the School Readiness Program. Parents can access the School Readiness Program through Coordinated Child Care of Pinellas, Inc. Services include:

- Inclusion Warmline
- Developmental Screening
- Support Interventions
- Referral & Navigation

**Service Delivery Summary**

- School Readiness: ELCP served 11,702 children from 7,200 families in the School Readiness program. Over $26.3 million provided School Readiness Scholarships to eligible children. 36.15% of scholarship payments served infants and toddlers, followed by 34.19% for preschool age, and 29.64% for school-age children. Most of the children funded (28.58%) were from Pinellas County.

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38 Early Learning Coalition of Pinellas County, Inc. 2010-2011 Annual Report
low-income eligible families, followed by children of families receiving cash assistance (26.44%), at risk children (21.03%), children of families receiving transitional child care (15.30%), children of migrant families (10%), the Child

- Care Executive Partnership program (6.9%), ARRA at < 2% and special needs at < 1%.
- There were 761 providers that offered School Readiness services. Private childcare facilities represented the majority (78.85%) of School Readiness payments received, followed by 20.61% to family child care homes, 2.95% to public schools and <1% to informal providers.

2. Pinellas County School District

Pinellas County Schools\(^39\) is an award-winning school district that has been recognized on the national and state levels for its strong efforts in education and leadership. The district is the seventh-largest school district in the state and the 24th-largest district in the nation. The district has a student population of more than 101,000 at 142 school sites plus virtual school. The district is divided into five regions offering feeder patterns from elementary to secondary schools. The district offers several school options for parents to choose from, including six elementary magnet programs, four middle school magnets, 11 high school magnets, 10 career academies, five designated career technical programs, and four elementary area magnets. Pinellas County Schools is the largest employer in the county with more than 17,000 teachers, administrators and support staff.

111 The number of private schools in Pinellas in 2005-06.
18,766 The number of students enrolled in Pinellas private schools in 2005-06.
112,127 The number of students enrolled in Pinellas public schools in 2005-06.
2,026 The number of people employed by Pinellas private schools in 2005-06.
5th Pinellas County's ranking, statewide, for private school enrollment.

There are 30 public schools which serve as public shelters\(^40\) (2011). Of these, 3 are special needs shelters; 3 are “pet friendly”.

3. Vulnerability Assessment

A Vulnerability Analysis of the facilities and agencies providing for these services was conducted as part of the PDRP planning process and human services component. The inventory of facilities was provided by the Health and Human Services Coordinating Council. These facilities included:

\(^{39}\) www.pcsb.org
\(^{40}\) http://www.pinellascounty.org/emergency/shelters.htm
- Child Care Services
- Public / Private Schools and Colleges/Universities

The vulnerability assessment was conducted using the geographic location of the facilities and known hazards including storm surge (hurricane categories 1-5), freshwater flooding (100- and 500-year events) and the urban wildfire interface. The data is provided on a spreadsheet which lists facility information, contact information and specific vulnerability. A separate Storm Tide Atlas for child care facilities was developed and provided online to provider agencies and the HHSCC.

4. **Communication and Coordination in Response and Recovery**

In the aftermath of a disaster, the *DRLN Communications Plan* requires child care agencies to report their status (facility and staff) within the first 24 hours to 2-1-1 Tampa Bay Cares and, when activated, the Disaster Recovery Center. This information is transmitted to the Pinellas County EOC through ESF 8 (Health). This will allow the coordination of resources to support the restoration of the facilities and agency operations.

The Pinellas County School District will have a representative in the Emergency Operations Center (EOC) as these local resources support ESF #1 Transportation and ESF #6 Mass Care (shelter operations). As the situation moves into the recovery phase, the schools will coordinate with health and human services to repair/re-open schools as quickly as possible and support after-school on-campus child care services.

5. **Major Issues and Strategies**

The major issues facing child care and education providers are (1) priority restoration of facilities; (2) staffing and (3) licensing issues.

**ISSUE F9: RESTORATION OF CHILD CARE AND THE EDUCATIONAL SYSTEM** is critical to recovery in the community. It allows employees to return to work and provides stability as well as a return to normalcy for dependents.

- **Strategy F9.1:** Prioritize and facilitate the restoration of dependent care facilities/programs including child care and after school programs.

- **Strategy F9.2:** Provide support to the School District and post-secondary educational facilities to reopen schools and resume classes.
I. Organizational/Community/International Services

1. Overview

This component of the Health and Social Services collaboration refers to a key component of not only the day-to-day operations but specifically to disaster response and recovery. These service providers provide the public with referral information (Tampa Bay Cares 2-1-1) relating to health and human services. It assists agencies with licensing and staffing issues and provides the technology for efficient client management systems. This component is essential in the implementation of the DRLN Disaster Communications Plan (Attachment 10-1) which requires service providers to call-in within 24 hours of a disaster and report their status. The Disaster Recovery Center then works to provide assistance to agencies to get their facilities and staffs back in operation as quickly as possible. This section also works to ensure the direction of licensed care providers/volunteers to where they are needed most. Specific components of this service category include:

- Licensing
- Information and Referral
- Technology Initiatives

2. Vulnerability Assessment

A Vulnerability Analysis of the facilities and agencies providing for these services was conducted as part of the PDRP planning process and human services component. The inventory of facilities was provided by the Health and Human Service Coordinating Council.

The vulnerability assessment was conducted using the geographic location of the facilities and known hazards including storm surge (hurricane categories 1-5), freshwater flooding (100- and 500-year events) and the urban wildfire interface. The data is provided on a spreadsheet which lists facility information, contact information and specific vulnerability. A Human Services Storm Tide Atlas including these agencies was developed and provided online to provider agencies and the HHSCC.

3. Communication and Coordination in Response and Recovery

In the aftermath of a disaster, the DRLN Communications Plan requires health and human service agencies to report their status (facility and staff) within the first 24 hours to 2-1-1 Tampa Bay Cares through, when activated, the Disaster Recovery
Center. This information is transmitted to the Pinellas County EOC through ESF 8 (Health). This will allow the coordination of resources to support the restoration of the facilities and agency operations.

4. **Major Issues and Strategies**

Major issues facing these service providers include (1) increased demand for information and referrals; (2) licensing and background checks for volunteers; (3) communication and assistance to provider agencies; (4) disruption of communication and connectivity and (5) coordination of client management systems. It is assumed this function will be ongoing into long-term recovery.

**ISSUE F5: COMMUNICATIONS AND COORDINATION** between the behavioral health and human service providers are essential to facilitate the restoration of services and continuity of care for clients in need of services. This will be accomplished through the implementation of the DRLN Communication Plan. The plan calls for the establishment of the Disaster Recovery Management Center, requires human service providers to report their status immediately after impact (or as soon as possible) to identify needs. Using the data from Agency Status Reports, analyze the ability of the agencies to provide service and how the Recovery Management Center can assist them. With the goal to optimize service capability, strategies may include suggestions to:

- Identify assistance needed by agencies and communicate these needs to the Emergency Support Function 8 desk to speed assistance.
- Maximize the use of facilities that are undamaged or otherwise maximally functional.
- Combine staff from facilities that are closed or minimally functional with staff at locations that are operational.
- Shift staff and other resources from low demand areas to high demand areas.
- Open service sites in alternate locations where demand is high and accessibility is good.
- Utilize staff in non-traditional roles to meet service demand.
- Coordinating service provision activities with the Emergency Support Function 8 desk at the Emergency Operations Center to maximize use of all community resources.

**Strategy F5.1:** Implement the DRLN Disaster Communications Plan in the aftermath of a disaster.

**ISSUE F10: RESTORATION OF LICENSING, INFORMATION AND REFERRAL SERVICES, COMMUNICATIONS AND CLIENT MANAGEMENT SERVICES** is essential in order to maintain the continuity of services within the region as well as manage the increased demand for services in short- and long-term recovery.
Strategy F10.1: Prioritize and facilitate the restoration of providing organizational services including licensing, information and referral and client management services.

Strategy F10.2: Insure the ability to check licensing of providers, including volunteers (as required) and expand services as needed.
A. Introduction

Clear communication of recovery and redevelopment information is imperative to the successful recovery of residents, businesses, government and the community as a whole. The purpose of this chapter is to describe how the public was involved in the development of the Post-disaster Redevelopment Plan as well as how Pinellas County will collect and disseminate recovery information after a disaster. It also defines how public participation in long-term recovery and redevelopment decisions will be insured.

B. Public Participation in the PDRP Planning Process

The citizens’ involvement in the PDRP development, maintenance and implementation is imperative. It is also recognized that success will require the active engagement among and between different levels of government, the private sector and the public throughout each phase of a disaster including the development of the PDRP. Each of the working groups consisted of county and municipal government, private sector and not-for-profit agencies with expertise and a role in recovery.

The Pinellas County Communications Department along with the Public Information Officers (PIO) Regional Group identified goals and strategies to educate and inform residents, businesses, associations and non-profits organizations on disaster preparedness, recovery and long-term redevelopment issues. (Refer to the Communications Action Plan, Appendix 11-A)

Pinellas County has an extensive pre-disaster public outreach program which engages the general public, private-sector partners, non-governmental organizations (NGOs) and both county and municipal agencies. The county uses its website, electronic newsletters, focus groups, public speaking engagements, E-Town meetings and publications to keep the public informed of warnings, plans and policies as well as the public’s responsibilities before a disaster strikes. Establishing these lines of communications prior to a disaster helps establish a sense of trust throughout the county. Additional education and briefing of members of media outlets is a critical component to this process. This enables media partners to effectively conduct risk education and helps ensure an uninterrupted flow of information both pre and post event.
As indicated, the PDRP planning process included the development of a website, www.postdisasterplan.org with a video featuring the County Administrator who defined the reason the county had embarked on this important project. As the project progressed, public outreach conveyed the objectives and basic components of the Plan. Strategies were developed on how to inform the public of the changes in procedures and policies in the post-disaster phase and how to gain additional input from citizens and stakeholders.

Throughout the planning process of the PDRP, the website, www.postdisasterplan.org, was utilized to keep committee members, stakeholders and the public informed as to meetings (agendas and minutes), references and draft plans. The project was highlighted in the Pinellas County electronic newsletter and website and the Pinellas County Emergency Management electronic newsletter.

Once the Draft PDRP was developed, the county worked with the Tampa Bay Regional Planning Council to solicit input from adjacent communities and the State Division of Emergency Management and Department of Economic Opportunity.

In addition, public workshops and E-Town meetings were held to present the draft document and gain input from citizens and other stakeholders. These venues afford the public with the opportunity to provide comments and feedback on the issues relative to the post-disaster redevelopment plan and recovery strategies. As with the development of the local government comprehensive plans, consensus and buy-in from the public are critical in developing a vision of the community’s future, particularly after a disaster.

As mentioned, public participation is a critical component of the Local Comprehensive Plan and adoption of Land Development Regulations. Pinellas County and its municipalities have engaged in numerous public visioning processes to identify the policies and codes and vision for each community. The PDRP should not establish new vision but ensure that the adopted vision – if it leads to a safer, more resilient and sustainable community – is re-established.

Other opportunities to educate the community and solicit feedback also exist. These include:
- Homeowner Associations, CERT, Neighborhood Crime Watch groups
- Chambers of Commerce, Economic Development
- Civic Associations and other business organizations including Association of Contingency Planners (ACP)
- Professional planning associations (i.e., APA, FPZA)
- Homebuilders, Contractor Associations
- Faith-based Groups
- Advocacy or special interest groups
C. Public Outreach in the Post-Disaster Environment

More challenging is public outreach after a disaster. The PDRP focuses on the disaster phase when issues shift from emergency response to recovery and redevelopment. Dependent upon the extent and magnitude of the disaster, the community will be dealing with a multitude of issues, including home rebuilding, property development, business recovery and infrastructure restoration. Resources and staffs will be limited, tempers short, and frustrations high. Effective, consistent and coordinated communication utilizing both traditional and cutting edge technologies will be essential. Additional resources to maintain the public outreach after an event will necessitate the establishment of a Joint Information Center and, quite possibly, mutual aid requests to the State Division of Emergency Management and FEMA for qualified, experienced public information officers.

1. Internal Communication

Recovery and redevelopment-related communication to Pinellas County and municipal staff following a major disaster will be coordinated through the PDRP Steering Committee and the Regional PIO Workgroup. During the response phase, the County Administrator or Emergency Management Director serves as the spokespersons for the event. Once recovery is underway, the County Administrator or Planning Department Director will serve as spokespersons of the Steering Committee, depending on the issue.

Recovery operations begin the Emergency Operations Center (EOC) and then transition to long-term recovery and redevelopment operation over time. This transition will be overseen by the County Administrator and the structure of the long-term recovery operation will be established by the PDRP Steering Committee depending upon the impacts and long-range goals of the community. Communication between the members of the long-term recovery operation may have to take place via conference call, webinar or email.

2. External Communication

Working with FEMA Community Outreach Teams, municipal partners and nonprofit partners within the PHP COAD and PROUD will be able to reach out to survivors. This may be accomplished early in the recovery phase through a variety of mechanisms such as door-to-door flyers, bulletin board postings at feeding sites, recovery sites, points of distribution, faith-based centers, community centers, libraries and other public buildings which are operational.

As power is restored and the broadcast media and telecommunications are back online, more traditional methods of communication will be employed. Once schools begin to reopen and social services are re-established, they, too, can become avenues to notify
impacted families of available assistance. Television and radio are a major source of news and information for many citizens following a disaster. In addition county residents will be able to access long-term recovery and redevelopment information through the County and municipal websites. Information can be coordinated through the County Communications Department to provide a consistent message to residents, as requires. While the public will be able to continue to obtain information through traditional media outlets as listed below, the county’s government access station (PCC-TV Bright House 622 - Knology 18 - Verizon 44) to obtain county-specific information. The county has also worked with the St. Petersburg Times to coordinate special printing and delivery of post-disaster information.

The County also has an existing Citizens Information Center (727-464-4333) open only during emergencies whose purpose is to provide a central point of contact for citizens to request service, seek information/referrals and direct complaints, compliments and suggestions regarding government services. The Pinellas County Construction and Licensing Board (PCCLB) also has a special line for contractor information. In addition 2-1-1 can refer the public to needed services within the county. The 2-1-1 Referral Service is also a vital component for the coordination and communication between health and human service agencies identifying needs and coordinating assistance to those agencies to get them back online. (See Chapter 10: Health and Human Services)

Information specific for the business community will be coordinated through the Pinellas County Economic Development Department and the County Communications Department. They will begin operations initially in the County EOC with the efforts of Emergency Support Function (ESF) 18. (See Chapter 9: Economic Redevelopment)

3. Public Participation in Redevelopment Decisions

Following a disaster, Pinellas County or the appropriate jurisdiction(s) will initiate a series of meetings in areas impacted by the disaster. Figure 11.1 provides a representation of the timeline of these meetings, recognizing that these actions are dependent on the severity, impact and geographic location(s) of the event. As soon as possible following a disaster, staff will conduct Community Listening Meetings to collect information, concerns, data, etc. from the residents of those areas and to identify common recovery and redevelopment themes and issues.

Once Community Listening Meetings have taken place, the county will use the information gathered through these meetings to refine the Recovery and Redevelopment Strategies. Essential to this effort, the county will continue to keep the public updated on the status of the recovery with neighborhood Community Recovery Update Meetings and the Recovery Tracking Report.

The next phase of community redevelopment will be conducted in the impacted areas with the creation of Neighborhood Redevelopment and Revitalization Plans. The
Pinellas County Planning Department working with the pilot PDRP community, Manatee County, developed a neighborhood redevelopment planning strategy as part of the PDRP Toolkit (See Chapter 14: PDRP Toolkit) to provide guidance to neighborhoods and help facilitate this process.

The County will also develop an electronic newsletter that will be posted to the Web site and sent to citizens interested in the recovery/redevelopment in the County. Note: this publication will be unique for each disaster and branded, as appropriate.

4. Regional, State and Federal Coordination

The primary point of contact for regional, state and federal staff in a disaster is the County Emergency Management Director. During recovery, this will transition to the County Administrator or the Chairman of the PDRP Steering Committee. Before a disaster occurs; however, it is the responsibility of Pinellas County Communications and Public information with assistance from the Planning Department and the Emergency Management Department to identify those County departments and the appropriate points-of-contact that will interact with regional state and federal employees following a disaster. It is expected that the regional, state and federal representatives will use these staff members as resources to provide them with information about the situation in the county.
D. Major Goal, Issues and Strategies

The PIO Working Group identified the major goal of the Communications component of the PDRP as:

**GOAL:** Provide clear, concise, consistent communication to the public, pre- and post-disaster and ensure effective inter-jurisdictional coordination regarding recovery and redevelopment operations.

The major Public Outreach issues identified include the following:

**Maintaining effective communication pre- and post-disaster**
- The ability to effectively communicate the recovery status to residents, including out-of-area seasonal and displaced families
- The ability to distribute information on available assistance, i.e., federal programs and local assistance
- Distribution of information regarding donations and volunteering
- Distribution of information regarding business assistance (grants and loans) and employment opportunities
- The ability to effectively communicate the detailed decisions regarding build-back policies; i.e., conforming and non-conforming uses, floodplain management regulations (substantial damage), permitting processes
- Coordinating clear, consistent public information across jurisdictional boundaries
- Staff resources will be severely limited in all jurisdictions

**Empowering residents to take an active role in post-disaster decision-making**
- Engaging the public in land use, mitigation, economic restoration and other redevelopment decisions
- Ensuring transparency in recovery decisions and official actions

**ISSUE G1: MAINTAINING EFFECTIVE COMMUNICATION WITH THE PUBLIC IN THE POST-DISASTER ENVIRONMENT**

Following a major event, public information is critical in order to provide important information to residents (permanent and seasonal) and their concerned families (who may be out of the area) and to restore confidence in the government and the recovery process itself. In the early phases of recovery, this can be extremely challenging due to the potential impact to telecommunications and the infrastructure. In the long-term recovery phase, communication remains a vital element to the community’s well-being. Residents must receive necessary information in regard to regulations and rebuilding as well as where to find assistance.
Strategy G1.1: Provide effective communication of recovery status and available assistance, including outreach to seasonal and displaced residents.

Strategy G1.2: Provide effective outreach in regard to build back policy, coastal setbacks, code enforcement, permitting and temporary housing, etc.

**ISSUE G2: ENSURE COMMUNICATIONS WITH AGENCIES PROVIDING CRITICAL SERVICES IS RESTORED AND STATUS/NEEDS ARE COMMUNICATED.** As part of the communications network within the county, it is important that the needs of critical services including the health industry and human service organizations are addressed and that the public knows where they can receive these services. In addition another critical constituent of public outreach is the private sector community. In order for the community to recover, the business community, social services network and health care industry must be restored.

Strategy G2.1: Maintain communications with health and human service agencies through 211 Tampa Bay Cares and the DRLN Recovery Management Center, and the EOC (through ESF 8 and 15) during response and short-term recovery.

Strategy G2.2: Communicate the availability of services to the public.

Strategy G2.3: Maintain communications with the business community regarding operational status, access and needs as well as available assistance and resources.

**ISSUE G3: EMPOWER RESIDENTS TO PARTICIPATE IN THE POST-DISASTER REDEVELOPMENT PROCESS**

Effective public participation is a challenge in “blue skies”. Following a disaster, public participation is critical to ensure that residents understand the opportunities (and limitations) in the post-disaster environment. In Florida decisions must be made in the “sunshine” and public notice and participation is required. If neighborhoods have been devastated - as witnessed in other areas hit by disasters - town meetings or charettes may be used to determine a “new” vision of the community. Electronic media, such as E-Town meetings may also be employed to ensure transparency in decision-making and that all voices are heard. Regardless of the method, recovery must engage the citizenry in a powerful way.

Strategy G3.1: Ensure transparency in recovery decisions and official actions consistent with Chapter 163 of the Florida Statutes.

Strategy G3.2: Empower residents and encourage public participation in land use, economic restoration and other redevelopment decisions.
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CHAPTER 12
RECOVERY ADMINISTRATION AND FINANCE

A. Overview

The administration and finance component of the PDRP is extremely important to the recovery of the community. The county would face tremendous challenges in the post-disaster environment as the local government faced additional revenue shortfalls while certain budget needs are likely to increase with recovery and redevelopment needs. Therefore financial strategies will need to be identified.

Following a disaster, there are many sources of Federal and State assistance as well as private donations that will need to be directed to the most immediate needs followed by long-term redevelopment projects. However, the financing process is complicated and must be carefully managed. There are specific eligibility requirements and staff training on likely post-disaster funding procedures and reimbursement requirements will be necessary. In addition, many opportunities will require local match. In order to position the county to receive the financial assistance and appropriate reimbursements and facilitate a successful timely recovery, the county needs an understanding of local government revenue vulnerability and mitigation strategies, as well as knowledge of pre- and post-disaster financial assistance programs and requirements.

The major issues associated with recovery administration and finance include:

- **Ability to quantify and mitigate, if necessary, the impacts to principal revenue sources (e.g. property tax, tourist development tax, impact fees, etc.)**

A review of the FY2011 Budget indicates that the $1,611,380,790 balanced budget continues the County’s tradition of providing high quality services to the public while addressing the economic realities of today’s economy. The operating budget, including Enterprise departments, reflects a $145.5 million or 10.6% decrease, including decreases of 12.8% in County Administrator governmental operations and 9.7% in Constitutional Officers’ funding. The non-recurring capital portion of the budget increased $78.8 million. The total FY2011 budget is $66.7 million or 4.0% less than the total FY2010 Budget.
Revenues There are four primary funding sources for the General Fund: Property Taxes, State Shared Half-Cent Sales Taxes, State Revenue Sharing, and Communications Services Taxes. These sources comprise about 77% of the revenue. The remaining 23% is derived from a variety of resources, including User Fees, Grants, Interest, and Cost Recovery from other County funds.

Expenditure The General Fund includes the primary governmental functions of the County that are not completely supported by dedicated resources. These activities include, but are not limited to: Sheriff’s law enforcement, detention, and corrections; support of the Court system, including facilities and technology; health and human services; environmental management; emergency management and communications; parks and leisure services; general administration; and the operations of the Property Appraiser, Tax Collector, and Supervisor of Elections. The expenditures in the General Fund total $485.9M (net of reserves) and can be summarized in four groups: the Board of County Commissioners, the Sheriff, Other Constitutional Officers, and independent Agencies.

The figure below illustrates the “sunny day” funding of county departments with their primary role in Long Term Recovery (Recovery Functions); i.e. Community Planning and Capacity Building, Economic Development, Health, Social and Community Services, Housing, Infrastructure Systems, and Natural and Cultural Resources.

The following table reviews the specific Funds, their revenue source, strengths and vulnerabilities.
"Sunny Day" Funding

County departments are shown by light orange. Those departments funded solely through General Revenue funds are connected by an arrow. Similarly, those departments funded solely by Special Revenue or Enterprise funds are shown by an arrow. Other departments are funded by a compilation of Special Revenue Funds and General Revenue Funds.

The dark orange layer represents private sector – both non-profit and not for profit, volunteer agencies and civic associations funded by private investment and donations.
## Fund Review

<table>
<thead>
<tr>
<th>Fund</th>
<th>Source</th>
<th>Purpose</th>
<th>FY2011</th>
<th>Potential Impact</th>
</tr>
</thead>
<tbody>
<tr>
<td>Tourist Development Council Fund</td>
<td>“Bed Tax” on Hotel Rooms</td>
<td>Promotional activities;</td>
<td>$22.9M</td>
<td>Very sensitive to economic conditions/disaster. The reserve level in the TDC fund is currently at 10.4%, at the 100% revenue level, which is the reserve level requested by the Tourist Development Council.</td>
</tr>
<tr>
<td>Transportation Trust Fund</td>
<td>6 cent local option gas tax; state shared gas taxes, and Ninth Cent County for ITS</td>
<td>Road and ROW maintenance, bridge maintenance and operation, traffic signal operation, ITS, sidewalk repair, Stormwater facilities</td>
<td>$26.7M</td>
<td>Short term impact dependent on fuel supply (although it is running in deficit)</td>
</tr>
<tr>
<td>Penny for Pinellas Fund</td>
<td>1 cent local option surtax on sales</td>
<td>Primary source of revenue supporting County’s capital improvement program (jail facilities, specific capital projects, debt service fund)</td>
<td>$550M</td>
<td>Sales tax from the cost of repairs, construction equipment and supplies, replacement furniture, etc. could over the long-term increase unless there is significant population relocation.</td>
</tr>
<tr>
<td>EMS Fund</td>
<td>Property tax and ambulance user fee</td>
<td>Provides funding for the ambulance provider contractual expenditures</td>
<td>$30M/$30M</td>
<td>Increased demand anticipated; dependent upon property tax revenues. Pinellas County Ordinance 88-12, which was amended with Resolution 89-208, authorizes the establishment of a prudent reserve equal to one-third of the annual expenditure budget for this fund. This guideline exceeds the 5-15% reserve policy adopted by the Board. Reasons for such a high reserve level include disasters, such as a hurricane, where a large amount of equipment/vehicles may need to be replaced quickly to sustain EMS service and enough working capital for a potential transition if contract requirements are not met by the service provider. The FY2011 budgeted reserve level is 23% (at 100% revenues).</td>
</tr>
<tr>
<td>Fire Districts Fund</td>
<td>Property Tax</td>
<td>Supports the fire protection for Pinellas County and municipalities</td>
<td>$23.5M</td>
<td>Increased demand anticipated; dependent upon property tax revenue</td>
</tr>
</tbody>
</table>
## Fund Source | Purpose | FY2011 | Potential Impact
--- | --- | --- | ---
Airport Fund | Enterprise Fund (rental/leases; airfield/flight lines and Airco Golf Course) | Airport operations/Foreign Tread Zone | $34.8M | Dependent upon airport and golf course operations
Water System | Enterprise – User (retail and wholesale water sales) | Potable water service | $80.9M | Short term Impact anticipated to facilities and distribution systems; no long term impact unless there is significant population relocation.
Sewer System | Enterprise – User | Sewer Service | $58.8M | More vulnerable locations of facilities; maintains higher reserve level (33%), no long term impact unless there is significant population relocation.
Solid Waste System | Enterprise – User | Solid Waste Service (landfill, waste-to-energy plant, hazardous waste collection, recycling programs and litter reduction. | $79.0M | Tremendous impact to operations; no significant impact to revenue stream

**Fund Source**
- Enterprise Fund
- Enterprise – User

**Purpose**
- Airport operations/
  Foreign Tread Zone
- Potable water service
- Sewer Service
- Solid Waste Service

**FY2011**
- $34.8M
- $80.9M
- $58.8M
- $79.0M

**Potential Impact**
- Dependent upon airport and golf course operations
- Short term Impact anticipated to facilities and distribution systems; no long term impact unless there is significant population relocation.
- More vulnerable locations of facilities; maintains higher reserve level (33%), no long term impact unless there is significant population relocation.
- Tremendous impact to operations; no significant impact to revenue stream
FY2011 Budgeted Reserves
The FY2011 General Fund budget includes a projected reserve of $94.1M (16%) which meets and exceeds the Board’s 15% policy target. This dollar mount is the same as the year before and was not adjusted downward as the overall budget decreased. The components of the estimated FY2011 year-end reserves are Non-Spendable, Restricted, Contingency, Encumbered Contracts, Cash Flow, and Disaster Response.

NonSpendable and Restricted Reserves These two categories of reserves are well defined as they are driven by things such as the change in the value of inventories and limitations imposed by external entities such as grants that are being carried forward from the previous year. As a percentage of the overall reserve, non-spendable and restricted reserves represent less than 1% of reserves.

Contingency Reserve The Contingency Reserve, which is budgeted at $29.0M in FY2011, is an amount equal to 5% of resources to be used for unanticipated revenue shortfalls or expenditures. For example, fuel costs and electricity rate increases have been highly volatile and often exceed normal inflation. Another example is the need for accrued leave layouts due to layoffs.

Encumbered Contracts Reserve During the year, at any given time there are purchase orders and service contracts that have been approved and are subject to payment as work is completed or goods delivered. The $6.6M in the Encumbered Contracts Reserve for FY2011 represents the average amount that was encumbered at month’s end for the 12-month period ending May 2010.

Cash Flow Reserve The Cash Flow Reserve is required to meet cash flow needs. During the first two months of the fiscal year, expenditures exceed revenues because most of the property tax revenue is not received until December. Property tax revenue represents about 65% of the total General Fund revenue. The FY2011 amount for the Cash Flow reserve, $38.1M, is equal to one-twelfth of all General Fund revenue budgeted for the fiscal year.
**Disaster Response Reserve** As a high hazard coastal county, Pinellas needs to have Disaster Response Reserve funds on hand in case of an emergency such as a hurricane or other man-made or natural disasters. In FY2011, $20.4M is budgeted in this reserve. Reimbursement from the Federal Emergency Management Agency (FEMA) and the State usually cover only a portion of the costs, is not available at the beginning of a disaster, and often is not received for many months or years. For example, FEMA funds for the three 2004 hurricanes which brushed Pinellas County (Jeanne, Charley, Frances) were not fully received until 2007, after extensive and protracted appeals through FEMA and the State. Approximately $1.6M of the $9.3M total cost was not reimbursed for these storm events. There are other economic impacts which can result from a major disaster. With a substantial portion of the county's highest taxable value properties located on the shoreline or in lower elevation coastal areas, there is the potential for a reduction in the tax base if properties are damaged or destroyed by a storm surge or high winds. This would result in a decline in property tax revenue in the following year. Sales and other taxes would also decrease due to the negative effects on tourism from the storm. Rebuilding would generate additional revenues, but it would take time to offset the losses in the aftermath of the disaster. As an indication of the size of this problem, a seven-county area of Florida impacted by 2004's Hurricane Charley sustained over $6.6 Billion in losses to residential, commercial, and industrial properties. The County is the primary coordinating agency for disaster response, and extraordinary unbudgeted expenses are required to respond to such a situation. Resources are needed to pay for extended work hours for Sheriff's deputies and other emergency first response personnel and to operate emergency shelters and the emergency communications center. Public works crews and equipment, and possibly private contractors, are needed to repair storm damage. Debris removal funding may be required if solid waste resources are not available. Since storms may vary greatly in their impact, it is not possible to predict the exact amount which would be required.

**Potential of Municipal Insolvency**
As presented in the Vulnerability Assessment Section of this plan, the municipal governments - particularly the smaller barrier island communities - are particularly at risk to natural hazards, with most of the building stock of the communities located in hazard zones. It is possible that if these municipalities are impacted by a severe enough event, they could be faced with difficult choices to make about their communities.

Pinellas County is committed to doing their part to ensure that these communities do not face insolvency. The County will assist the municipalities in whatever ways they can by attempting to anticipate the needs of the municipalities before a disaster occurs.
• Ability to determine post-disaster recovery staff demand and resource needs and the impact on the budget

**Mutual Aid Agreements**
Mutual aid agreements facilitate and expedite recovery, as other local governments that have not been impacted by the disaster can provide staffing and other resources to assist the impacted county. For example, mutual aid agreements can be developed to include the following staffing and services: planners, permit specialists, emergency period debris removal staff and equipment, geographic information system (GIS) specialists, public information officer (PIO), etc. Currently, Pinellas County has no mutual aid agreements in place for long-term recovery staffing needs.

**Pre-Established Recovery Contracts**
Pre-established contracts are helpful or expediting the goods and services needed for post-disaster recovery. These contracts are more readily procured and executed, as they have already been reviewed and approved by the Pinellas County’s Purchasing Department. Although, FEMA will reimburse local governments for emergency contracts, services are typically limited to the first 72 hours of work. There are cases when sole source contracts may be let, but there are special requirements that must be adhered to per the Code of Federal Regulations (CFR) Section 13.36. Pinellas County currently has pre-established contracts with debris removal companies to provide post-disaster services.

**Contract Employees**
The downturn in the national and local economy as well tax structure has led to significant staff reductions in the county in the last two years. These staffing reductions could impact the recovery and redevelopment operations in a major event. County emergency management is working with temporary hiring agencies to have access to the additional emergency personnel needed in the county including those with professional management skills and knowledge of the county.

• Ability to leverage local funding mechanisms to meet match requirements (e.g. bonds, financial reserves, insurance, etc.)
Having an adequate reserve also demonstrates stability to the financial markets. Pinellas has the lowest general revenue debt of any major Florida county and this stability enhances the County’s ability to raise capital through bonding at a lower cost if required in the future. Even with the recent recalibration of credit scores by the bond rating agencies, Pinellas County earned a AAA rating (the highest) for general obligation debt by Fitch Ratings. With proper organizations in place, the county should be in position to facilitate post-disaster reinvestment in the community after a major disaster with assistance from federal and state disaster programs.
• Research applicable recovery/redevelopment grant programs and understanding requirements for documentation, eligibility and timelines, funding uses and restrictions, etc.

Disaster Funding and Resources are provided in Attachment 12-1. The excerpt below identifies the major federal post-disaster funding sources.

**Major Federal Post-Disaster Funding Sources**

**Public Assistance**

Public assistance is aid to State or local governments administered by FEMA to pay part of the costs of rebuilding a community’s damaged infrastructure. Generally, public assistance programs pay for 75% of the approved project costs. Public Assistance may include debris removal, emergency protective measures and public services, repair of damaged public property, loans need by communities for essential government functions, and grants for public schools. Public assistance also allows for improved and Alternate Projects which can provide opportunities for mitigation or other redevelopment needs.

**Hazard Mitigation Grant Program (HMGP)**

The HMGP provides grants to State and local governments to implement long-term hazard mitigation measures after a major disaster declaration. Authorized under Section 404 of the Stafford Act and administered by FEMA, HMGP was created to reduce the loss of life and property due to natural disaster. The Program enables mitigation measures to be implemented during the immediate recovery from a disaster. A State or local match of 25% is required.

**Community Development Block Grants**

In response to disaster, Congress may appropriate additional funding for the Community Development Block Grant (CDBG) and HOME programs as Disaster Recovery Grants to rebuild the affected areas and provide crucial seed money to start the recovery process. Since CDBG Disaster Recovery Assistance may fund a broad range of recovery activities, the U.S. Department of Housing and Urban Development can help communities and neighborhoods that otherwise might not recover due to limited resources.

**Community Disaster Loan Program**

FEMA also provides loans to jurisdictions in a designated disaster area that has suffered a substantial loss of tax and other revenue and has demonstrated need for financial assistance to perform its governmental functions. The loans cannot exceed 25% of the local government’s annual operating budget, with a maximum of $5 million.
• **Ability to capture local private investments, donations and volunteer hours**
  
  A Long-Term Recovery Organization, PROUD has recently incorporated as a private non-profit 501C3 to meet the unmet needs in Pinellas County following a disaster. The County participates through representation from the Emergency Management agency, Planning Department, Housing Department, Health and Human Services Department, Volunteer Pinellas and the Health and Human Services Coordinating Council.

• **Seek financial assistance from recovery programs and explore alternative revenue sources**
  
  A matrix was developed to illustrate the types of financial assistance which may be available and the department which would most likely be involved with those programs. Refer to Attachment 12-1.

• **Manage the response and recovery expenditures and appropriate file for eligible reimbursement**
  
  Since 2004 the county has contracted with a large, well-known accounting firm to manage disaster-related expenditures, grants, contracts and reimbursement applications pertaining to FEMA’s Public Assistance program. Through the PDRP planning process, Pinellas County Office of Management and Budget (OMB) identified a need to more clearly identify internal disaster-related purchasing protocols and grants management and will develop an Internal Controls Handbook for the management of disaster-related programs. The goal is to ensure methodical, systematic, accurate, timely and comprehensive accounting procedures in a very hectic and challenging time by providing concise and up-to-date guidance to all departmental financial / administration staffs.

**B. Major Goal, Issues and Strategies**

**GOAL:** Develop and maintain the capacity to mitigate potential impacts to the county revenue sources and ensure internal policies and procedures allow effective response in response and long-term recovery.

**ISSUE H1: THE COUNTY MUST ENSURE THE CAPABILITY TO MITIGATE POTENTIAL IMPACTS TO THE COUNTY REVENUE SOURCES FOR LONG-TERM RECOVERY OPERATIONS**

The County has worked diligently in this economic climate to provide services to residents as effectively and efficiently as possible. However, it is recognized that given a major disaster, these resources will not be sufficient to recover. It is therefore incumbent upon the County to position itself and municipal jurisdictions countywide to recuperate eligible funds to assist in the immediate response as well as the long-term recovery efforts. The County recognizes that meeting this challenge will require communication and coordination between different departments, different levels of
government, continuous assessment of sufficient insurance and catastrophic funds, and acquisition of mitigation funds to harden infrastructure and public facilities. This also includes knowledge of resources from within the community such as volunteer agencies, mutual aid and cross training.

**Strategy H1.1:** Identify strategies to mitigate the potential impact to principal revenue sources.

**ISSUE H2: ENSURE INTERNAL CONTROLS, PROCEDURES AND POLICIES WILL ALLOW EFFECTIVE RESPONSE TO RECOVERY OPERATIONS**

A preliminary assessment of the County’s internal controls, procedures and policies demonstrated a base-line capability to respond and recovery from a major disaster. However, a comprehensive assessment and emergency fiscal guidance is necessary to ensure compliance and appropriate procedures and policies.

**Strategy H2.1:** Identify strategies to meet increase demand on staffing through mutual aid agreements, temporary labor and vendors.

**Strategy H2.2:** Effectively manage post-disaster financial assistance to ensure opportunities for mitigation, economic redevelopment, infrastructure repair and reconstruction and community restoration are recognized.

**Strategy H2.3:** Effectively manage post-disaster financial assistance to ensure eligible reimbursements are received in a timely manner.


Following a disaster, as witnessed by other communities, there will be unmet needs within the community. These needs are addressed, where feasible, through a partnership between government and the volunteer agencies in the community. Pinellas County has such an organization, the newly created Pinellas Recovery Organizations United in Disasters or PROUD. Support of this entity as well as the regional COAD is essential to assist residents recover.

**Strategy H3.1:** Coordinate with the Long-Term Recovery Organization, PROUD\(^{41}\), to capture donations and volunteer contributions toward addressing unmet needs in the community.

\(^{41}\) Pinellas Recovery Organizations United in Disasters
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CHAPTER 13
PLAN IMPLEMENTATION AND MAINTENANCE

This chapter of the plan describes how the Pinellas County Post-disaster Redevelopment Plan (PDRP) will be maintained and updated over time. It will also discuss the implementation of the PDRP would be activated in the aftermath of a disaster.

A. Transition from Emergency Response to Recovery

Defining the transition from Emergency Response operations to Recovery and Long-Term Redevelopment operations can be difficult and confusing. However, it is an essential part of the PDRP. Perhaps the easiest way to define the transition is to identify the “trigger points” which signal the transition. While no written document can address the entire spectrum of issues, a procedure was modified\(^\text{42}\) to reflect the general transition. Table 13.1 presents guidance identifying core elements and conditions. As more conditions are met, the recovery organization will be able to identify the need to ramp up resources to meet the changing conditions. This procedure evaluates (18) specific parameters and ranks them on a simple color scale. The color scale is as follows:

- **RED** – Clearly in the Response Phase. Basic services are lacking and the community requires assistance to meet basic human needs.
- **YELLOW** - In transition from response to recovery. Systems are in place to meet basic needs, but may still require external support to remain functions.
- **GREEN** – Clearly in the Recovery Phase. Systems are generally operating within normal parameters and are relatively self-supporting.

\(^{42}\) Lee County CEMP, Response to Recovery Transition, 2007
Table 13.1 Parameters and Conditions of Response to Recovery

<table>
<thead>
<tr>
<th>Parameters</th>
<th>RED – Clearly in Response</th>
<th>YELLOW – Transitional</th>
<th>GREEN – Clearly in Recovery</th>
</tr>
</thead>
<tbody>
<tr>
<td>Curfews and Security</td>
<td>Multiple curfews throughout County. Additional law enforcement/security required</td>
<td>Some curfews and additional security measures remain in affect.</td>
<td>No curfews. Normal law enforcement presence</td>
</tr>
<tr>
<td>Damage Assessment</td>
<td>Awaiting Damage Assessment</td>
<td>Initial Damage Assessments in progress</td>
<td>Initial Damage Assessment complete.</td>
</tr>
<tr>
<td>Shelters</td>
<td>Ongoing shelter operations at two or more facilities</td>
<td>Shelters consolidated into single facility</td>
<td>All public shelters closed.</td>
</tr>
<tr>
<td>Search &amp; Rescue</td>
<td>Awaiting Search and Rescue</td>
<td>Primary search completed throughout county</td>
<td>Secondary search complete throughout county</td>
</tr>
<tr>
<td>Public Communications</td>
<td>Multiple local radio and television stations are off the air</td>
<td>Many radio and television stations are on the air using alternate facilities and/or generator power</td>
<td>All/Most radio and television stations are on the air and using commercial power</td>
</tr>
<tr>
<td>Road and Bridges</td>
<td>Travel on major transportation routes restricted. Many traffic control devices are not operational.</td>
<td>Clear travel on all major routes. Some traffic control devices not operational.</td>
<td>All public streets and roads are clear. Greater than 98% of traffic control devices are functional.</td>
</tr>
<tr>
<td>Emergency Services</td>
<td>Essential emergency services are compromised in their ability to provide routine services</td>
<td>Using mutual aid resources to provide routine emergency services. Alternate communication systems may be in use.</td>
<td>Routine emergency services are restored with no mutual aid. Normal communications.</td>
</tr>
<tr>
<td>Health Care</td>
<td>One or more hospitals evacuated or damaged to the extent they cannot receive patients</td>
<td>All hospitals functional, but may have sustained damage. Possible compromise of smaller providers.</td>
<td>Hospitals at normal operational status. Health system functional; although not all providers may be fully restored.</td>
</tr>
<tr>
<td>Power</td>
<td>More than 10% power outage throughout county</td>
<td>90-98% power availability throughout county</td>
<td>Greater than 98% restoration to customers able to receive power.</td>
</tr>
<tr>
<td>Water</td>
<td>Loss of main pressure or damage to facilities resulting in loss of more than 10% production capacity</td>
<td>Main pressure restored. Capacity at least 90% Boil water notices in effect</td>
<td>At least 98% production and delivery restored. No boil water notices.</td>
</tr>
<tr>
<td>Sewer</td>
<td>Damage to main lines or treatment facilities; resulting in more than 10% reduction of treatment capacity.</td>
<td>Treatment facilities operational. Damage or lack of power to some lift stations.</td>
<td>Greater than 98% treatment capacity available and operational.</td>
</tr>
</tbody>
</table>
### Conditions Parameter Table

<table>
<thead>
<tr>
<th>Parameters</th>
<th>RED – Clearly in Response</th>
<th>YELLOW – Transitional</th>
<th>GREEN – Clearly in Recovery</th>
</tr>
</thead>
<tbody>
<tr>
<td>Fuel</td>
<td>At least one port closed. Widespread fuel shortages or shortages on major transportation routes reported.</td>
<td>Ports open. Localized fuel shortages not affecting transportation on major routes.</td>
<td>Normal fuel deliveries in all areas. No noticeable fuel shortages.</td>
</tr>
<tr>
<td>Schools</td>
<td>Schools are not in session. Probably or confirmed facility damage.</td>
<td>Schools open. Students may be relocated to temporary facilities.</td>
<td>Schools in session. All facilities (not destroyed) are serviceable.</td>
</tr>
<tr>
<td>Government Offices</td>
<td>County government offices closed</td>
<td>County government open. Some facilities or services may be limited.</td>
<td>Government offices open and providing all pre-event services.</td>
</tr>
<tr>
<td>Debris</td>
<td>Travel restricted due to debris in streets.</td>
<td>Roads free of debris. First pass pickup completed throughout County.</td>
<td>Second pass pickup completed throughout County.</td>
</tr>
<tr>
<td>Elections</td>
<td>Scheduled elections on hold.</td>
<td>Elections using temporary polling places</td>
<td>Normal voting and polling procedures throughout County.</td>
</tr>
<tr>
<td>Telephone</td>
<td>Damage to main switches, junctions, transmission lines or cell towers. Facilities on battery power</td>
<td>Greater than 90% service availability. Some facilities on generator power. Limited reliance on COWs or COLTs.</td>
<td>Greater than 98% service availability. Commercials power restored to all facilities.</td>
</tr>
<tr>
<td>Food, Water, Ice</td>
<td>Most local grocery stores closed. Unknown stock and resupply issues. Three or more PODs open.</td>
<td>Many, well distributed and stocked grocery stores open throughout the County. Two or less PODs open.</td>
<td>Most grocery stores operating normally. All PODs closed.</td>
</tr>
</tbody>
</table>
B. Community Recovery Operations

FEMA has identified key Recovery Support Functions (RSFs) as part of the (draft) National Recovery Framework. These RSFs are the key operations of recovery as the Emergency Support Functions (ESFs) are the key components of emergency response. Figure 13.1 identifies the RSFs and their missions.

Figure 13.1
Recovery Operations

- **Infrastructure**
  - Mission: Integrate the capabilities of Federal, state and local governments and other infrastructure owners & operators to achieve recovery goals relating to the recovery of infrastructure systems.

- **Natural and Cultural Resources**
  - Mission: Integrate resources and capabilities to address long-term environmental and cultural resource recovery needs after major and catastrophic disasters.

- **Health, Social and Community Services**
  - Mission: Support re-establishment of essential health/social/community services with particular attention to children, the elderly, families, people living with disabilities, accessibility and functional needs, and underserved populations.

- **Economic Development**
  - Mission: Integrate federal and local resources to help rebuild businesses and develop new economic opportunities, with the goal of creating sustainable, economically-viable communities.

- **Community Planning & Capacity Building**
  - Mission: Unify capacity-building expertise and support programs to provide governmental services and organize, plan, manage and implement long term recovery activities and initiatives.

- **Housing**
  - Mission: Coordinate federal, state and local resources and activities to restore destroyed and damaged housing and develop other new accessible, permanent housing options, if necessary.

Community Recovery Operations
The RSFs correlate with the Work Groups under the PDRP planning process addressing the issues attached to these functions with some distinctions. Community planning and Capacity Building functions (land use, mitigation, rebuilding) as well as Housing issues were handled by the Land Use, Housing and Mitigation Work group. Local permitting and construction issues were handled by a separate committee: Construction, Permitting and Historic Preservation. As noted, historic preservation issues were handled by the Construction, Permitting and Historic Preservation Work Group not by the Environmental Restoration Work Group.

**Table 13.2 Correlation of PDRP Work Groups and Recovery Support Functions (RSFs)**

<table>
<thead>
<tr>
<th>Pinellas PDRP Work Groups</th>
<th>Recovery Support Functions</th>
</tr>
</thead>
<tbody>
<tr>
<td>Land Use, Housing and Mitigation Construction, Permitting and Historic Pres.</td>
<td>Community Planning and Capacity Building Housing</td>
</tr>
<tr>
<td>Environmental Restoration</td>
<td>Natural and Cultural Resources</td>
</tr>
<tr>
<td>Health and Human Services</td>
<td>Health, Social and Community Services</td>
</tr>
<tr>
<td>Infrastructure Restoration</td>
<td>Infrastructure</td>
</tr>
<tr>
<td>Economic Redevelopment</td>
<td>Economic Development</td>
</tr>
<tr>
<td>Public Information/ Communications</td>
<td></td>
</tr>
<tr>
<td>Financial and Administration</td>
<td></td>
</tr>
</tbody>
</table>

The series of organization charts (Figure 13.2- Figure 13.5) which follows illustrates the transition from “sunny day” daily county operations to emergency operations to short-term recovery and finally, to long-term redevelopment. They are meant to demonstrate the gradual transition from the emergency response operations coordinated through the EOC to those long-term recovery/reconstruction functions which require different players and key stakeholders, different location(s) and a different organization structure.
Figure 13.2 Pinellas County Government Organizational Chart
Figure 13.3 Emergency Response Operations (EOC)

Pinellas County Emergency Operations Center

**OPS CHIEF**
**EOC MANAGEMENT (OPERATIONS GROUP)**

**PLANNING CHIEF**
**ESF 5**

**LOGISTICS CHIEF**
**ESF 7**

**FINANCE CHIEF**

**EMERGENCY SERVICES BRANCH**
- FIRE ADMIN - ESF 4 FIREFIGHTING
- FIRE ADMIN - ESF 9 SEARCH AND RESCUE
- EMERGENCY MANAGEMENT - ESF 15 MILITARY
- PCG - ESF 16 LAW ENFORCEMENT

**SUPPORT BRANCH**
- FACILITY OPERATIONS
- GIS

**HUMAN SERVICES BRANCH**
- DOH / HOSPITALS - ESF 8 HEALTH / MEDICAL
- FACILITY MGMT - ESF 3 PUBLIC WORKS
- INFORMATION TECHNOLOGIES
- COMMUNICATIONS - ESF 15 VOLUNTEER / DONATIONS
- ANIMAL SERVICES - ESF 17 ANIMAL SERVICES
- SUNSTAR - ESF 18 TRANSPORTATION & MEDICAL
- HUMAN SERVICES
- MEDICAL DIRECTOR - ESF 8 HEALTH / MEDICAL

**INFRASTRUCTURE BRANCH**
- EMERGENCY COMMUNICATIONS - ESF 2 COMMUNICATIONS
- PINELLAS COUNTY UTILITIES - ESF 3 PUBLIC WORKS
- PINELLAS COUNTY HIGHWAY - ESF 3 PUBLIC WORKS
- VERIZON - ESF 12 ENERGY
- DAMAGE ASSESSMENT
- PROPERTY APPRAISER
- BUILDING DEPT
- PROGRESS ENERGY / TECO - ESF 12 ENERGY
- BUSINESS & INDUSTRY - ESF 10 (ECONOMIC DEVELOPMENT)
- EDO T - ESF 3 PUBLIC WORKS
- FLEET MANAGEMENT
Figure 13.4
Transition to Short Term Recovery Phase
Figure 13.5 Long-Term Recovery Coordination and Collaboration
Figure 13.6 Post-Disaster Redevelopment (Internal Operations)
C. Plan Implementation

1. Steering Committee

The Pinellas County Board of County Commissioners will oversee the redevelopment operations following a disaster. The County Administrator has the overall responsibility to implement the functions of the redevelopment procedures.

Following a disaster, the County Administrator may authorize activation of the Post-Disaster Redevelopment Steering Committee to review the strategies and implement actions in the PDRP as needed. The PDRP Steering Group shall meet as frequently as determined necessary by the Chairman of the committee.

The Pinellas County PDRP Steering Group is a standing task force that is established in order to provide a coordination mechanism to oversee recovery and redevelopment operations and procedures. It serves as an advisory committee to the Pinellas County Board of County Commissioners on those issues.

The mission of the Post-Disaster Redevelopment Steering Committee is to:

- Activation of Work Groups, as needed
- Establish uniform policies for effective coordination between and among different levels of government
- Implement strategies identified in the PDRP, as deemed appropriate, including emergency ordinances, procedures, public outreach, etc.
  - Recommend enactment, repeal or extension of moratoriums
  - Recommend enactment, repeal or extension of emergency ordinances and resolutions
- Recommend and coordinate redevelopment efforts to restore stability to the community
  - Channel disaster assistance to promote the community's economic redevelopment policy
- Help identify mitigation opportunities and resources
  - Recommend rezoning/land use changes in damaged areas, as appropriate
  - Review disputes arising from implementing build back policy
- Coordinate economic recovery with business community
- Coordinate tourism industry recovery
- Coordinate long-term recovery / address unmet needs of disaster survivors
2. Work Group Responsibilities
Each work group activated should follow their Action Plan and address their mission coordinating with stakeholders including municipalities, federal/state/regional partners, non-profit/volunteer agencies and the private sector. Coordination and communication through the PDRP Steering Committee is essential. A summary of the mission/duties of each work group is listed below.

Table 13.2 Work Group Mission/ Duties

<table>
<thead>
<tr>
<th>Work Group/ Task Force</th>
<th>Recovery Support Function</th>
<th>Mission/ Duties</th>
</tr>
</thead>
</table>
| 1. Land Use, Housing and Mitigation | Community Planning & Capacity Building | Community Planning  
  - Recommend enactment, repeal or extension of moratoriums, emergency ordinances, resolutions  
  - Recommend rezoning/land use changes in damaged areas  
  - Coordinate public participation in damaged areas (listening sessions, neighborhood redevelopment plans)  
  - Code enforcement/ Emergency Permitting Procedures  
  - Review Disputes arising from implementing build back policy  
  - Coordinate/ Resolve Contactor Licensing Issues  
  - Determine types of mitigation assistance/funding available and types most needed  
  - Coordinate hazard mitigation assistance available from federal/state government  
  - Secure funding for LMS projects |
| 2. Construction, Permitting and Historic Preservation |                                       |                                                      |
| 3. Disaster Housing Task Force | Housing                                  | Disaster Housing  
  - Recommend enactment of disaster housing ordinance(s) as appropriate  
  - Coordinate permitting of sites and set-up of Temporary Housing Units (THUs)  
  - Coordinate with hotel/motels and realtors to access vacant units for disaster housing  
  - Secure community sites as needed  
  - Work with PHP COAD and PROUD for wrap-around services |
<table>
<thead>
<tr>
<th>Work Group/Task Force</th>
<th>Recovery Support Function</th>
<th>Mission/ Duties</th>
</tr>
</thead>
</table>
| 4. Economic Restoration | Economic Development      | 1. Channel disaster assistance to promote the community’s redevelopment policy  
2. Coordinate economic recovery with the business community  
3. Tourism Recovery: Coordinate tourism recovery with hospitality industry.  
- Determine impacts on local economy and strategies to mitigate  
- Local coordination of federal/state recovery efforts (bridge loans, SBA loans)  
- Distribute accurate information to private sector community  
- Inform business community of disaster assistance available  
- Provide assistance to small businesses |
| 5. Infrastructure Restoration | Infrastructure |  
- Determine impact to the infrastructure and utility systems within the county  
- Address Debris Management; coordinate on a county-wide level  
- Develop strategy for immediate and long-term restoration incorporating the prioritization of emergency repairs and planned mitigation/enhancements  
- Identify /coordinate PA/FHW projects  
- Identify/ coordinate HMGP and other mitigation projects |
| 6. Environmental Restoration | Natural and Cultural Resources | **Determine impact to the natural environment and develop strategies to mitigate impacts**  
- Address debris and contamination issues  
- Develop strategy for long-term restoration and opportunities for acquisition  
- Address potential SLR impacts and adaptive strategies |
| 7. Health and Human Services | Health, Social and        | **Expedite recovery of health and social service providers and disaster survivors and advocate community’s needs for recovery.**  
- Assist in activating Disaster Recovery Centers  
- Work with PHP COAD and PROUD |
<table>
<thead>
<tr>
<th>Work Group/Task Force</th>
<th>Recovery Support Function</th>
<th>Mission/ Duties</th>
</tr>
</thead>
</table>
|                       |                           | • Work with providers through HHSCC  
|                       |                           | • Provide wrap-around services for Disaster Housing |
| 7. Financial Adm. (Financial Coordinator) | | Coordinate Disaster Assistance (application, expenditures, monitoring, contractual services)  
|                       |                           | • Determine types of assistance needed  
|                       |                           | • Secure federal disaster assistance/reimbursements  
|                       |                           | • Assist local coordination of federal/state financial recovery efforts  
|                       |                           | • Monitor/ Document expenditures |
| 8. Public Information (PIO/ Communications) | | Provide ongoing accurate information to the public, business community and stakeholders  
|                       |                           | • Provide Recovery Tracking Report to the BOCC and the public  
|                       |                           | • Coordinate with County to ensure transparency and public participation in recovery/redevelopment decisions.  
|                       |                           | • Coordinate with federal/state/regional/municipal partners (JIC/JFO) |
D. Monitoring, Evaluation and Enhancement

In order for the PDRP to remain a viable document, the plan shall be evaluated and updated in accordance with the following:

- Reviewed and updated, if necessary, annually;
- Tested, evaluated and enhanced at least every 5 years;
- Following a disaster event of other event where the plan was used to guide redevelopment operations.

The PDRP will be reviewed and updated in conjunction with the review and update of the Local Mitigation Strategy (LMS). The review will be coordinated by the Pinellas County Planning Division and the following tasks should be conducted:

- Note any membership or leadership changes
- Provide update and/or status report on the Action Plans and make changes as necessary
- Prepare a brief PDRP status report for the Board of County Commissioners

As the County updates the Comprehensive Plan and the Comprehensive Emergency Management Plan (CEMP), integrate relevant policies and elements from the PDRP, as appropriate.

E. Plan Training and Exercise Schedule

The Pinellas County Post-Disaster Redevelopment Plan involves the participation and coordination of County and municipal departments, numerous agencies and nongovernmental organizations, the private sector and other stakeholders. Because of the complexity of the plan and the myriad of stakeholders- most of whom are not familiar with disaster programs, policies and procedures- the plan should be exercised on a regular basis. This is the best way to familiarize those tasked with implementing the plan with their duties and responsibilities. The training or exercise may be a webinar or tabletop exercise with a focus on hypothetical scenarios.
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CHAPTER 14
PDRP TOOLKIT

In order to successfully implement the Pinellas County Post-Disaster Redevelopment Plan and to affect an efficient recovery from a major disaster, there are key plans, procedures, analyses and regulations which must be in place. Many of these “tools” were developed as part of the planning process, others have been identified (in the Action Plans) as necessary or needing revision/update.

These PDRP “Tools” will be shared digitally with both internal and external partners through the website (www.posdisasterplan.org) and continued coordination through working groups and existing committees (Disaster Advisory Committee; Local Mitigation Strategy Committee, etc.). These include, but are not limited to the following:

- Comprehensive Emergency Management Plan (CEMP) 2012
- Post-Disaster Redevelopment Plan and Action Plans 2012
- Evacuation Implementation Guide 2012
- Recovery Implementation Guide Under development
- Vulnerability Assessments/ Atlases (7) 2012
- Debris Management Plan(s) and Coordination Element Ongoing
- Disaster Housing Strategy Currently under revision
- Emergency Permitting Procedures Under Review
- Damage Assessment Procedures 2011
- Emergency Ordinances:
  - Activation of the PDRP Under development
  - Temporary Disaster Housing 2012
  - Debris Clearance on Private Roads for Public Safety Under development
  - Emergency Property Condemnation / Blight Abatement Under development
  - Temporary Building Moratorium Under development
  - Temporary Sign Ordinance Under development
  - Curfew/ Re-Entry
  - Restriction of the Sale of Alcohol
  - Price Gouging Prohibition
- Disaster Recovery Leadership Network (DRLN) Communications Plan 2011
- Recovery Management Center (RMC) SOP 2012
- University of Florida PDRP White Papers/ Legal Research 2012
  - Shore Avulsion and Moratorium
  - Other papers
In addition the website will provide links to emergency management, response and recovery organizations which provide training and preparedness information. Additional guidance from the federal and state partners pertaining to long-term recovery will be listed under reference documents and links.

Pinellas County will continue to work with state and federal partners as well as other local and regional entities to ensure that the county has the tools necessary to recover and build back safer and more resilient and sustainable.