



## The ARC CITY/ IN-HARMONY SYSTEM Highlights ©

The overall ARC City/ In-Harmony System design accomplishes the following:

### Overview

- The first major change in living patterns in 6,000 years
- The first truly self-sustainable, non-polluting city
- Ecologically safe on it's own Sustainable Footprint
- Zero-carbon emission

### Building

- Live, Work and Play at one location with Mega-structure design
- Inclement weather (cold & rain) no longer a factor self-contained city
- Spacious, modern lifestyle with all amenities available within 10 minute walk
- Residential space averages from 100 s.f. to 600 s.f. per person
- Common Areas have shopping, restaurants, night clubs and entertainment
- On-site hotel with 3, 4 & 5 star accommodations
- Meeting rooms available for many group activities
- Private party rooms available with varying genre and catered food/ beverage
- Rain Water Collection, purification and Storage for 6 months supply
- Community Laundry with water and energy saving capabilities
- Reduced water usage through grey water recycling and redistribution
- Building insulation and embedded design eliminate heat transfer and variations
- Natural building ventilation reducing energy use for air flow
- Air Purification System to disinfect germs and CO2 scrubber to enhance oxygen
- Geothermal Heat Pump system
- Beautiful, Energy Efficient Lighting throughout
- Infra-structure supply line requirements (plumbing, electrical, communication) are minimized due to concentrated nature of high density building

### Transportation

- Intra-City Vertical Transportation by high-speed elevators
- Intra-City Horizontal Transportation by foot
- Inter-Site Transportation by foot with stairways and tunnels to parks
- Inter-Site Transportation with underground tunnels to greenhouses and food production using trains
- Underground trams to move food into City and people out to food production areas.
- Underground freight subway trains to connect with other cities
- Point-to-Point Inter-City Transportation Elevated Mass transit of people by Commuter Trains to all other major destinations
- Elimination of car, trucks and roads. Only small paths and farm access roads will occur.

## **Energy**

- Collection of Renewable Energy from Solar, Wind & Geothermal when possible
- Installation of New Non-Carbon emitting Energy source (Liquid Fluoride Thorium Reactor)
- Energy Storage of heat & electrical for independent use 24x7
- Connection to other like-cities in a Supra- Grid for emergency energy sharing
- Energy Efficient environment using 15% of typical modern city

## **Food Production & Consumption**

- In-site Food Production reducing transportation energy by 98%
- Environmentally controlled Greenhouses for 365 day food production
- Permanent bed, organically grown food in greenhouses, field & orchard crops
- Fish and Algae food production in adjacent lakes
- Harvested Food transferred to City in re-useable containers
- Community Food Processing
- Community Food Storage
- Community Kitchens & Restaurants of great variety and cuisine
- Nutritious, Organically grown Food served in healthy meals

## **Waste Recycling**

- Multi-use waste segregation and collection system
- Close-loop nutrient recycling back into fields
- Natural waste processing by Dr. John Todd “living machines”
- Elimination of solid waste generation.
- Recycling materials from the City and collecting waste materials from outside

## **Healthy Living**

- Exercise, Sports and Recreational facilities, both inside the City and outside on the grounds.
- Schools available for K thru 12 plus college and research
- Child Care with emphasis on science, social interaction and nature studies
- Health Clinic and Medical Care only 5 minutes away from any part of the City
- Churches for all faiths will all have equal access to space
- City Administration to organize city operations

## **Safety & Security**

- Safety and Security guaranteed for all inhabitants inside and outs
- Surveillance and law enforcement throughout city and compound
- Security check point scans at entrances for weapons and germs
- Triple ring of canals for flood protection
- Site Perimeter Boundary Wall and exterior “buffer zone” for protection
- Building Designed to withstand 400-500 mph wind storms & 10.0 earthquakes
- Food, Water & Energy Storage for 4 months

## Economics/Industry

- Stable factory environment with steady, healthy easily accessible work force
- Large factory areas with access to receiving and shipping warehouse that are part of the subway freight train system connecting to other hub cities for completion of more advanced assemblies.
- Factories organized into Material Flow Systems for sub-assembly to assembly
- Economics tied to new system for slow, steady growth
- Energy Efficient factory equipment to utilize minimum energy consumption
- Demolition and recycling of collapsing cities
- Fabrication facilities- machine shop, woodworking, clothing mills, electronics assembly, health and medical supplies
- Specialized industries and trade with other cities