

The RAND Palestine Initiative



Aerial view of the Arc, RAND's proposal for a sweeping infrastructure corridor linking urban centers, within and between the West Bank and Gaza

HELPING A PALESTINIAN STATE SUCCEED

Creating a successful independent Palestinian state poses a wide range of political, economic, social, and environmental challenges. Since 2002, a multidisciplinary team of experts from the RAND Corporation has been working with Palestinians, Israelis, and the international community to develop an in-depth and comprehensive nation-building plan to address these challenges and facilitate the state's success (www.rand.org/palestine).

RAND's work is the first comprehensive, multi-sector analysis of evolving needs in the region, examining governance, security, economic development, health, education, environment/natural resources, infrastructure, and urban planning. Although RAND's analysis focuses particularly on strengthening a Palestinian state once it is established, many of RAND's recommendations could be implemented today.

A major part of RAND's project is a landmark, award-winning proposal, produced in partnership with Suisman Urban Design, for a Palestinian national transportation and infrastructure corridor called the Arc. The Arc proposes

a framework for connecting existing Palestinian urban centers, within and between the West Bank and Gaza, via inter-city rail, road, energy and telecommunications lines, and other infrastructure. The Arc also constitutes a parallel urban planning framework to accommodate, in economically and environmentally sustainable ways, the significant Palestinian population growth, including from immigration, that is likely in the coming decade and beyond.

The Arc envisions the West Bank and Gaza as an integrated region of connected cities. One key feature of the Arc is an interurban rail line linking the main cities within the West Bank, and the West Bank and Gaza - including a stop at the international airport - in a journey of just over 90 minutes. Each major city would have a rail station on this main line, located several miles from the historic urban center. The second key feature of the Arc is a series of transit boulevards linking these new stations to the historic urban centers, via an advanced form of bus rapid transit, creating a focus for new economic and residential development along the length of each boulevard.



AERIAL VIEW OF PROTOTYPICAL MUNICIPAL AREA

This aerial view shows the possible growth and development—infrastructure, neighborhoods, and open space—within a single prototypical municipal area. The image shows the transit boulevard (blue), starting from the historic center (upper left) and extending to the new station area (lower right). Also visible are historic Route 60 (along the top) and the new rail, water, energy, road, and park infrastructure along the line of the Arc.

Along each boulevard, new commercial and residential neighborhoods would be developed — largely by private-sector investment — to accommodate population growth. Housing and jobs would be created within walking distance of the transit system. New building design would incorporate sustainable systems using solar energy and recaptured water. Development along each boulevard would pump economic activity into the historic centers of Palestinian cities and assure their preservation and revitalization — an essential strategy for creating a much-needed tourism industry.

Although the core of the Arc is interurban rail, the Arc design provides for many types of infrastructure. Construction of the transportation line invites concurrent, cost efficient, parallel construction of electricity, natural gas, telecommunications, and water connections. A national park following the line of the Arc would provide needed recreation space within each city, and a path for hiking and biking between urban areas. A toll road parallel to the rail line would provide access for vehicles, particularly trucking, linking all urban and rural areas to air and seaports.

RAND estimates that the cost of constructing the core elements of the Arc — the rail and road infrastructure — would be about \$9.4 billion (in 2008 dollars). Assuming that this core would be built over five years, the project would directly employ 100,000 to 160,000 Palestinians per year over this period, and create thousands of jobs in the new businesses developed along the corridor linking the Arc rail stations to the main cities of Gaza and the West Bank.

The need for the Arc is urgent; the timing is right. Work could begin now, with planning and construction in phases. Building the Arc would create jobs today. When built, the Arc infrastructure would support broader economic development. The Arc framework helps Palestinian policymakers plan for population growth in environmentally sustainable ways. And the Arc concept provides a constructive vision for successful development, for Palestinians, Israelis, and the region.

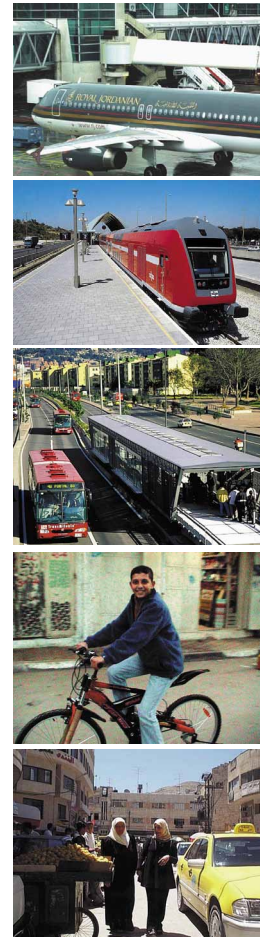
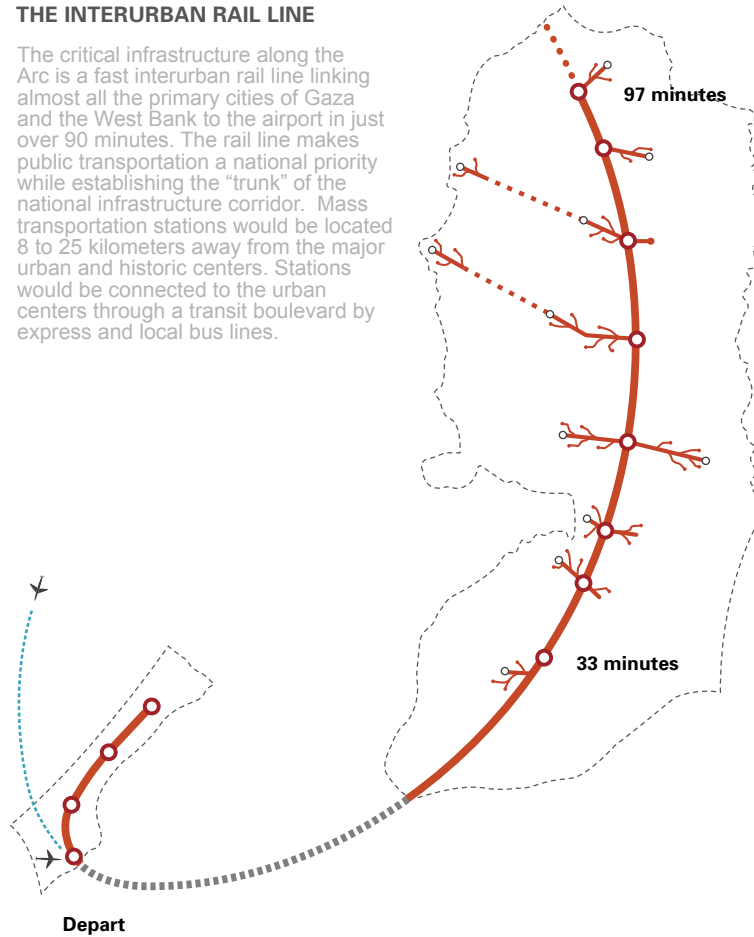
LINEAR URBAN GROWTH

The Arc is a “ladder” of sustainable cities—an integrated, publicly owned infrastructure corridor containing rail, road, energy, water, and telecommunications lines. This infrastructure will enable efficient movement of people and goods, essential prerequisites for national development and prosperity.



THE INTERURBAN RAIL LINE

The critical infrastructure along the Arc is a fast interurban rail line linking almost all the primary cities of Gaza and the West Bank to the airport in just over 90 minutes. The rail line makes public transportation a national priority while establishing the "trunk" of the national infrastructure corridor. Mass transportation stations would be located 8 to 25 kilometers away from the major urban and historic centers. Stations would be connected to the urban centers through a transit boulevard by express and local bus lines.



the Arc



To learn more about the RAND Palestine Initiative and to view a short video about the Arc please visit:

www.rand.org/palestine

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