

City of Arts & Innovation

City Council Memorandum

TO: HONORABLE MAYOR AND CITY COUNCIL DATE: FEBRUARY 25, 2020

FROM: CITY MANAGER'S OFFICE WARDS: ALL

**SUBJECT: PRESENTATION ON A SUSTAINABLY DESIGNED SELF-POWERED PUBLIC
TRANSPORTATION SYSTEM BY TIG/M PRESIDENT BRAD READ AND
REQUEST TO EXPLORE FUNDING OPTIONS FOR A FEASIBILITY STUDY**

ISSUE:

Receive a presentation and provide staff direction regarding a sustainably designed self-powered public transportation rail system opportunity within the Innovation District.

RECOMMENDATIONS:

That the City Council:

1. Receive a presentation from TIG/m President Brad Read on an innovative self-powered public transportation rail system;
2. Provide staff direction to explore financing options, evaluate project feasibility, and provide site selection assistance to TIG/m for the purpose of relocating their manufacturing and operation headquarters to the City of Riverside; and
3. Authorize the City Manager, or his designee, to apply for grants, seek state/federal funding, encourage private capital investment and evaluate City funding opportunities for the purpose of initiating a feasibility study to establish a world-class advanced-technology manufacturing facility and an operational public transportation rail system in the City of Riverside.

BACKGROUND:

On September 3, 2019, Mayor Bailey received the attached letter from TIG/m President Brad Read expressing his interest in the City of Riverside. Mr. Read wrote "I have learned that Riverside is on the right path towards economic prosperity and environmental stewardship. We are interested in relocating our facility to Riverside for a number of important reasons: proximity to the California Air Resources Board Southern California Headquarters and UCR/CE-CERT – whose leadership in air quality and advanced transportation are important to our business; availability to cutting edge research and local talent through Riverside's four universities and college, as well as others in the region; easy access to rail, highway and air transportation and

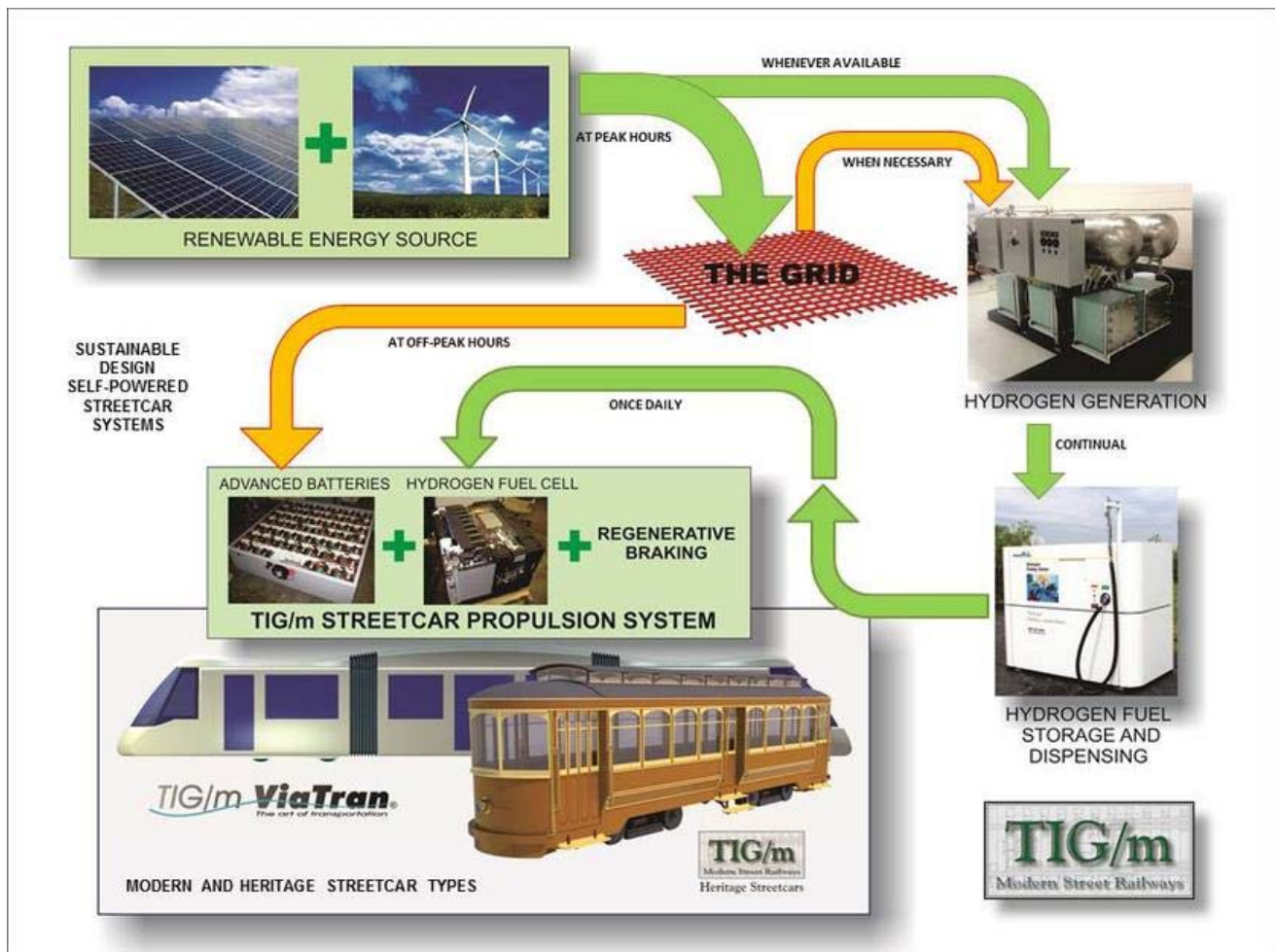
central location within Southern California; existing and potential partnerships with innumerable local agencies, businesses, and Riverside Public Utilities; and, business friendliness of the City and its City and State representatives.” Mr. Read explained that TIG/m “need[s] to expand [their] manufacturing capacity” and expressed the need for:

1. A manufacturing facility and associated offices of a minimum of 60,000 square feet with the ability to expand. This will allow TIG/m to produce approximately 30 streetcars per year and employ a staff of up to 150 skilled technicians.
2. Be connected to a test track.
3. Be associated with an active streetcar system and “Depot” (operation, maintenance, and storage facility).

TIG/m Overview

TIG/m designs, manufactures, and operates revolutionary self-powered public transportation rail systems commonly known as "streetcars", "trams", or "trolleys". TIG/m systems require no wayside power infrastructure thereby dramatically reducing the visual, technical, and economic impacts to a community. The vehicles are self-powered by a battery-dominant propulsion system and can operate for 20 hours on a single charge.

Sustainable design practices are central to TIG/m as they have achieved the world's first zero-carbon public transportation system. The graphic below illustrates their model for Sustainably Designed Self-Powered Streetcar System:



On December 30, 2019, TIG/m opened a 2-kilometer streetcar network in the Msheireb District of Downtown Doha, Qatar, which is improving connectivity between key district locations as well as with Doha's three metro lines at Central Msheireb metro station. Other locations where TIG/m has built systems include the United Arab Emirates, Mexico, and Aruba. Early prototypes of TIG/m technology can be seen at The Grove in Los Angeles, California and The Americana at Brand in Glendale, California.

A more detailed overview will be provided in a presentation by TIG/m President Brad Read.

DISCUSSION:

The TIG/m public transportation rail system would operate (initially) within the Innovation District and is precisely the type of "clean, green tech" business operation desired in the Innovation District and the City of Riverside. While a location for TIG/m has not been determined nor has any public transportation route been selected, staff believes that TIG/m's facility and Innovation District alignment would serve as a catalyst for significant, future Innovation District investment. Staff believes that TIG/m's disruptive technology will fundamentally change the streetcar industry and the public's acceptance of such. In partnership with TIG/m, Riverside has the opportunity to be the first city in the nation to build a zero-emission public transportation system at a fraction of the cost of current, other streetcar projects across the country. It is anticipated that a feasibility study would cost approximately \$450,000.

FISCAL IMPACT:

There is no fiscal impact associated with receiving this presentation and/or adoption of the recommendations provided herein. If City funding sources are identified for conducting a feasibility study, staff will return to City Council for appropriate approvals to utilize city funds.

Prepared by:	Rafael Guzman, Assistant City Manager
Certified as to	
availability of funds:	Edward Enriquez, Chief Financial Officer/Treasurer
Approved by:	Al Zelinka, City Manager
Approved as to form:	Gary G. Guess, City Attorney

Attachments:

1. Letter from TIG/m President Brad Read dated September 19, 2019
2. Qatar Article
3. Presentation