



## The Case for Rapid City

In our world today many things impact our local economies and how we conduct commerce. These things shape and influence our choices, habits, and preferences. In spite of our globalized economies, many civic authorities are starting to address how to provide sustainable and living conditions for their constituents.

Here in Rapid City, we are facing the crossroads of history. With the national economy in a recession and tourism, ranching, and military as our only real major industries since the 1940's, we need to be assessing how we can do things better not only to sustain our community but to grow our community. If one of these industries leave or fail within the next 20 years, how prepared we are to fill that void will define the next economic era in Rapid City. I would like to suggest that a streetcar trolley system could prove vital as stimuli in our local economy in the coming decades.

Streetcars provide highly attractive mass transit to the general public while maintaining function by easing accessibility for areas where civic leaders encourage more pedestrian traffic. A streetcar in Rapid City would differ from the trolleys that are currently in operation in a couple of differing ways. First, the trolleys we currently operate are not really trolleys but busses that are meant to look like nostalgic streetcar trolleys. Streetcar trolleys are on standard gage tracks and can be self-propelled, propelled using cables within tracks or by an over head electric grid. Streetcars also can often share tracks with other types of tracked vehicles (LTR Vehicles, Freight Trains) and can be operated year round.

Portland, Oregon is a great example of a community coming together to support a streetcar system to further growth in their community. By the early 1990's Portland's economy was hurting and plans to develop the city towards a transit based economy had started to take form. Planning and design started in 1997 for a 4.8-mile modern streetcar system going from Portland State University, through the "Pearl District," to the Northwest District and back to Portland State in a counter-clockwise loop on single track. This plan became reality in July 2001 when the streetcar service was finally initiated.

The initial project cost in Portland was \$57 million including the cars and maintenance facility. This system connects urban entertainment venues, shopping, lodging, residential, and education centers within the city creating a more vibrant pedestrian oriented city. By 2005, over \$2.3 billion was invested within two blocks of this streetcar line producing 7,248 housing units and 4.6 million square feet of office and commercial space in over one hundred projects. Portland's experience with Transit Oriented Development addressed three things for the community that was crucial to the cities renaissance: Accessibility, Population Density, and Zoning.

In terms of what Portland did for accessibility was this: It made walking convenient and less restricting in the core of the city thus reducing the need for personal transportation and busses in

the inner core. Without the need for personal transportation, more people could enjoy the city's core without increasing road traffic and parking congestion, giving rise to increased population density.

People want convenience, so with the advent of the Portland streetcar more people migrated into the city increasing its density but also bringing financial capital, increased revenue opportunities, and the need for increased emergency personnel and civic administrators. This also has increased tourism and city finances so they could focus on better infrastructure for the overall city.

Finally the streetcar reshaped how zoning was applied to projects in the vicinity. Zoning directly impacted the development of the area into a mixed community where well paying jobs were accessible without the need of personal transportation. This increased pedestrian traffic and allowed for higher densities for residents and further job opportunities.

Rapid City is not that much different in terms of the situation that Portland was facing in the early 90's. What needs to be done to prepare our city is to improve infrastructure but yet we lack the revenue to do so. This lack of revenue is a direct result of how we've addressed zoning within the core city over the past 70 years.

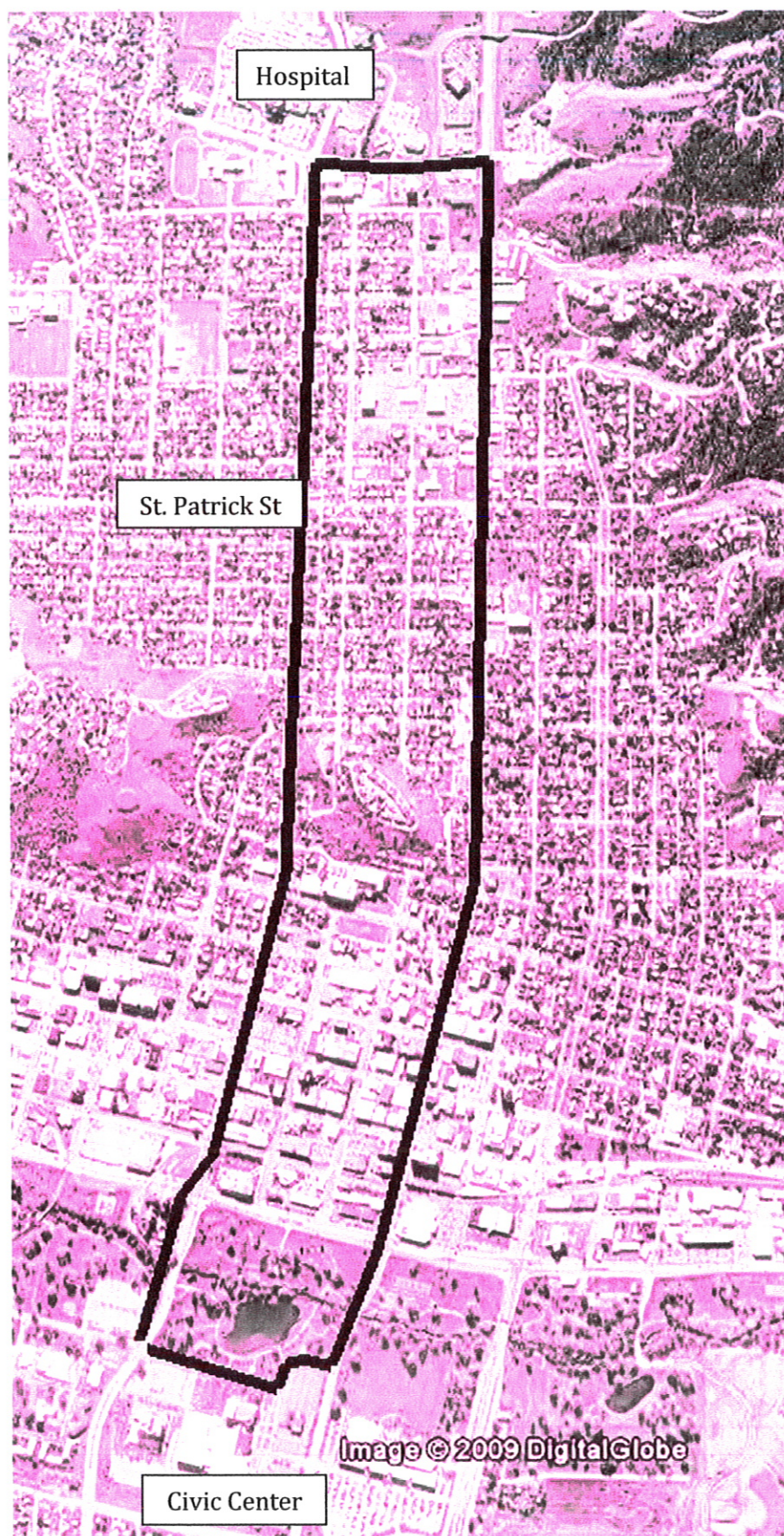
When urban areas grow to a size where traditional zoning becomes so restrictive that the civic authorities cannot properly maintain their infrastructure, new tactics and policies need to be taken into consideration. This current fiscal squeeze has its beginnings after WWII when we see suburban sprawl come to Rapid City as well as the establishment of the Ellsworth Air Force Base. These two events happened at a time when Rapid City was in a transition of economic focus and at a point that was premature for Rapid City to cope with. The mining companies were failing, Rail lines were still bringing passengers to Rapid City, Mt Rushmore began attracting more travelers to the Black Hills, and the Dust Bowl effectively ended any mass attempt for traditional farming east of the Missouri River thus attracting the attention of ranchers and the ranching industry.

What needs to happen and what has been happening more recently has been a refocusing on the historic city center and the beginnings of an urban revival in Rapid City. Much like Portland, Rapid City would greatly benefit from a streetcar system. The street car would be a major step forward in growing the scope of that revival while meeting critical objectives that we are currently considering.

*STREETCAR LOCATION*

- First, the streetcar will provide access from the south and the lower north parts of Rapid City; connecting the civic center to downtown, downtown to Rapid City Regional and back to downtown and Memorial Park. This would free up existing transit busses for improved coverage and frequency in area neighborhoods. Creating a 4.4 mile loop and defining a livable downtown district.
- The system would be oriented running on a counter-clockwise loop following Mt. Rushmore Rd. south, Cathedral Dr. east, north along 5<sup>th</sup> St., and west across Memorial Park/New York St.
- Mt Rushmore Rd from Omaha to Cathedral Dr would be converted to three lanes of one way traffic with room for a bike lane and paralleled parking along the west side of the street.
- 5<sup>th</sup> St. from Cathedral Dr to Omaha would also be converted to three lanes of one way traffic with room for a bike lane and paralleled parking along the west side of the street. The addition of the streetcar would require the city to address the grade of the street just north of the cathedral and the intersection of St. Patrick St. and 5<sup>th</sup> St.
- Cathedral Dr. would remain as a two-way with streetcar access on the north side of the street with a station/median between the streetcar and street traffic. This may require the purchase of land from existing parking lots.



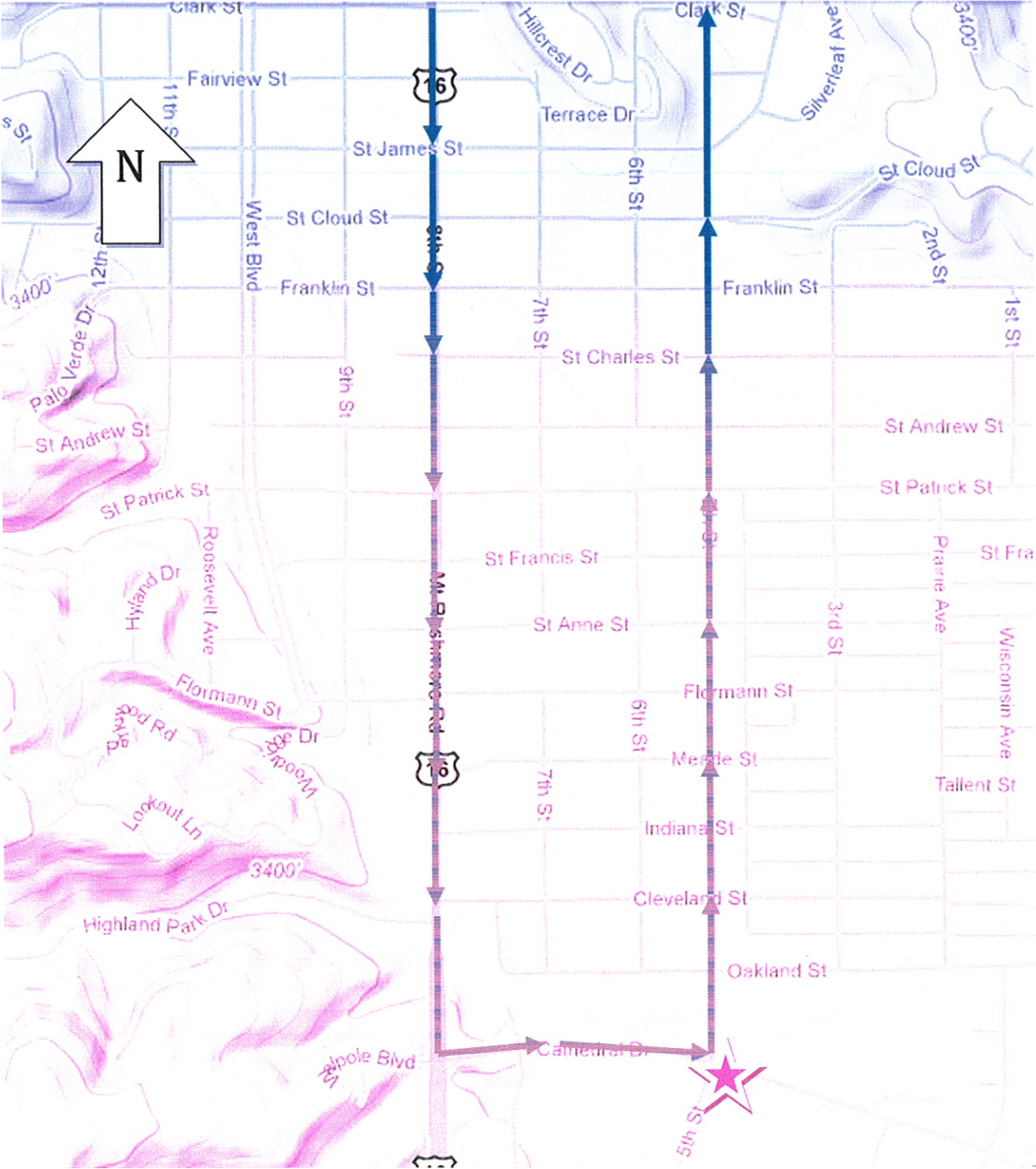


Loop Proposed Stops

[Stars indicate potential transit hubs between city busses and streetcars]

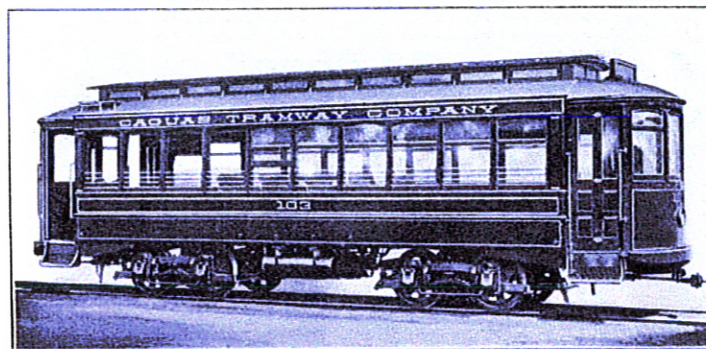






## STREETCAR INFRASTRUCTURE

➤ The system would consist of seven replica trolleys which offer air conditioning and heat for cold weather comfort, seating 35-45 passengers, and have a front entry and a rear exit/handicapped lift.



TEAK WOOD CAR OF BRILL SEMI-CONVERTIBLE TYPE. MOUNTED ON BRILL NO. 27-G1 TRUCKS.



➤ System vehicles would be internally propelled by CNG/Battery Hybrid energy thus keeping emissions low while providing enough energy for HVAC systems, lighting, and operating controls.

➤ Streetcar Lanes would consist of standard gage tracks flush to the surrounding pavement imbedded with 4"x8" brick red pavers.





➤ Each stop with will have shelter for inclement weather to include benches, warmers, and an automated led marquee board indicating real time next car estimated arrival. Possibly built into decorative analog clocks on posts at every stop



➤ The maintenance facility or "car barn" would be on the space currently occupied the Hubbard Feed's grain elevator and would be built with future expansion in mind to add possible light rail to the transit system. This facility would house the trolleys, snow removal vehicles, and feature work pits under the cars for better maintenance access as well as hoists.



*STREETCAR STARTUP FINANCING*

Based off of the construction of Portland's streetcar system the projected budget totals \$54-\$57 million. The primary funding would be from the sale of engraved bricks along the 4.4 mile stretch of track. The promotion would target not only locals of Rapid City but those throughout the Black Hills and tourists who desire to permanently be part of the City of Presidents. With a 70% return per brick sold at \$100 minimum and meeting the goal of 50% of bricks engraved (425,000 of 850,000 bricks) the revenue from this one source of funding would total \$29.7 million. Other sources for private fundraising would be naming rights to cars and facilities, memorial benches, bonds, donations, and fundraising events. Public funding from the City, County, State, or Federal Governments may also be considered as prudent as the project allows.

In conclusion, Rapid City was founded with the foresight and vision of pioneers that sought to build a vibrant community that respected the natural and cultural beauty of the Black Hills and its native peoples, willing to share their services, goods, and hospitality to visitors and neighbors alike. They envisioned a community that could produce countless opportunities for their children to grow and achieve according to their child's own effort and successes. Bringing back the nostalgia of the streetcar to Rapid City may prove to be the stimuli needed to move Rapid City forward in redeveloping for the twenty-first century; Providing well paying and sustainable jobs, personal incomes, and city revenues that impact the quality of life not just for Rapid City but the surrounding territory and population.