



Arctic Institute of North America Photo No. S64P600

Northwest Embayment, Waxell Ridge, Chugach Mountains, Alaska

One of several massive landslides seen in September 1964 by the Arctic Institute of North America and American Geographical Society aerial reconnaissance group, working under a National Science Foundation grant. This tongue of debris, presumably caused by the earthquake of the previous March, is roughly 3 x 6 km. in size and appears to have broken off the face to the lower left of the arete where the face is over 1000 m. high. A light dusting of recent snow obscures the surface of the debris which could be up to 3 m. in thickness. The Bering Glacier lies behind (south) of Waxell Ridge.

Commentary

COMMENTS ON THE IMPACT OF THE GOOD FRIDAY EARTHQUAKE ON THE ALASKAN ECONOMY

George W. Rogers*

AT 5:30 P.M. on 27 March 1964 over 52,000 square miles of southcentral Alaska were severely shaken by one of the most violent earthquakes recorded (between 8.4 and 8.7 on the Richter scale). Massive land movements altered elevations and landscapes significantly and generated sea waves (tsunamis) of devastating force all along the Gulf of Alaska. The town of Valdez was wiped out and Seward's port devastated; much of Kodiak slumped below high tide and many smaller towns suffered varying degrees of damage. The main business district and the most exclusive residential area in Anchorage literally had the ground pulled out from under them and the railroad and highways twisted themselves into ruin.

Against this catastrophic background it was natural to assume that the economy must have been crippled and the new State's struggle to achieve economic and social progress dealt a staggering blow. The disaster area contained an estimated 60 per cent of the total Alaskan population receiving over 55 per cent of the State's total income. Although the loss of life was relatively small, the initial rough estimates of between one-half to three-quarters of a billion dollars property damage represented a calamity which, it could be assumed, would have serious effects upon the Alaskan economy in terms of its ability to sustain a regular flow of income and employment for its citizens. In addition, the earthquake struck at a time when the 1964 Legislature was arriving at agreement upon the most critical budget since statehood.

Despite these initial forebodings of economic disaster, by the end of the calendar year Governor William Egan was able to report that not only was the State government solvent, but the general business climate had improved and most economic indicators plotted a continued upward trend of economic well-being. Much of the credit for this unexpected and relatively "happy ending" must be given to the Alaskans, the federal government and private institutions for their response to the disaster. Existing agencies were in action almost immediately during the emergency period. On 2 April 1964 President

* Research Professor of Economics, University of Alaska.

Johnson established the Federal Reconstruction and Development Planning Commission for Alaska with Senator Clinton Anderson as Chairman and membership representing his cabinet, to coordinate the planning and implementation of reconstruction following the emergency period. When the Commission's major responsibilities had been discharged, it was replaced on 2 October by the Federal Development Planning Committee for Alaska to continue the coordination of the longer-run development planning looking "beyond the immediate catastrophe toward providing a firm base for rebuilding an even better Alaska."

The economic impact of the disaster was different from what had been expected, because of the form and nature of the property damage and the unusual character of contemporary Alaskan economy. The final official estimates of property damage were reduced to \$311 million (not including personal property loss), more than three-quarters of which was in the public sector of the economy. Most of the public property loss was federally-owned or controlled, or is being restored in whole or large part by federal funds. Within the private sector the burden of reconstruction was eased by generous federal aid to private individuals and groups in the form of loans on favourable terms, forgiveness or adjustments of outstanding mortgages and other obligations, tax adjustments, etc. Thus the cost to Alaskans of rebuilding and recovery was considerably lower than the total damage estimates would suggest, and did not require large reallocation of local economic resources to accomplish. The job was undertaken at a relatively rapid rate and without any great drop in local expenditures for current consumption or private building.

Since the 1940's more than half the employment of and personal income received by Alaskans has been from wage and salary employment directly in civilian and military government agencies. This does not include all the employment in so-called "private industries" which exist solely or primarily to serve government programs. Manufacturing and natural resource extractive activities consequently play an abnormally low role in the total economy. In 1962, for example, only 8.5 per cent of total employment came from these activities in Alaska as compared with 30.4 per cent of total employment for the United States as a whole. Furthermore, timber, petroleum and other mineral resources and industries were unaffected by the disaster. Only a portion of the fisheries industry was directly affected and it was able to recover in time to participate in the large 1964 salmon runs and maintain the king crab take.

For these reasons, there was no problem of having to restore industrial plants before the Alaskan economy could function again, as would have been the case had it been more mature and balanced. Instead, as the economy had been based primarily upon the continuing import of funds from outside the State via the federal government, it shifted back into operation as soon as reconstruction funds were made available.

Many individual Alaskans and some communities suffered severe economic hardship, but on the whole there appears to have been an overall

increase in employment and economic activity. Representative was the experience of the Anchorage labour market. Construction employment increased 55.5 per cent in April over March 1964, a level 72 per cent above the corresponding month in 1963. Following the emergency period construction employment continued at higher levels and by November 1964 was recorded at 81 per cent above November 1963 as reconstruction got into full swing. Civilian government employment rose significantly, if less spectacularly. Trades, services, communications, and other dependent industries initially fell below their corresponding 1963 levels due to destruction of business establishments and transportation facilities, but by July and thereafter had risen above the corresponding 1963 levels as "business as usual" was once more possible.

On a relatively small scale, therefore, the economic impact of the disaster and its aftermaths during the year 1964 had been comparable to the sort of "shot in the arm" from successive replacements of defence facilities that has kept the Alaskan economy alive for the past two decades. Intelligent planning and scheduling of the reconstruction appears to assure the spreading of this beneficial effect over two or more years.

At the very most, however, this will only be a short-run effect. The recent past has demonstrated that economic activity engendered by such federal spending is not self-sustaining beyond the specific program or project for which the expenditure is made. In Alaska construction generates no pump-priming effects as it does elsewhere (all equipment and most materials must be imported) and any decrease in its activity is immediately translated into the social and economic costs associated with unemployment. For this reason, most Alaskans recognize that the defence-construction economy must be supplemented and increasingly replaced by an expanding natural resources economy.

Of greater importance than the short-run effects, therefore, is the possible impact of the 1964 Good Friday disaster upon the long-run process of Alaska's economic development. This is of course more difficult to determine.

When the memory of the terror was fresher, it was thought that popular awareness of the natural hazards represented by earthquakes and seismic waves could have adverse effects upon future plans to live and invest in Alaska. It also appeared that the destruction of private property could increase mobility of Alaska's population through the release of the individual from the ties of fixed equity in Alaska. But after the passage of less than a year, most of the damaged communities were substantially restored to their pre-disaster condition with only a few concessions to knowledge of the hazard — the relocation of the town of Valdez and portions of other coastal communities and shore-based facilities to safer ground and attempts to provide soil stabilization in the main slide area of the City of Anchorage. There was no evidence of changes in pre-earthquake investment and development decisions and plans, nor any major exodus of population. Construction of facilities for further development of the Cook Inlet and Kenai

Peninsula petroleum field, for example, continued on schedule.

It has been speculated that progress toward statehood in fact as well as in name might be retarded by the disaster. Statehood was sought originally as a means of fostering the transition of the Alaskan economy from a federal government orientation to a self-sustaining locally oriented economy. On the eve of the projected full fiscal independence from direct federal support of purely State government functions, Alaska has been thrust back into a further period of continued direct federal subsidy of its government. In addition to the relief and reconstruction funds, the Alaska Omnibus Act was amended 27 May 1964 to provide for continuation of transitional grants to Alaska for State functions until 30 June 1966 and programs of interim services and facilities by federal agencies were extended for a similar period. The Federal Development Planning Committees for Alaska established 2 October 1964 have important planning and policy functions which are to be shared with State agencies. If Alaskans have overstated their real need of relief and if they shirk their responsibilities of leadership and sharing of the costs and efforts involved, these continuing programs will merely become mechanisms by which Alaska will revert to territorialism in disguised form.

However, considering all these factors, it appears that, despite the frightening physical impact of the actual event, the 1964 Good Friday earthquake has had little lasting effect upon the Alaskan economy.