

AMMAN, JORDAN

TOAID A-3

UNCLASSIFIED

1 8

24p

PROJECT EVALUATION SUMMARY
(Submit to TO/PAV after each project evaluation)

1. Mission or AID/W Office Name USAID/Jordan			2. Project Number 278-0187	
3. Project Title Amman/Ras Wn Naqeb Highway (Loan AID 278-012)				
4. Key project dates (fiscal years)			5. Total U.S. funding-life of project	
a. Project Agreement Signed	b. Final Obligation	c. Final input delivered	FY 1974	
FY 1974	FY 1974	1979	\$ 10,000,000	
6. Evaluation number as listed in Eval. Schedule	7. Period covered by this evaluation		8. Date of this Evaluation Review	
One	From: June 1975 To: Dec. 1977		Jan. 5, 1978	
9. Action Decisions Reached at Evaluation Review, including items needing further study.			10. Officer or Unit responsible for follow-up	
a. Revise Log Frame			a. USAID	
b. Revise Financial Plan			b. USAID	
c. Accident data for Log Frame			c. USAID	
			11. Date action to be completed	
			a. Attached	
			b. Submitted*	
			c. Nov. 1978	
			* Form 750-8, PFIP, sent to SER/FA/CAD 12/19/77.	

12. Signatures:

Project Officer		Mission Director	
Signature	<i>Joseph S. Chimento</i>	Signature	<i>Christopher H. Russell</i>
Typed Name	Joseph S. Chimento	Typed Name	Christopher H. Russell
Date	December 31, 1977	Date	December 31, 1977

Clearances: McMahon Davis Warrell Herder
 (Project) WColes
 (Committee)

13. Summary

The project consists of the construction of 74 km of a new, two-lane highway, generally contiguous to the major north-south Desert Highway in southern Jordan. Funding has been provided through a loan authorized under FAA section 9.03, "Middle East Special Requirements Fund".

A review of the Project Paper has identified deficiencies in both the Logical Framework and the baseline data. A revised Logical Framework has been completed and the data have been updated to reflect the results of a GOJ Import-Export study which was in preparation when the AID loan was authorized. This evaluation is based upon the revised Logical Framework and updated data.

Prior to loan authorization in July 1975, the GOJ had advertised for and had received bids from a number of Construction Contractors. AID personnel examined the GOJ award procedures and subsequently approved a Construction Contract with a Jordanian Contractor, the Shahin Engineering and Contracting Company, on 12 July 1975 (State 164668). The Contract was signed on 21 July 1975.

A Construction Supervision Contract which was required as one of the Loan's Conditions Precedent was approved by AID via Implementation Letter No. 3 dated January 24, 1976. (Dar-Al Mandasah Engineering Company)

Because of the rapidity with which this project was designed and implemented, we have continually attempted to identify weaknesses and take the actions required to enhance achievement of project purpose. Toward that end, the revised Logical Framework has been based on the GOJ's Five Year Plan Sectoral Goal, rather on the countrwide Development Goal. By so doing, we believe that the Purpose and Goal are clarified and stated in a more practical manner, and that achievement of Project Purpose will result in a more meaningful contribution to the Sector Goal.

During the first year of this project's implementation, site visits were infrequent due to the small Mission staff available for project monitoring. Even though early identification of problems or potential problems was difficult under these circumstances, USAID engineers noted deficiencies in the contractor's performance and progress. Their actions led to some basic improvements early in the contract period. With the expansion of our full-time staff to the present total, project sites are visited regularly and frequently, and incipient problems are identified early. With the more clearly defined Project Purpose and the current ability to monitor project activities, we believe there is a high probability of achieving project Purpose, even though project completion will be delayed for approximately nine to twelve months.

The continuous rapport and enlightened self-interest kind of dialogue between all interested parties has helped to resolve such problems as:

a) Excavation of the GOJ-funded weigh station had been started at a location which was totally unsuited for weighing activities. The selected site was located no more than 1.5 meters from the edge of an arterial highway; was dangerously close to a two-lane bridge and only some 40 meters from the main entrance to the Headquarters of the MPW Highway Department.

The USAID Engineer immediately advised the GOJ of the inefficient and potentially dangerous operating conditions which would result from the traffic tie-ups caused by trucks pulling off and parking along and on the main road to await their turn on the scale. As a result, the GOJ selected, and AID has approved, a more suitable and safer site for the weigh station.

b) In another instance, the Construction Contractor had applied a sub-standard tack coat to 3 km of the road's base course. The Consulting Engineer had rejected the work and had advised the Construction Contractor of his decision. The Construction Contractor disagreed with the Consulting Engineer and it appeared that a dispute was in the making. The USAID Engineer inspected the work and agreed with the Consulting Engineer. He so notified the Construction Contractor and further advised him that AID would not accept that section of the road for reimbursement. At that point the Construction Contractor agreed to re-do the rejected section of road.

The above are but two examples of the importance of having available competent USAID project monitors.

During the early months of project implementation congestion at the port of Aqaba delayed receipt of the Construction Contractor's material and equipment. These delays, coupled with less-than-adequate contractor performance, have added approximately one year to construction completion date. With the elimination of congestion at the port, shortages have been overcome and current progress is reasonable and satisfactory.

There are indications that the Contractor's previous performance may have been related to an apparent over extension of his resources. USAID, the GOJ and the Consulting Engineer maintain continuous surveillance over the Contractors' activities and keep abreast of conditions in the construction industry in general. Should we find the Contractor's capabilities deteriorating, we would alert the Ministry and the Consulting Engineer and advise them to prevent the contractor from removing equipment and materials from the AID-Funded project. We would then take whatever action necessary to complete the project as planned.

The GOJ will negotiate an extension to the Supervisory Contract which expires in March 1978, to allow for continuous supervision of the Construction Contract which is now nine to twelve months behind schedule. USAID's approval of the supervisory contract extension as well as any time extensions or cost increases of the construction contract would be required.

14. Evaluation Methodology

The PP did not include an Evaluation Plan. This is a regular evaluation and was included in a CPI network submitted for this project in Nov. 1976.

The data were collected from: The Consulting Engineer's Monthly reports, reports of site visits by USAID personnel, meetings with Construction Contractor personnel, consultations with PP personnel, examination of GOJ statistical data and consultation with the Embassy Economic Advisor.

15. Documents to be Revised

Logical Framework and financial plan.

16. External Factors

The over-riding major change in project setting which has impacted on the project was the extreme congestion and increased import tonnage at Aqaba Port during 1976. The principal effects are:

- (a) Increased demurrage charges which were passed on to consumers, and which contributed to an inflationary spiral.
- (b) Increased tonnages created a greater demand for the already short-supply labor force. In turn, wages began to climb.
- (c) More trucks were required to move the increased tonnage over the deteriorating existing road thereby creating a greater and earlier need for the new road. Benefits at project completion will likely be greater than originally anticipated.
- (d) The congestion led to delays in the supply of materials and equipment required for construction of the road. This delay will cause the project completion date to be 9-12 months later than planned.

During 1977, the efficiency of port operations has improved to the point where ship turn-around time is now in accordance with international norms. We do not anticipate a return to the conditions which created the congestion in the past.

We believe the assumptions are valid inasmuch as we have noted a rise in import and export tonnages; the GOJ has continued to provide the Transportation Sector with the level of support originally planned; earnings in the Transportation Sector have increased at better than 8% over 1975; and, during August 1977, Jordan, Syria and Iraq commenced negotiations which will lead to an agreement regarding axle load limitations for trucks bound to and from the port of Aqaba.

17. The Sector Goals to which this Project will Contribute are:

(a) to expand the network of international, primary and secondary roads with emphasis on these serving development projects and trade and transit activities; and (b) to keep the road network in the Kingdom in good repair and ensure public safety through continual maintenance and improvement.

A Roads Master plan, is currently being developed by Wilbur Smith and Associates under an AID-Financed Contract. The Plan will be completed early in CY 1978. AID will also provide training assistance in road maintenance, scheduling, planning, equipment operation and maintenance, inspection procedures, administration and highway safety design and operations. The GOJ has remained on-target towards its plan to invest some 34.7 million JD in Road Construction and Improvements between 1976 and 1980. The FY 1976 investment totalled 6.5 million JD while the national FY 1977 investment is estimated at 11.2 million JD.

Other projects contributing to this Sector Goal include:

- AID: Yarmouk Dead Sea Road widening and re-surfacing.
- AID: Roads Improvement Project, Patch, Pave and Upgrade 174 KM of existing Roads:
- AID: Village Development Project, construct approximately 53 KM of Farm to Market roads. An additional 40 KM are being funded by other donors.
- Republic of China: Safi-Aqaba Road, 187 KM.
- Iraq: Azraq/Iraqi Border, 230 KM, Azraq/El Jafer, Design Study, 200 KM.

Abu-Dhabi: Azraq/Saudi Border, 56 KM, completed

Arab Fund for

Economic Development: Overpasses on the Amman/Zarqa Road

KFW and World Bank: Farm to Market Roads, 30 KM

GOJ Funding: Approximately 13 projects to be undertaken by the Ministry of Public Works

On the basis of the progress to date, we believe the AID-funded project will contribute to the achievement of the Sector Goal.

18. The Purpose of this project is,

To reduce the Jordanian social and economic costs of road transportation between the port city of Aqaba and the population centers in Northern Jordan; and increase revenue for the transportation sector through an increase in the tonnage carried to and from other Middle Eastern countries.* End of Project Status (EOPS) conditions expected by the end of CY 1980 are:

- a. Vehicular transit time will be reduced;
- b. Vehicle operating and maintenance costs will be reduced;
- c. Road Safety conditions will be improved;
- d. Transport Sector contribution to the GDP will increase.

At the current, improved rate-of-progress, the road will be completed and in use by January-February, 1979. While we expect that individual segments could be opened to traffic prior to that time, it would be premature to anticipate significant measurable progress towards the expected EOP's conditions until mid CY 1980.

The GOJ has continued in its efforts to improve road conditions and maintenance on the desert highway. They are presently repaving 105 KMs of the Desert Highway north from Ma'an and are building two RR overpasses near El Hasa. At KFW request, a technical assistance package which includes training in road maintenance, equipment operation and maintenance inspection procedures, planning, scheduling and administration is being prepared by AID. On completion of the planned technical assistance, we anticipate that the KFW's road maintenance practices will show marked improvement.

As noted above, the GOJ, Iraq and Syria are negotiating an agreement regarding axle loadings. When an agreement is reached, we expect

improvement in weight-limitation and we plan to observe the weighing station in operation after installation is completed in mid-1978.

While we recognize that the existing level of driver/traffic safety enforcement is not up to U.S. standards, none-the-less, we are optimistic because:

(a) We believe that the recommendations that will flow from the data being collected under the on-going, AID-funded, 'Master Roads Plan Training Project', will further alert the GOJ to the high cost in lives and money attributable to poor road design, improper maintenance and ineffective driver/traffic safety practices;

(b) The GOJ has requested, and AID has approved funding for an advisor in driver/traffic safety education from the U.S. Dept. of Transportation. The advisor is expected to arrive in Jordan in late February 1978; and

(c) The Royal Automobile Club of Jordan has completed a Driver Education Facility in Amman. Classes are to start in late January 1978.

19. The Overall Project Output is

"The acceptance, by AID, of a new, safety-engineered 74 km, two-lane highway complete with appropriate striping, shoulders, climbing lanes and an operating weigh station." The performance targets are now being achieved as follows:

a. There have been no untoward problems in timely availability of required funds. The total cost of the project should be within 5% of the original estimates, well within reason.

b. Although the original Contractor's schedule of 900 calendar days was not achieved due to the external and internal factors previously discussed, the revised contract schedule is now meaningful and realistic.

c. Although there were minor delays in the assignment of IPW supervisory staff to the Consulting Engineer in the early months of contractor mobilization, construction supervision is now adequate. USAID continually consults with IPW officials regarding the importance of enforcing stringent inspection and supervision standards in this and all other IPW activities.

d. As noted, materials and equipment were not always available when needed due to the extreme port congestion which delayed receipt of required construction materials and the contractor's asphalt plant. The plant has now been assembled and placed in operation and we have noted accelerating progress in paving operations.

e. An expanded and competent Direct Hire Staff results in more frequent and regular project monitoring and continuing dialogue between USAID, GOJ, the Consultant Engineer and the Construction Contractor Staff.

Except for the previously mentioned delays, project inputs have been provided when needed. We do not anticipate any problems regarding the GOJ installation of the Weigh Station and, to our knowledge, the GOJ will operate and maintain the Weigh Station in accordance with the covenant included in the Loan Agreement.

20. Unplanned Effects

The road segment will probably be subjected to a greater traffic flow than originally planned. This could result in increased earnings for a broader range of Jordanian beneficiaries (gas station, drive-in-restaurants, novelty shops, etc.)

21. Changes in Design or Execution

Project Purpose achievement date (EOPS) has been changed from end CY 1979 to end CY 1980.

22. Lessons Learned

The lesson learned is that the initial project design must include a comprehensive log frame based on hard data which will be aimed at "real-world" targets; realistic Implementation Plans and more timely Evaluation schedules.

Notwithstanding that other considerations will inevitably impact on the design of projects in Supporting Assistance countries, USAID will continue its efforts to involve host country personnel in all aspects of project identification, design, implementation and evaluation.

PICKERING

UNCLASSIFIED

EVALUATION SUMMARY

Dec. 31, 1977

RUM JUNCTION - RAS EN NA'QEB - MA'AN ROAD

	REVISED PLAN		
1. Narrative Summary of Planned Objectives	2. Objectively Verifiable Indicators		3. Planning Assumptions
	a. Indicators of Progress Toward Planned Targets	b. Indicators of Benefit Incidence-Employment, Income Distribution, Social Equity, etc.	
<p>A. <u>Sectoral Goal</u></p> <p>The GOJ Sector Goals are to:</p> <p>(1) Expand the network of International, primary and secondary roads with emphasis on those serving development projects and trade and transit activities;</p> <p>(2) Keep the road network in the Kingdom in good repair and ensure public safety through continual maintenance and improvement.</p>	<p>Measures of Goal Achievement:</p> <p>(1) Prepare Road Master Plan early CY 1978</p> <p>(2) Establish Road Construction Priorities CY 1978.</p> <p>(3) Establish Time schedule for Implementation-CY 1978</p> <p>(4) Conduct studies on Technology & Maintenance continuing</p> <p>(5) GOJ Road Construction improvements total 37.4 Million JD 1976-1980.</p>	<p>Measures of Benefit Incidence at Goal Level:</p> <p>(1) Contractor Salaries</p> <p>(2) MPW Personnel Salaries</p> <p>(3) MPW Personnel Salaries</p> <p>(4) Contractor Salaries</p> <p>(5) MPW & Contractor Salaries</p>	<p>Assumptions affecting the linkage between project purpose and Sector Goal:</p> <p>a. Private Sector increasingly participates in development efforts</p> <p>b. Central Gov't and municipalities continue to support investment in transport sector.</p> <p>c. Imports and Exports through Aqaba increase to 1.1 million M/T per year 1980.</p> <p>d. Jordanian economy continues to grow.</p> <p>e. An expanded, well-maintained road network will contribute to increased earnings within the transport sector.</p>

Dec. 31, 1977

CURRENT STATUS

4. Changes in Assumptions and Circumstances

5. Actual Progress in Terms of Objectively Verifiable Indicators

a. Indicators of Progress Toward Planned Targets

b. Indicators of Benefit Incidence- Employment, Income Distribution, Social Equity, etc.

Changes Affecting the Linkage between Project Purpose and Sector Goal:

Contribution of Project to Sector Goal:

Benefit Incidence at Goal Level:

a. through e.
No significant changes

- (1) AID-funded Master Plan being prepared. Final due 1/78.
- (2) Will be established subsequent to receipt of Master Plan.
- (3) Same as (2), above
- (4) AID currently providing Technical Assistance both areas.
- (5) GOJ investment 1976 approx. JD 6.5 Million and JD 11.2 Million included in the 1977 budget.

- (1) Contractor Salaries
- (2) None to date
- (3) None to date
- (4) Contractor Salaries
- (5) MPW & Contractor Salaries

EVALUATION SUMMARY

Dec. 31, 1977

RUM JUNCTION - RAS EN NA'QEB - MA'AN ROAD

1. Narrative Summary of Planned Objectives	REVISED PLAN		3. Planning Assumptions
	2. Objectively Verifiable Indicators		
	a. Indicators of Progress Toward Planned Targets	b. Indicators of Benefit Incidence-Employment, Income Distribution, Social Equity, etc.	
<p>A. <u>Sectoral Goal</u></p> <p>The GOJ Sector Goals are to:</p> <p>(1) Expand the network of International, primary and secondary roads with emphasis on those serving development projects and trade and transit activities;</p> <p>(2) Keep the road network in the Kingdom in good repair and ensure public safety through continual maintenance and improvement.</p>	<p>Measures of Goal Achievement</p> <p>(1) Prepare Road Master Plan early CY 1978</p> <p>(2) Establish Road Construction Priorities CY 1978.</p> <p>(3) Establish Time schedule for Implementation-CY 1978</p> <p>(4) Conduct studies on Technology & Maintenance continuing</p> <p>(5) GOJ Road Construction improvements total 37.4 Million JD 1976-1980.</p>	<p>Measures of Benefit Incidence at Goal Level:</p> <p>(1) Contractor Salaries</p> <p>(2) MPW Personnel Salaries</p> <p>(3) MPW Personnel Salaries</p> <p>(4) Contractor Salaries</p> <p>(5) MPW & Contractor Salaries</p>	<p>Assumptions affecting the linkage between project purpose and Sector Goal:</p> <p>a. Private Sector increasingly participates in development efforts</p> <p>b. Central Gov't and municipalities continue to support investment in transport sector.</p> <p>c. Imports and Exports through Aqaba increase to 1.1 million M/T per year 1980.</p> <p>d. Jordanian economy continues to grow.</p> <p>e. An expanded, well-maintained road network will contribute to increased earnings within the transport sector.</p>

Dec. 31, 1977

CURRENT STATUS

Changes in Assumptions and Circumstances	5. Actual Progress in Terms of Objectively Verifiable Indicators	
	a. Indicators of Progress Toward Planned Targets	b. Indicators of Benefit Incidence- Employment, Income Distribution, Social Equity, etc.
<p>Changes Affecting the Linkage between Project Purpose and Sector Goal:</p> <p>a. through e. b. significant changes</p>	<p>Contribution of Project to Sector Goal:</p> <p>(1) AID-funded Master Plan being prepared. Final due 1/78. (2) Will be established subsequent to receipt of Master Plan. (3) Same as (2), above (4) AID currently providing Technical Assistance both areas. (5) GOJ investment 1976 approx. JD 6.5 Million and JD 11.2 Million included in the 1977 budget.</p>	<p>Benefit Incidence at Goal Level:</p> <p>(1) Contractor Salaries (2) None to date (3) None to date (4) Contractor Salaries (5) MPW & Contractor Salaries</p>

Dec. 31, 1977

REVISED PLAN			
1. Narrative Summary of Planned Objectives	2. Objectively Verifiable Indicators		3. Planning Assumptions
	a. Indicators of Progress Toward Planned Targets	b. Indicators of Benefit Incidence-Employment, Income Distribution, Social Equity, etc.	
<p><u>C. Project Outputs</u></p> <p>A complete, 74 km, two lane road which has been accepted by AID and opened to traffic</p>	<p>Magnitudes of Outputs :</p> <p>(1) Excavations 915,000 M³ OCT 78</p> <p>(2) Embankments 1,935,000 M³ AUG 78</p> <p>(3) Base Course 407,000 M³ OCT 78</p> <p>(4) Bridges & Culverts 10,500 M³ MAR 78</p> <p>(5) Paving 585,000 M² JUL 79</p> <p>(6) Striping 74 KM JUL 79</p> <p>(7) Weigh Station Installed & Operation JUN 78</p>	<p>Indicators of Benefit Incidence Expected at Output Level:</p> <p>(1) Reimbursements to Contractors</p> <p>(2) Salaries for MPW personnel</p>	<p>a. Funds will be allocated</p> <p>b. Contractor's schedule will be realistic and will be met as planned.</p> <p>c. GOJ will provide an adequate number of competent supervision/ inspection personnel as required by the Consulting Engineer</p> <p>d. Materials and equipment will be available and delivered when needed.</p>

4. Changes in Assumptions and Circumstances	CURRENT STATUS	
	5. Actual Progress in Terms of Objectively Verifiable Indicators	
	a. Indicators of Progress Toward Planned Targets	b. Indicators of Benefit Incidence - Employment, Income Distribution, Social Equity, etc.
	Progress Toward Output Targets as of November, 1977:	Benefit Incidence at Output Level:
a. No change	1. Excavations 1,120,000 M ³ 122%	Local Construction and supervision Contractor Personnel: \$6.325 Million of which AID has provided \$5.59 Million. Undetermined amount paid to MPW and local supplier personnel
b. Construction Contractor's organizational structure precluded optimum utilization of the available equipment. Slower rate of progress than originally envisioned. Output target completion dates have been revised accordingly.	2. Embankments 1,190,000 M ³ 61%	
	3. Base Course 275,000 M ³ 67%	
	4. Bridges 5	
	Culverts 10,183 M ³ 97%	
	5. Paving 200,000 M ² 44%	
	6. Striping (KM) -0- 0%	
c. MPW assistance to the Consulting Engineer was not as forthcoming or as expected at initial project implementation. This problem has now been resolved. In future projects which might require MPW personnel participation, USAID will include personnel identification as Condition Precedent.	7. Weigh- Station Scale Ordered 30%	
d. Port congestion delayed receipt of required construction materials and contractor's asphalt plant. These delays contributed to stretch-out of construction completion.		

Dec. 31, 1977

REVISED PLAN

1. Narrative Summary of Planned Objectives	2. Objectively Verifiable Indicators		3. Planning Assumptions
	a. Indicators of Progress Toward Planned Targets	b. Indicators of Benefit Incidence-Employment, Income Distribution, Social Equity, etc.	
<p>C. <u>Project Outputs</u></p> <p>A complete, 74 km, two lane road which has been accepted by AID and opened to traffic</p>	<p>Magnitudes of Outputs:</p> <ul style="list-style-type: none"> (1) Excavations 915,000 M³ OCT 78 (2) Embankments 1,935,000 M³ AUG 78 (3) Base Course 407,000 M³ OCT 78 (4) Bridges & Culverts 10,500 M³ MAR 78 (5) Paving 585,000 M² JUL 79 (6) Striping 74 KM JUL 79 (7) Weigh Station Installed & Operation JUN 78 	<p>Indicators of Benefit Incidence Expected at Output Level:</p> <ul style="list-style-type: none"> (1) Reimbursements to Contractors (2) Salaries for MPW personnel 	<ul style="list-style-type: none"> a. Funds will be allocated b. Contractor's schedule will be realistic and will be met as planned. c. GOJ will provide an adequate number of competent supervision/ inspection personnel as required by the Consulting Engineer d. Materials and equipment will be available and delivered when needed.

Dec. 31, 1977

CURRENT STATUS

4. Changes in Assumptions and Circumstances	5. Actual Progress in Terms of Objectively Verifiable Indicators		b. Indicators of Benefit Incidence- Employment, Income Distribution, Social Equity, etc.
	a. Indicators of Progress Toward Planned Targets		
	Progress Toward Output Targets as of November, 1977:		Benefit Incidence at Output Level:
a. No change	1. Excavations 1,120,000 M ³	122%	Local Construction and supervision
b. Construction Contractor's organizational structure precluded optimum utilization of the available equipment. Slower rate-of-progress than originally envisioned. Output target completion dates have been revised accordingly.	2. Embankments 1,190,000 M ³	61%	Contractor Personnel: \$6.325 Million of
	3. Base Course 275,000 M ³	57%	which AID has provided \$5.59 Million.
	4. Bridges & Culverts 10,183 M ³	97%	Undetermined amount paid to MPW and
	5. Paving 200,000 M ²	44%	local supplier personnel
	6. Striping (KM) -0-	0%	
	7. Weigh- Scale		
	Station Ordered	30%	
c. MPW assistance to the Consulting Engineer was not as forthcoming or as expected at initial project implementation. This problem has now been resolved. In future projects which might require MPW personnel participation, USAID will include personnel identification as Condition Precedent.			
d. Port congestion delayed receipt of required construction materials and contractor's asphalt plant. These delays contributed to stretch-out of construction completion.			

Dec. 31, 1977

CURRENT STATUS		
4. Changes in Assumptions and Circumstances	5. Actual Progress in Terms of Objectively Verifiable Indicators	
	a. Indicators of Progress Toward Planned Targets	b. Indicators of Benefit Incidence- Employment, Income Distribution, Social Equity, etc.
<p>Changes Affecting the Linkage between Project Outputs and Project Purpose:</p> <p>a. The MW has recently requested Technical Assistance in Highway Maintenance. USAID is preparing an activity which will include road maintenance, equipment operation and maintenance, inspection procedures, planning scheduling and administration.</p> <p>b. Jordan, Syria and Iraq are now negotiating an agreement regarding axle loadings of all trucks bound to and from the Port of Aqaba. Weigh Station should be installed by mid-1978.</p> <p>c. At GOJ request, USAID will provide services of Driver/Traffic Safety Advisor to assist the GOJ during the early part of CY 1978. Implementation of advisors' recommendations should highlight need for increased driver/traffic safety enforcement.</p> <p>d. No change.</p>	<p>Progress Toward Project Purpose:</p> <p>(1) Through (4): There will be no measurable indicators of progress toward Purpose until the on-going study is completed (Mid-1978), and centralized data gathering facilities are operational.</p>	<p>Benefit Incidence at Project Purpose level:</p> <p>(1) through (4): None measurable to date.</p>

Dec. 31, 1977

REVISED PLAN

1. Narrative Summary of Planned Objectives	2. Objectively Verifiable Indicators		3. Planning Assumptions																																																												
	a. Indicators of Progress Toward Planned Targets	b. Indicators of Benefit Incidence Employment, Income Distribution Social Equity, etc.																																																													
B. <u>Project Purpose</u>	Conditions Expected at End of Project (EOPs):	Indicators of Benefit Incidence at EOPs:	Original Assumptions affecting linkage between Project Outputs and Project Purpose																																																												
To reduce Jordanian social and economic costs of road transportation between the port city of Aqaba and the population centers in Northern Jordan; and increase revenue for transport sector through increase in tonnage for other Middle East Countries	<ul style="list-style-type: none"> (1) Vehicular transit time reduced (2) Vehicle Operating and maintenance costs reduced (3) Road Safety Conditions improved. (4) Transport contribution to GDP increased. 	<table border="0"> <tr> <td></td> <td style="text-align: center;">From</td> <td style="text-align: center;">To</td> </tr> <tr> <td></td> <td style="text-align: center;">1974</td> <td style="text-align: center;">1980</td> </tr> <tr> <td colspan="3"><u>(1)(a) DL Factor Decreased</u></td> </tr> <tr> <td>Light Vehicles</td> <td style="text-align: right;">1.49</td> <td style="text-align: right;">1.12</td> </tr> <tr> <td>Heavy Vehicles</td> <td style="text-align: right;">2.02</td> <td style="text-align: right;">1.30</td> </tr> <tr> <td colspan="3"><u>(1)(b) Driving Time Reduced</u></td> </tr> <tr> <td>Light Vehicles</td> <td style="text-align: right;">1 Hr.</td> <td style="text-align: right;">.5 Hr</td> </tr> <tr> <td>Heavy Vehicles</td> <td style="text-align: right;">2 Hrs.</td> <td style="text-align: right;">1.0 Hr</td> </tr> <tr> <td colspan="3"><u>(2)(a) Operating Costs (fils) per Vehicle Trip Decreased</u></td> </tr> <tr> <td>Light Vehicles</td> <td style="text-align: right;">1360</td> <td style="text-align: right;">990</td> </tr> <tr> <td>Heavy Vehicles</td> <td style="text-align: right;">4940</td> <td style="text-align: right;">2810</td> </tr> <tr> <td colspan="3"><u>(2)(b) Road Traffic (VPD) Increased</u></td> </tr> <tr> <td>Rum to Ra: En Naqeb</td> <td style="text-align: right;">369</td> <td style="text-align: right;">560</td> </tr> <tr> <td>Ras En Naqeb to Ma'an</td> <td style="text-align: right;">720</td> <td style="text-align: right;">1660</td> </tr> <tr> <td colspan="3"><u>(3)(a) Road Capacity (Vehicles per day) (Increased)</u></td> </tr> <tr> <td>Rum to Escarpment</td> <td style="text-align: right;">4500</td> <td style="text-align: right;">7000</td> </tr> <tr> <td>Escarpment to Ras En Naqeb</td> <td style="text-align: right;">2250</td> <td style="text-align: right;">3500</td> </tr> <tr> <td>Ras En Naqeb to Ma'an</td> <td style="text-align: right;">5250</td> <td style="text-align: right;">6750</td> </tr> <tr> <td colspan="3"><u>(3)(b) Accident Rate Reduced (All Vehicles*)</u></td> </tr> <tr> <td colspan="3">(4) From JD 26 Million (1975) to JD 43 Million (1980).</td> </tr> </table>		From	To		1974	1980	<u>(1)(a) DL Factor Decreased</u>			Light Vehicles	1.49	1.12	Heavy Vehicles	2.02	1.30	<u>(1)(b) Driving Time Reduced</u>			Light Vehicles	1 Hr.	.5 Hr	Heavy Vehicles	2 Hrs.	1.0 Hr	<u>(2)(a) Operating Costs (fils) per Vehicle Trip Decreased</u>			Light Vehicles	1360	990	Heavy Vehicles	4940	2810	<u>(2)(b) Road Traffic (VPD) Increased</u>			Rum to Ra: En Naqeb	369	560	Ras En Naqeb to Ma'an	720	1660	<u>(3)(a) Road Capacity (Vehicles per day) (Increased)</u>			Rum to Escarpment	4500	7000	Escarpment to Ras En Naqeb	2250	3500	Ras En Naqeb to Ma'an	5250	6750	<u>(3)(b) Accident Rate Reduced (All Vehicles*)</u>			(4) From JD 26 Million (1975) to JD 43 Million (1980).			<ul style="list-style-type: none"> a. The GOJ will continually apply a high standard of regular general road maintenance. b. The project weighing station will be manned as the existing axle load legislation will be enforced c. Vehicular operating regulations will be enforced; better designed road will help to reduce accidents d. GOJ will centralize and maintain appropriate data gathering facilities. e. An expanded, properly maintained road network will contribute to increased earnings within the transportation sector f. Transportation sector grows at rate of 8.6% per year
	From	To																																																													
	1974	1980																																																													
<u>(1)(a) DL Factor Decreased</u>																																																															
Light Vehicles	1.49	1.12																																																													
Heavy Vehicles	2.02	1.30																																																													
<u>(1)(b) Driving Time Reduced</u>																																																															
Light Vehicles	1 Hr.	.5 Hr																																																													
Heavy Vehicles	2 Hrs.	1.0 Hr																																																													
<u>(2)(a) Operating Costs (fils) per Vehicle Trip Decreased</u>																																																															
Light Vehicles	1360	990																																																													
Heavy Vehicles	4940	2810																																																													
<u>(2)(b) Road Traffic (VPD) Increased</u>																																																															
Rum to Ra: En Naqeb	369	560																																																													
Ras En Naqeb to Ma'an	720	1660																																																													
<u>(3)(a) Road Capacity (Vehicles per day) (Increased)</u>																																																															
Rum to Escarpment	4500	7000																																																													
Escarpment to Ras En Naqeb	2250	3500																																																													
Ras En Naqeb to Ma'an	5250	6750																																																													
<u>(3)(b) Accident Rate Reduced (All Vehicles*)</u>																																																															
(4) From JD 26 Million (1975) to JD 43 Million (1980).																																																															

* TO BE DETERMINED

Dec. 31, 1977

CURRENT STATUS

4. Changes in Assumptions and Circumstances	5. Actual Progress in Terms of Objectively Verifiable Indicators	
	a. Indicators of Progress Toward Planned Targets	b. Indicators of Benefit Incidence- Employment, Income Distribution, Social Equity, etc.
<p>Changes Affecting the Linkage between Project Outputs and Project Purpose:</p> <p>a. The MPW has recently requested Technical Assistance in Highway Maintenance. USAID is preparing an activity which will include road maintenance, equipment operation and maintenance, inspection procedures, planning scheduling and administration.</p> <p>b. Jordan, Syria and Iraq are now negotiating an agreement regarding axle loadings of all trucks bound to and from the Port of Aqaba. Weigh Station should be installed by mid-1978.</p> <p>c. At GOJ request, USAID will provide services of Driver/Traffic Safety Advisor to assist the GOJ during the early part of CY 1978. Implementation of advisors' recommendations should highlight need for increased driver/traffic safety enforcement.</p> <p>d. No change.</p>	<p>Progress Toward Project Purpose:</p> <p>(1) Through (4): There will be no measurable indicators of progress toward Purpose until the on-going study is completed (Mid-1978), and centralized data gathering facilities are operational.</p>	<p>Benefit Incidence at Project Purpose level:</p> <p>(1) through (4): None measurable to date.</p>

Dec. 31, 1977

	ORIGINAL PLAN		
1. Narrative Summary of Original Planned Objectives	2. Objectively Verifiable Indicators		3. Planning Assumptions
	a. Indicators of Progress Toward Planned Targets	b. Indicators of Benefit Incidence	
<p>D. <u>Project Inputs</u></p> <p>(1) USAID Loan (2) GOJ Contribution</p>	<p>Input Categories:</p> <p>(1) Total AID Loan \$10,000,000 to finance 85% of local currency costs of eligible goods and services required to complete 74 kilometers of new two-lane road.</p> <p>(2) GOJ:</p> <p>(a) \$4,205,000</p> <p>(b) Executed supervision & Construction Contracts approved by AID.</p> <p>(c) MPW Technicians assigned to consulting engineer for inspection supervision</p> <p>(d) GOJ weigh Station</p>	<p>Budget and Implementation Schedule:</p> <p>(1) AID Loan in FY 1975</p> <p>(2) GOJ Funding to be provided as required</p>	<p>Provision of Inputs:</p> <p>(a) AID Loan will be signed by June 30, 1975.</p> <p>(b) Initial CP's to be met by Oct. 27, 1975</p> <p>(c) DRA issued by USAID Nov. 1975.</p> <p>(d) TDD: Nov, 30, 1979-four year disbursement period.</p> <p>(e) Construction Contract to be signed by July 30, 197</p> <p>(f) GOJ Personnel will be assigned and on board with supervisory.</p> <p>(g) GOJ will adhere to covenants regarding installation, operation and maintenance of a weigh station.</p>

Dec. 31, 1977

CURRENT STATUS

4. Changes in Assumptions and Circumstances	5. Actual Progress in Terms of Objectively Verifiable Indicators	
	a. Indicators of Progress Toward Planned Targets	b. Indicators of Benefit Incidence
Provision of Inputs:	Indicators:	Benefit Incidence at Input Level:
(a) No change	(1) \$5,590,000 disbursed to date.	(1) and (2)
(b) Changed to 31 Dec. 1975 - all CP's met on 24 December 1975.	(2a) Disbursements as needed.	Jordanian Suppliers of goods and services paid with US and Jordanian Funds
(c) DPA in amount \$4.0 Million issued 9 May 1976; increased to \$8.0 million 21 Mar. 1977; Balance of \$2.0 Million to be made available when requested by the GOJ	(2b) Contract expires Jan. 1978 Contract extension to be negotiated by GOJ. Construction approximately 12 months behind schedule. Contract extension to be negotiated by GOJ. Estimate a 5% cost overrun to be funded by GOJ.	Foreign Suppliers paid with Jordanian Funds.
(d) TDD - No change	(2c) Personnel Assignments now as required.	MPW salaried personnel.
(e) Construction Contract signed July 21, 1975.	(2d) Original Weigh Station excavation inspected in March 1977 was not suitable to AID. After AID approval of a new location to be selected by MPW, excavation and construction can begin. Equipment has been ordered and will be installed on arrival.	
(f) Supervisory contract approved July 1975. Minor delay in assembly of MPW personnel will not affect revised project completion date.		
(g) No change.		

Dec. 31, 1977

1. Narrative Summary of Original Planned Objectives	ORIGINAL PLAN		3. Planning Assumptions
	2. Objectively Verifiable Indicators		
D. <u>Project Inputs</u> (1) USATD Loan (2) GOJ Contribution	a. Indicators of Progress Toward Planned Targets	b. Indicators of Benefit Incidence	
	<p>Input Categories:</p> <p>(1) Total AID Loan \$10,000,000 to finance 85% of local currency costs of eligible goods and services required to complete 74 kilometers of new two-lane road.</p> <p>(2) GOJ:</p> <p>(a) \$4,205,000</p> <p>(b) Executed supervision & Construction Contracts approved by AID.</p> <p>(c) MPW Technicians assigned to consulting engineer for inspection supervision</p> <p>(d) GOJ weigh Station</p>	<p>Budget and Implementation Schedule:</p> <p>(1) AID Loan in FY 1975</p> <p>(2) GOJ Funding to be provided as required</p>	<p>Provision of Inputs:</p> <p>(a) AID Loan will be signed by June 30, 1975.</p> <p>(b) Initial CP's to be met by Oct. 27, 1975</p> <p>(c) DRA issued by USAID Nov. 1975.</p> <p>(d) TDD: Nov, 30, 1979-four year disbursement period.</p> <p>(e) Construction Contract to be signed by July 30, 197</p> <p>(f) GOJ Personnel will be assigned and on board with supervisory.</p> <p>(g) GOJ will adhere to covenants regarding installation, operation and maintenance of a weigh station.</p>

Dec. 31, 1977

CURRENT STATUS

4. Changes in Assumptions and Circumstances	5. Actual Progress in Terms of Objectively Verifiable Indicators	
	a. Indicators of Progress Toward Planned Targets	b. Indicators of Benefit Incidence
<p>Provision of Inputs:</p> <p>(a) No change</p> <p>b) Changed to 31 Dec. 1975 - all CP's met on 29 December 1975.</p> <p>c) DPA in amount \$4.0 Million issued 9 May 1976; increased to \$8.0 million 21 Mar. 1977; Balance of \$2.0 Million to be made available when requested by the GOJ</p> <p>d) TDD - No change</p> <p>e) Construction Contract signed July 21, 1975.</p> <p>f) Supervisory contract approved July 1975. Minor delay in assembly of MPW personnel will not affect revised project completion date.</p> <p>(g) No change.</p>	<p>Indicators:</p> <p>(1) \$5,590,000 disbursed to date.</p> <p>(2a) Disbursements as needed.</p> <p>(2b) Contract expires Jan. 1978 Contract extension to be negotiated by GOJ. Construction approximately 12 months behind schedule. Contract extension to be negotiated by GOJ. Estimate a 5% cost overrun to be funded by GOJ.</p> <p>(2c) Personnel Assignments now as required.</p> <p>(2d) Original Weigh Station excavation inspected in March 1977 was not suitable to AID. After AID approval of a new location to be selected by MPW, excavation and construction can begin. Equipment has been ordered and will be installed on arrival.</p>	<p>Benefit Incidence at Input Level:</p> <p>(1) and (2) Jordanian Suppliers of goods and services paid with US and Jordanian Funds</p> <p>Foreign Suppliers paid with Jordanian Funds.</p> <p>MPW salaried personnel.</p>

4/27/10/78

8-0187 PRU

AIRGRAM

DEPARTMENT OF STATE

UNCLASSIFIED

CLASSIFICATION

For each address check one ACTION | INFO

TO - AID/W TOAID A-8 X

DATE REC'D.

DATE SENT
2/11/78

DISTRIBUTION

ACTION

Mail

INFO.

Rom

35 cpy's

w/attach

FROM - AMMAN

E.O. 11652 N/A

SUBJECT - Project Evaluation - Ma'an/Ras En Nageb Highway

Loan 278-K-012

REFERENCE - AIRTO CIRC A-188 dated 5/11/77

Attached is regular evaluation as per USAID/J
Project Evaluation Schedule.

CPH
PICKERING

Attachment: a/s sent Mail Room, Blue Print Desk 2/28/78

PAGE 1 OF 1 PAGES

DRAFTED BY <i>W</i> PRM:WColes:enf	OFFICE PRM	PHONE NO. 240	DATE 1/31/78	APPROVED BY: <i>CPH</i> DIR:CHRussell
--	---------------	------------------	-----------------	---

AID AND OTHER CLEARANCES

(See Attachments)

UNCLASSIFIED

CLASSIFICATION