

Basic Information			
Approval Year	: 2019	Region	: CID
Team Leader	: Torrico Duran, Blanca Paola	Country	: Costa Rica
Taxonomy	: Client Support	Department	: IFD
Fund	: AAF	Sector	: ST - Sti Policy & Institutions
Approval Number	: ATN/AA-17621-CR	Sub Sector	: REG
Execution Agency	: US-IDB		
Execution Status	: Closed		
Operation Objective	: Support the Government of Costa Rica to increase the transparency of the processes of design, construction and operation of public works through the adoption of Building Information Modeling (BIM) in the public and private sector.		

Financial Information			
CR-T1206			
ATN/AA-17621-CR:AAF	Original	Current	% of Current Amount Financed
Amount Financed	\$200,000.00	\$199,256.37	
Disbursed Amount	N/A	\$199,256.37	100.00 %
Commitments not yet disbursed Amount	N/A	-	0.00 %
Available Amount	N/A	-	0.00 %
Final Disbursement Date	Oct 8, 2022		

Status Update
In 2020 the BIM strategy for the country was launched and consultancies hired for the creation of the BIM implementation roadmap. Furthermore, the BIMconcept was piloted on a specific contruction work contract for the expansion and rehabilitation of the national route No. 1, Inter-American Highway North, Barranca - San Gerardo Section. Thepilot contributed to improvements to the road expansion and rehabilitation construction process. In 2021 a study on the benefits of BIM in thetransparency of public construction processes was performed. Also, pilots were carried out in operations financed by the Bank in collaboration with Transport, Integration and Institution's sectors. Finally, in 2022 a diagnosis to measure the BIM maturity in public - private sector and academia was conducted.

Advance in the Achievement of Outcome and Outputs
Advance in the Achievement of Outcome
1 . Government's transparency increased in the design, construction and operation of public works by the adoption of BIM

With the implementation of BIM in public building projects in the country, it was sought to use a set of methodologies, technologies and standards that allow the design design, construction and operation of a building or infrastructure collaboratively in a virtual space. That is, to generate and manage information through three-dimensional models throughout the life cycle of a project. This facilitates the circulation of information and traceability on the costs of works among the different stakeholders involved, increasing transparency levels throughout the processes.

Advances in Execution

1. Action Plan

Component Cost: \$130,000

Output Indicator	Indicator Detail	Unit Of Measure	Baseline	Baseline Year	Means Of Verification	Theme	Year	P	P(A)	A
1.1 * Strategies designed	BIM implementation plan (AAF)	Strategies (#)	0	2019	Strategy document	Institutional Development	Physical			
							2019	0	0	0
							2020	1	1	0
							2021	0	1	1
							2022	0	0	1
							EOP 2022	1	1	2
							Financial			
							2019	0	0	0
							2020	120000	120000	7973.76
							2021	0	112026.24	112026.24
							2022	0	0	0
							EOP 2022	120000	120000	120000

Advances In Execution: In 2021, the Roadmap for the adoption of BIM in Costa Rica was developed in coordination with the work team formed by the Ministry of National Planning and Economic Policy (MIDEPLAN) and the Interinstitutional Commission for BIM Implementation (CI-BIM) from the country. This roadmap will serve as a structuring axis for the implementation of BIM in the country around the lines of strategic action defined in the National Strategy BIM Costa Rica. In 2022, the BIM Maturity Measurement Methodology instrument that is part of the BIM Roadmap of Costa Rica was applied to a group of public, private, civil society and academic organizations in the country and analysis of the results

Output Indicator	Indicator Detail	Unit Of Measure	Baseline	Baseline Year	Means Of Verification	Theme	Year	P	P(A)	A
1.2 ^s Workshops organized	workshops with public-private actors to support the processes of information gathering, review and development of regulations and standards and the validation of the road map (AAF)	Workshops (#)	0	2019	List of participants	Institutional Development	Physical			
							2019	0	0	0
							2020	2	2	2
							2021	1	1	2
							2022	1	0	1
							EOP 2022	4	4	5
							Financial			
							2019	0	0	0
							2020	5000	5000	5000
							2021	2500	2500	2972.5
							2022	2500	2027.5	2027.5
							EOP 2022	10000	10000	10000

Advances In Execution: In 2021, for the preparation of the Roadmap, the consulting firm conducted co-creation workshops and interviews with relevant actors to validate the process. These events were held virtually, but definitely guided the preparation of the Roadmap to the point that stakeholders are engaged with the project

2. BIM Capacity Building

Component Cost: \$35,000

Output Indicator	Indicator Detail	Unit Of Measure	Baseline	Baseline Year	Means Of Verification	Theme	Year	P	P(A)	A
2.1 ^s Pilot interventions implemented	Technical assessment, which includes training activities, for at least one pilot project (AAF)	Pilots (#)	0	2019	Report	Institutional Development	Physical			
							2019	0	0	0
							2020	1	1	1
							2021	0	0	0
							2022	0	0	0
							EOP 2022	1	1	1
							Financial			
							2019	0	0	0
							2020	25000	25000	0
							2021	0	25000	20900
							2022	0	4100	4100
							EOP 2022	25000	25000	25000

Advances In Execution: In 2020, workshops were organized for the implementation of the BIM methodology in a transport infrastructure program LPI-115- 2019. These events have contributed to improvements in terms of requirements for the implementation of BIM under the contract for the expansion and rehabilitation of the national route No. 1, Inter-American Highway North, Barranca - San Gerardo Section. In 2021, support for construction pilots continued through technical advice with consultants.

Output Indicator	Indicator Detail	Unit Of Measure	Baseline	Baseline Year	Means Of Verification	Theme	Year	P	P(A)	A
2.2 ^s Training workshops delivered	training workshops for teams of public sector units involved in the pilot (AAF)	Workshops (#)	0	2019	List of participants	Institutional Development	Physical			
							2019	0	0	0
							2020	2	2	2
							2021	1	1	2
							2022	1	0	0
							EOP 2022	4	4	4
							Financial			
							2019	0	0	0
							2020	5000	5000	4000
							2021	2500	3500	0
							2022	2500	6000	6000
							EOP 2022	10000	10000	10000

Advances In Execution: In 2021, individual consultants were hired to improve the BIM requirement of the Transportation Division project and, thereby, train the parties involved in the execution and monitoring of the work through workshops. The series of workshops has enabled the collaborative development of certain definitions and prioritization of criteria common to the participating organizations for the implementation of BIM in pilot projects. These definitions include the general process map for road infrastructure and building; BIM criteria for the road pilot and general definition of BIM criteria for buildings; development, review and validation of the BIM Execution Plan and, finally, definition of performance indicators for BIM implementation in road pilots.

3. Dissemination and knowledge
Component Cost: \$35,000

Output Indicator	Indicator Detail	Unit Of Measure	Baseline	Baseline Year	Means Of Verification	Theme	Year	P	P(A)	A
3.1 ^s Diagnostics and assessments completed	Study impact on transparency (AAF)	Diagnostics (#)	0	2019	Report	Institutional Development	Physical			
							2019	0	0	0
							2020	1	1	0
							2021	0	1	1
							2022	0	0	0
							EOP 2022	1	1	1
							Financial			
							2019	0	0	
							2020	25000	25000	0
							2021	0	25000	21794.65
							2022	0	3205.35	2461.72
							EOP 2022	25000	25000	24256.37
							Advances In Execution: In 2021, an individual consultant was hired to develop a study that captures the benefits of the use and application of BIM in terms of improving transparency in the design and implementation of infrastructure projects.			

Output Indicator	Indicator Detail	Unit Of Measure	Baseline	Baseline Year	Means Of Verification	Theme	Year	P	P(A)	A
3.2 ^s Workshops organized	workshops and awareness events (AAF)	Workshops (#)	0	2019	Workshop Minutes	Institutional Development	Physical			
							2019	0	0	0
							2020	1	1	1
							2021	1	1	1
							2022	0	0	0
							EOP 2022	2	2	2
							Financial			
							2019	0	0	0
							2020	2500	2500	5000
							2021	2500	0	0
							2022	0	0	0
							EOP 2022	5000	5000	5000
							Advances In Execution: In 2021, for the preparation of the Roadmap, the consulting firm conducted co-creation workshops and interviews with relevant actors to validate the process. These events were held virtually, but definitely guided the preparation of the Roadmap to the point that stakeholders are engaged with the project			

Output Indicator	Indicator Detail	Unit Of Measure	Baseline	Baseline Year	Means Of Verification	Theme	Year	P	P(A)	A
3.3 ^s Virtual platforms designed	Design and creation of digital content for dissemination (AAF)	Platforms (#)	0	2019	Publications	Digital Economy	Physical			
							2019	0	0	0
							2020	1	1	0
							2021	1	1	2
							2022	0	0	0
							EOP 2022	2	2	2
							Financial			
							2019	0	0	0
							2020	2500	2500	1735.14
							2021	2500	3264.86	3264.86
							2022	0	0	0
							EOP 2022	5000	5000	5000
Advances In Execution: This activity is linked to the BIM roadmap and communication materials. Due to the limitations for holding face-to-face meetings, all the workshops and events were virtual, which facilitated the frequency of activities, increasing the number planned. Also, communication materials, such as BIM Costa Rica Strategy and BIM Roadmap were produced										