



## **CAREC 2030 Transport Sector Annual Progress Report**

Reference Document

**Transport Sector Progress Report and Work Plan  
(July 2021 – August 2022)**

**CAREC 19<sup>th</sup> Transport Sector Coordinating Committee Meeting  
19-20 October 2022**

## **I. Executive Summary**

Roughly two years into the pandemic, CAREC transport continues to adapt to the challenges ushered in by the COVID-19 outbreak. Amidst the quickly changing constraints resulting from the pandemic, some adjustments in both the lineup and schedule of CAREC transport activities had been accommodated as deemed appropriate.

With COVID-19-related restrictions remaining largely in place across MCs over the work plan timeframe<sup>1</sup>, a number of events under the current work plan had to be pushed back until in-person meetings become more feasible. These include the 19<sup>th</sup> Transport Sector Coordinating Committee Meeting (TSCC), the sixth RWG Meeting, as well as the Regional Aviation Forum, which involve careful discussions of high-level sector plans and issues, and are thus deemed better suited for in-person meetings. Meanwhile, events that had been successfully completed on schedule were all arranged and conducted virtually.

On a positive note, some events were carried out well amidst the fluidity of the pandemic, including the Crash Investigation Training for Uzbekistan and the Kyrgyz Republic, the Online Training on the Road Safety Problem, and the Workshop on Knowledge Sharing on Road Asset Management Systems, to name a few. These events were not originally included in the current work program but had been successfully initiated and completed over the work plan period.

With respect to knowledge products (KPs), a number of KPs were completed within the work plan timeframe despite some pandemic-related delays especially during the initial months of the work plan period. For other KPs, however, activities requiring field research, in-person collaboration and data collection were slowed by COVID-19-related constraints, inevitably resulting in delays in their completion. Timelines for these KPs have been adjusted and CAREC transport aims for their completion under the coming year's work program.

On another note, the budget shortfalls and funding realignments that beset the CAREC transport in the previous year had been resolved by mobilizing new funding from other sources to support new activities in CAREC transport.

As the pandemic began to wane in recent months and travel restrictions are eased gradually, the tourism and travel industries are slowly bouncing back from the pandemic and markets are reintegrating into global value chains. As a result, the trade and transport sectors have also started to recover after contending with the challenges of the drawn-out pandemic.

But just as the world economy is starting to bounce back, new challenges have emerged such as surging oil prices (particularly for non-oil exporting countries) and fresh disruptions to the supply chain as a result of Russia's invasion of Ukraine. A global slowdown and sharp increases in inflation seem imminent. Depending on how long the conflict drags on, however, the extent of its potential impact on the trade and transport sectors in CAREC MCs is still unclear at this point.

## **II. Key Developments and Results**

This report covers progress made by the CAREC member countries in 2020 under the new CAREC Transport Strategy (CTS) 2030. It covers progress achieved in the implementation of events and knowledge products under the five sector pillars. CTS2030 uses several performance indicators to inform countries about their progress in key transport pillars (Table 1).

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<sup>1</sup> The current work program covers the period July 2021-August 2022.

**Table 1: Outcome Level Indicators for CAREC Transport Sector**

Pillar	Title	Outcomes	Indicators (Sources or Reports)
1	<b>Transport and Logistics Facilitation</b>	Efficiency improvements in border crossing points (BCPs), customs clearance, immigration procedures and cross-border logistics.	<ul style="list-style-type: none"> <li>• Average speed by corridors, speed with delay (SWD)</li> <li>• Time and cost to clear a border crossing point, by corridor, country and BCP</li> <li>• Logistics Perception Index (LPI)</li> </ul>
2	<b>Roads and Road Asset Management</b>	Improvement on the CAREC Road Asset Management maturity model*	<ul style="list-style-type: none"> <li>• 2019 (provisional): All countries at level 1 except Pakistan at level 3, for National Highway network (CAREC Transport Sector Progress Report)</li> <li>• Average speed of traffic without delay (SWOD), by corridors (CAREC CPMM)</li> <li>• Perception of highway quality improved (World Economic Forum Global Competitiveness Index) for selected countries</li> </ul>
3	<b>Road Safety</b>	Reduction in the number of road crash fatalities on CAREC international road corridors	<ul style="list-style-type: none"> <li>• By 2030: 50% reduction from 2010 figure (82,000 fatalities).</li> </ul>
4	<b>Railways</b>	Improved service level and operation efficiency of railways	<ul style="list-style-type: none"> <li>• CPMM average commercial speed, by CAREC corridor, SWD and SWOD</li> <li>• Perception of railway quality improved ((World Economic Forum Global Competitiveness Index for railways) for selected countries</li> </ul>
5	<b>Aviation</b>	Creation of a more open aviation market that catalyzes enhanced exchange and trade outcomes	<ul style="list-style-type: none"> <li>• Number of CAREC country pairs achieving unrestricted third- and fourth-freedom rights</li> <li>• Number of CAREC countries adopting paperless e-freight systems for aviation</li> <li>• Number of countries with e-visa systems</li> </ul>

\* RAMS maturity model (Phase 1 – RAMS at construction; Phase 2 – RAMS provides full inventory assessment, albeit it can be at the fixed time, not regularly updated, not used in full for decision making and financial planning; Phase 3 – continuous (periodic) monitoring of the road asset inventory, good cost models, cost/management accounting and planning, decisions and financial planning based on all well-known factors and clear performance targets).

CAREC = Central Asia Regional Economic Cooperation, CPMM = Corridor Performance Measurement and Monitoring.

Source: CAREC Secretariat.

## A. Sector Implementation

Roughly two years into the pandemic, CAREC transport continues to adapt to the challenges brought on by the COVID-19 outbreak, especially with regard to effective and timely delivery of planned KPs and events. Some of the activities under the current work plan encountered delays but were nonetheless completed within the work plan timeframe. They continued to be held virtually, however, as COVID-19-related restrictions remained largely in place across CAREC MCs over the work plan period.

Some of the important events carried out under the current work plan include the online workshop on Road Safety Engineering - Star Ratings for Road Safety Audits which was held in November 2021. The workshop introduced the manual of the same title to CAREC MCs and key stakeholders. The manual, published in June 2022, presents the different approaches for how Road Safety Audits and the iRAP methodology can be used together to improve safety in road designs.

A country-specific Road Safety Engineering Workshop for Turkmenistan was also held virtually in April 2022. As part of a broader effort to help strengthen road safety engineering capacity among CAREC MCs, the workshop helped participants upgrade their skills and knowledge on the key aspects of road safety engineering as embodied in the CAREC Road Safety Engineering Manuals. The six-module workshop was organized by the CAREC Institute in partnership with the Asian Development Bank (ADB).

Meanwhile, the Pedestrian Safety Online Workshop, conducted for CAREC MCs in June 2022, discussed the importance of protecting pedestrians and making roads more pedestrian-friendly by providing safer pedestrian facilities. It also encouraged CAREC MCs to embrace the Safe System to achieve higher standards of road safety.

With the continued uncertainty that marks the current work plan period, CAREC transport had to revisit its work plan and accommodate changes in schedules as deemed appropriate. The 19th Transport Sector Coordinating Committee (TSCC) Meeting, the sixth RWG Meeting, as well as the Regional Aviation Forum, for instance, had to be pushed back until in-person events become more feasible. These three activities involve careful discussions of high-level sector plans and issues and are thus deemed better held in-person. The sixth RWG and the 19<sup>th</sup> TSCC Meetings are now planned for 17-20 October 2022 in Almaty, Kazakhstan.

Meanwhile, some events that were not originally included in the work plan but which could be carried out amidst the fluidity of the COVID-19 crisis, had been successfully initiated and completed over the work plan period. These include the Crash Investigation Training for Uzbekistan and the Kyrgyz Republic, the Online Training on the Road Safety Problem, and the Workshop on Knowledge Sharing on Road Asset Management Systems, to name a few.

The virtual workshop on Knowledge Sharing on Road Asset Management Systems that was organized for Georgia, Pakistan, and Tajikistan in October 2021 served as a platform for the three countries to share their respective experiences in RAMS development, while the Online Training on the Road Safety Problem that was organized for the Kyrgyz Republic in April 2022 got the workshop participants acquainted with the Safe System Approach, crash causes, and principles of effective enforcement and deterrence theory. It also highlighted the importance of enforcement and its role in a safe system. Finally, the 3-day Crash Investigation Training that was organized for Uzbekistan (December 2021) and the Kyrgyz Republic (January 2022) explained the importance of collecting accurate crash data and provided participants with the skills necessary for managing a traffic crash scene, and for collecting and providing accurate crash data.

Several important knowledge products have also been successfully completed under the current work plan period, including the Situation of Railways in CAREC Countries and Opportunities for

Investment, Commercialization and Reform, which was published in April 2022. Building upon 11 country-level assessments and incorporating the development of a CAREC Regional Transport Model, the report examines the situation of the region’s railways and identifies priorities for railway investment, commercialization, and reform.

The Road Asset Management System and Performance-Based Road Maintenance Contracts in the CAREC Region is another key product that was completed under the current work plan. This report provides a status assessment of RAMS implementation and application of PBM contracts in the 11 CAREC MCs, including an overview of respective road networks, institutional arrangements, and levels and sources of funding for road assets management.

Two other studies are currently being developed: (i) Road Funds and Road User Charges in five selected countries in the CAREC region and (ii) an assessment of PBC pilots carried out in the CAREC member countries. The first reviews how different types of road user charges and revenue levels are being collected in selected CAREC MCs, and the extent to which these are earmarked for road maintenance. The second reviews ongoing and completed PBC pilots in CAREC MCs, including an analysis of how the PBCs were designed and issues encountered during implementation. Findings from the two studies will be presented in reports.

On road safety, the fifth in the CAREC Road Safety Engineering Manuals series, RSE Manual 5: Star Ratings for Road Safety Audit, was published in June 2022. The manual provides a brief overview of Road Safety Audits and the iRAP methodology and identifies the different approaches for using RSAs and the iRAP methodology together to reduce the occurrence and severity of crashes through safer road designs. In addition, the CAREC Road Safety Report Card was published in July 2022. The Report Card aims to track the status of implementation and progress of road safety initiatives of individual CAREC MCs under the CAREC Road Safety Strategy.

On cross-border transport and logistics, the RIBS projects in Pakistan and Mongolia are ongoing, while that for the Kyrgyz Republic is expected to be completed in the third quarter of this year. Civil works for the BCP in Tajikistan have long been completed while its NSW facility has also been fully operational since January 2021.

**Table 2. Workshops, Training Programs, and Knowledge Products Completed**

Title of Publication / Event	Timeframe
<b>Roads and road asset management</b>	
Knowledge Sharing Workshop on Road Asset Management Systems (Georgia, Pakistan, and Tajikistan)	Oct 2021
Workshop: Road Asset Management System and Performance-Based Road Maintenance Contracts - Afghanistan*	Mar 2021
Workshop: Road Asset Management System and Performance-Based Road Maintenance Contracts – Kyrgyz Republic	Jun 2021
Road Asset Management System and Performance-Based Road Maintenance Contracts in the CAREC Region (English and Russian versions)	Nov 2021
<b>Road safety</b>	
Road Safety Engineering - Star Ratings for Road Safety Audits Online Workshop	Nov 2021

Title of Publication / Event	Timeframe
Uzbekistan - Crash Investigation Training	Dec 2021
Kyrgyz Republic - Crash Investigation Training	Jan 2022
Turkmenistan – Road Safety Engineering Workshop**	Apr 2022
Kyrgyz Republic – Online Training on the Road Safety Problem	Apr 2022
Pedestrian Safety Training in CAREC countries	Jun 2022
CAREC Road Safety Engineering Manual 5 – Star Ratings for Road Safety Audit	Jun 2022
Road Safety Report Card for the CAREC Region	Jul 2022
<b>Railways</b>	
The Situation of Railways in CAREC Countries and Opportunities for Investment, Commercialization and Reform (English and Russian versions)	Apr 2022
<b>Overall transport</b>	
2020 CAREC Transport Annual Report (abridged online version)	Oct 2021
CAREC Transport Sector Progress Report and Work Plan (July 2020 to August 2021)	Oct 2021

\*ADB placed on hold its assistance to Afghanistan effective 15 August 2021.

\*\*With CAREC Institute.

## B. Implementation Progress by Priority Area

**Cross-border transport and logistics facilitation.** This pillar facilitates greater economic cooperation and connectivity among CAREC countries by reducing impediments to cross-border transport. It focuses specifically on improving cross-border infrastructure, streamlining the implementation and enforcement of transport agreements and conventions. Progress in these areas for 2021-2022 includes:

- **Continued improvement and application of the CAREC program’s Corridor Performance Measurement and Monitoring (CPMM) tool.** The CPMM tool is continuously being improved and applied in analyzing border crossing costs and delays in CAREC corridors. A Methodology Review Study and Consultation Workshop was held virtually in March 2022 to improve CPMM data collection and analyses.
- **Support for improved cross-border infrastructure, operational procedures, and stronger border management capacity through various projects and TA activities.** The CAREC Regional Improvement of Border Services (RIBS) projects in the Kyrgyz Republic, Mongolia, Pakistan, and Tajikistan aim to support BCP improvements through the deployment of BCP security and ICT equipment, creation of National Single Window (NSW) facilities, and establishment of integrated border management institutions. The RIBS projects in Pakistan and Mongolia are ongoing, while that for the Kyrgyz Republic is expected to be completed in the third quarter of this year. Civil works for the BCP in Tajikistan have already been completed while its NSW facility has been fully operational since January 2021. Meanwhile, the ADB and CAREC Institute are developing three-part

modules on the RIBS and NSW projects.<sup>2</sup> In a virtual meeting held in January 2021, the four CAREC countries discussed their experiences in RIBS project development and implementation as well as NSW systems development. For the third module, project officers and experts from international organizations discussed the various trade facilitation programs and initiatives supporting CAREC MCs. The Almaty-Bishkek Economic Corridor (ABEC) Program is also supporting improvements of border crossing points in Kazakhstan and the Kyrgyz Republic.

**Roads and road asset management.** This pillar supports the adoption of preventive knowledge-based road maintenance to minimize road maintenance costs while also maintaining good road network quality, with the aim of extending road asset life and increasing traffic safety. Activities in 2021-2022 under this pillar includes:

- **Workshop on Knowledge Sharing on Road Asset Management Systems.** A virtual workshop on Knowledge Sharing on Road Asset Management Systems was organized jointly by the CAREC Transport TA team and the ADB transport teams<sup>3</sup> of Georgia, Pakistan, and Tajikistan in October 2021. This pilot event offered the three CAREC MCs an opportunity to exchange experiences and lessons learned from RAMS development in their respective countries. Topics discussed ranged from the early stages of their respective RAMS development, current implementation status, and plans for further development.
- **Workshops on Road Asset Management System and Performance-Based Road Maintenance Contracts.** Two virtual workshops were held for Afghanistan<sup>4</sup> (March 2021) and the Kyrgyz Republic (June 2021) introducing the concepts of RAMS and PBM contracts.
- **Road Asset Management System and Performance-Based Road Maintenance Contracts in the CAREC Region.** Published in November 2021, this report discusses the development status of RAMS and PBCs in each of the 11 CAREC MCs, including an overview of their respective road networks, as well as institutional arrangements and levels and sources of funding for road assets management. This resource allows CAREC MCs to learn from other MCs' experiences with RAMS and PBCs, and identify best practices which they can replicate. More significant, the report outlines recommended actions for integrating RAMS and PBC into the broader framework for road management, tailored to each MC's specific context, current status and issues. The report is available in both English and Russian.

In 2022, two studies are being carried out that review (i) Road Funds and Road User Charges in five selected countries in the CAREC region and (ii) an assessment of PBC pilots carried out in the CAREC member countries. The first effort looks at how different types of road user charges and related revenue levels are being collected in the selected countries and to which degree these are earmarked for road maintenance. Subsequently these are compared to estimated road maintenance needs and actual road maintenance budgets. The Assessment of PBC pilots carried out in the CAREC member countries will review several ongoing and completed PBC pilots and analyze how the PBCs were

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<sup>2</sup> The three-part modules comprise Module 1: Regional Improvement of Border Services: Project Development and Country Experiences; Module 2: Single Window Development, and Module 3: Role of Development Partners.

<sup>3</sup> Transport and Communication Division and Georgia/Pakistan/Tajikistan Resident Missions, Central and Asia Department.

<sup>4</sup> ADB placed on hold its assistance to Afghanistan effective 15 August 2021.

designed and what issues may have been faced during implementation. Findings from the two studies will be presented in reports.

- **Capacity building support.** CAREC is assisting the Kyrgyz Republic in developing its road asset management system under a small expenditure financing facility for the Kyrgyz Republic. RAM components have also been included in road projects in other CAREC countries such as Georgia and Tajikistan. Performance-Based Maintenance contracts are also being implemented in several road projects in the People's Republic of China, the Kyrgyz Republic, and Tajikistan.

**Railways.** Guided by the CAREC Railway Strategy (Unlocking the Potential of Railways: A Railway Strategy for CAREC, 2017–2030), this pillar supports the long-term development of the railway sector in CAREC countries to facilitate cross-border trade and promote economic development in the region.

**The Situation of Railways in CAREC Countries and Opportunities for Investment, Commercialization and Reform.** Building upon 11 country-level assessments and incorporating the development of a CAREC Regional Transport Model, this report examines the situation of the region's railways and identifies opportunities for railway investment, commercialization and reform. It is one of the first consolidated analyses of CAREC railways and contributes to the growing evidence basis to support dialogue and decision-making on railway development in the region. The report, which was completed and published in April 2022, is available in both English and Russian.

**Road Safety.** This pillar helps ensure that CAREC road corridors continue to support safe and efficient movement of people and goods with high reliability and connectivity. Key achievements in these areas for 2021-2022 include:

- **Road Safety Engineering - Star Ratings for Road Safety Audits Online Workshop.** In November 2021, the CAREC Program organized an online workshop to introduce the manual *Road Safety Engineering - Star Ratings for Road Safety Audits* to CAREC MCs and key stakeholders. The workshop presented the different approaches for how Road Safety Audits and the iRAP methodology – which essentially use different methods but share the same objective of reducing both the risk of occurrence and severity of crashes – can be used together to improve safety in road designs.
- **CAREC Road Safety Report Card.** This report was developed to track the status of implementation and progress of road safety initiatives of individual CAREC MCs under the CAREC Road Safety Strategy. It is a useful resource for identifying implementation challenges, priorities, and reforms and resources necessary to fill any gaps that remain and to improve overall road safety in CAREC MCs. The CAREC Road Safety Report Card was published in July 2022.
- **CAREC Road Safety Engineering Manual 5: Star Ratings for Road Safety Audit.** This manual introduces the concept of Star Ratings for road safety audits, wherein road segments are assessed on a 5-star scale, with a 5-star rating being the safest. It provides a brief overview of Road Safety Audits and the iRAP methodology, including the strengths and limitations of each. It outlines the different approaches for using RSAs and the iRAP methodology together, which are essentially different methodologies but share a common objective of reducing the occurrence and severity of crashes through safer road designs. The manual, which is the fifth in the CAREC Road Safety Engineering Manual series, was published in June 2022.

- **Crash Investigation Training.** A 3-day training course on Crash Investigation was organized for Uzbekistan and the Kyrgyz Republic in December 2021 and January 2022, respectively. The training course explained the importance of collecting accurate crash data which is predicated on thorough crash investigation, crash analysis, and proper reporting. Accordingly, it provided participants with the skills and technical know-how needed to manage a traffic crash scene, and to collect and provide accurate crash data which is key to making well-informed decisions relating to traffic safety laws, road engineering improvements, and road safety measures, among other things.
- **Road Safety Engineering Workshop.** As part of ongoing efforts to help build up the road safety engineering capacity of CAREC MCs, the CAREC Institute in partnership with the Asian Development Bank (ADB) organized a six-module country-specific virtual workshop on Improving Road Safety Engineering for Turkmenistan in April 2022. The workshop provided participants the opportunity to update and upgrade their skills and know-how on the key elements of road safety engineering as embodied in the CAREC Road Safety Engineering Manuals. Workshop participants included road safety professionals from universities, the Committee of Roads, the National Traffic Police, national highway authority, provincial road agencies, and other government ministries and relevant authorities.
- **CAREC Online Training on the Road Safety Problem.** Government officials from the Ministry of Transport and Communications and from the Departments on Road Safety and on Road Supervision of the Ministry of Internal Affairs participated in the online training on Road Safety Problem that was organized by the CAREC Program for the Kyrgyz Republic. The training, which was held in April 2022, familiarized participants with the Safe System Approach, crash causes, and principles of effective enforcement and deterrence theory. It also highlighted the importance of enforcement and its role in a safe system.
- **Pedestrian Safety Online Workshop.** The Pedestrian Safety Online Workshop was conducted for CAREC MCs on 14-28 June 2022. The workshop was intended for highway and road safety engineers, project managers, planners, municipal engineers, traffic police, and representatives of design institutes and road agencies. It aimed to broaden understanding of the importance of protecting pedestrians and providing safer pedestrian facilities to make roads more pedestrian-friendly. It also urges CAREC MCs to conform to higher standards of road safety by embracing the Safe System. The workshop discussed a broad range of topics relating to pedestrian safety, including pedestrian management strategy, road rules enforcement, design considerations for disabled pedestrians, pedestrian facilities, small-scale civil works for improved pedestrian movement and safety, infrastructure design, speed management, and traffic calming strategies, among other things.

**Aviation.** The 2018 CAREC Aviation scoping study, which served as a reference document for establishing the aviation pillar under CAREC Transport Strategy 2030, outlines key issues and priorities for the aviation sector in CAREC member countries. This pillar emphasizes the importance of establishing more direct, cost-efficient, and safe aviation links among CAREC member countries for a more open regional aviation market in the CAREC region.

- **Aviation Cargo Study.** This study, which examines aviation cargo logistics services in CAREC MCs, including regional freight operations by land, air, and sea, aims to guide CAREC MCs in prioritizing national policy actions and regional agreements to facilitate the development of competitive aviation freight and logistics services. The study encountered some delays given the pandemic-related restrictions that made field research and data

collection difficult, but it is ongoing and is making progress toward completion and expected publication within the year.

### **III. Challenges and Key Issues**

Some events and knowledge products outlined under the current work plan (i.e., knowledge products, training, workshops, and similar initiatives, etc.) faced some delays owing to COVID-19-related restrictions, but others proceeded as scheduled, particularly those that could be carried out well virtually. Events which involve careful discussions of high-level sector plans and important issues were deemed better held under face-to-face (F2F) setting and had to be pushed back until in-person meetings become more feasible. The sixth RWG Meeting and the 19th TSCC Meeting which will discuss strategic directions and priorities for the railway subsector and the transport sector as a whole, respectively, are now scheduled to be held on 17-20 October 2022 in Almaty, Kazakhstan..

Moreover, some events that were originally not part of the current work plan had been initiated and successfully completed over the work plan period. These include the Crash Investigation Training for Uzbekistan and the Kyrgyz Republic, the Online Training on the Road Safety Problem, and the Workshop on Knowledge Sharing on Road Asset Management Systems, to name a few.

With respect to knowledge products, a number of KPs were completed within the work plan timeframe despite some pandemic-related delays especially during the initial months of the work plan period. For other KPs, however, activities requiring field research and in-person collaboration were slowed by COVID-19-related constraints. Timelines for these KPs have been pushed back as a result, and CAREC transport aims for their completion under the coming year's work program.

On a positive note, the budget shortfalls and funding realignments that beset the CAREC transport in the previous year had been resolved by mobilizing new funding from other sources to support new activities in CAREC transport.

As the pandemic began to ebb in recent months, borders have started reopening and travel restrictions are being eased gradually. As a result, tourism and travel industries are slowly recovering from the pandemic and markets are reintegrating into global value chains. Accordingly, the trade and transport sectors are also starting to bounce back after grappling with the challenges of the drawn-out pandemic.

But just as the world economy is starting to rebound, new challenges have emerged such as surging oil prices (particularly for non-oil exporting countries) and fresh disruptions to the supply chain as a result of Russia's invasion of Ukraine. Depending on how long the conflict drags on, however, the extent of its potential impact on the trade and transport sectors in CAREC MCs is still unclear at this point.

### **C. Work Program for Coming Year**

The CAREC program will offer technical assistance to CAREC countries in the remaining period of 2022 onward through knowledge products and workshops on the five pillars: roads and road asset management, road safety, railways, cross-border facilitation, and aviation.

#### **Cross border transport and logistics.**

- **Developers' Guide on Planning and Design of Logistics Centers.** The CAREC program has identified an increasing interest in developing logistics centers among some member

countries. Logistics centers are in substance areas specialized to accommodate warehouses, distribution centers, transport and logistics facilities and associated services. A set of knowledge materials on logistics centers will be prepared which would include a technical guide on the features, business model, and roadmap for implementation, among others. Workshops will be organized to provide guidance to decision makers, planners, investors, private sector and other concerned actors on market, institutional, financial, and operational aspects relevant to the design, planning and the operations of logistics centers.

- **Aviation Cargo Study.** This study, which looks comprehensively at aviation but with focus on cross-border transport and logistics, will provide an overview of the state of aviation freight logistics services in CAREC MCs – including regional cargo operations by land, air and sea – as well as analyze logistics parameters across various modes of transport and multimodal combinations. The study aims to help guide CAREC MCs in prioritizing national policy actions and regional agreements to facilitate the development of competitive aviation freight and logistics services.

#### **Roads and road asset management.**

- **Study on Road Funds and Road User Charges in the CAREC region.** The Study n is in progress and is planned for publication in Q3 2022. The report reviews the different types of road user charges being collected in CAREC MCs, and the extent to which the revenues they generate are earmarked for road maintenance. The report also examines the degree to which actual road maintenance budgets are able to cover estimated road maintenance requirements in CAREC MCs.
- **Assessment of Performance-based Road Maintenance Contracts in the CAREC region.** This report reviews ongoing and completed PBC pilots in CAREC MCs. It examines CAREC MCs' experiences in using PBCs for the management, maintenance, and rehabilitation of their road networks, particularly in terms of improvements in road asset conditions, cost savings, as well issues and challenges encountered during implementation. It also discusses lessons that can be drawn from these experiences and identifies best practices that can be replicated by other CAREC MCs. The report is planned for publication in Q4 2022.

#### **Road safety.**

- **Crash Investigation Training.** A 3-day training course on Crash Investigation will be organized for Georgia, Kazakhstan, Mongolia, Pakistan, and Tajikistan for the remainder of the current year. The course will discuss how accurate crash data aids understanding of why crashes occur and how they can be prevented, and how they can be used to guide evidence-informed measures and policy decisions relating to road safety. Moreover, the course will provide participants with the skills needed for managing a traffic crash scene and for collecting accurate crash data.
- **Launch of Road Safety Engineering Manual 5 – Star Ratings for Road Safety Audit.** This manual, which is fifth in the series to the CAREC Road Safety Engineering Manuals, will be launched in October 2022. The manual introduces the concept of Star Ratings for road safety audits and provides a brief overview of Road Safety Audits and the iRAP methodology, as well as different approaches for combining RSAs and the iRAP methodology to improve the safety of road designs.

## Railways.

- **Sixth Railway Working Group Meeting.** The pandemic restricted most activities and disrupted work plans and timetables especially at its onset. As a result, the sixth RWG meeting, which was originally scheduled to take place in March 2020 in Istanbul, Turkey, did not proceed as planned. But as the pandemic starts to wane and restrictions are slowly being eased, the railway subsector is pressing ahead with its plans to convene the working group for its sixth meeting in October 2022.

## Aviation.

- **Aviation Cargo Study.** The Study aims to guide CAREC governments in prioritizing national policy actions and regional agreements to facilitate development of competitive aviation cargo and logistics services. Specifically, the study will compile background information on aviation freight logistics services in CAREC member countries and provide an overview of the regional freight operations by land, air and sea. The analysis will focus on logistics parameters of various modes of transport and multimodal combinations. The study will be a good reference material for regional aviation companies, air terminal operators and logistics companies. Webinars will be organized in late 2022 to disseminate the findings of the Study.
- **Low-Cost Carriers Study.** Low-cost carriers (LCCs) are starting to gain ground in the CAREC region. Yet the CAREC aviation market is still relatively unpenetrated despite the launching of new local LCCs and expansion of foreign counterparts. Higher LCC penetration can help stimulate demand, accelerate air transport growth, as well as drive tourism growth in the domestic, regional (i.e., within CAREC) and international segments. In this context, this study aims to help CAREC governments and stakeholders gain a better understanding of the potential role of LCCs in driving a new phase of passenger growth and tourism development in the region. It will provide an overview of current and historical LCC operations in the CAREC region and assess opportunities for LCC growth in the post-pandemic environment.
- **Regional Aviation Forum.** The Regional Aviation Workshop is planned to be organized in 2023. The Forum will assess the current status of the aviation sector and provide an update on CAREC's role in facilitating regional cooperation in aviation. It will discuss priority topics for CAREC aviation, including: (i) opportunities for aviation industry growth in the post-pandemic environment; (ii) continued air transport market liberalization for both cargo and passenger services, (ii) facilitation of regional international travel within CAREC and (iii) adoption of health-related aviation protocols and standards and cooperation on public health measures. The workshop will also initiate and facilitate the development of a new long-term strategy for CAREC aviation.

### Appendix 1: Outcome indicators by pillar

<b>Transport and Logistics Facilitation:</b> Efficiency improvements in BCPs, customs clearance, immigration procedures and cross-border logistics.				
<b>Average speed by corridors, speed with delay (SWD; km/hr)</b>	<b>Corridor</b>	<b>2020</b>	<b>2021</b>	<b>Change</b>
	Overall	20.7	18.9	(1.7)
	1	27.6	20.7	(6.9)
	2	24.4	26.3	+1.9
	3	20.8	21.7	+0.9
	4	16.4	13.7	(2.7)
	5	8.6	10.6	+2.0
	6	20.3	20.7	+0.4
<b>Time taken to clear a border crossing point, by corridor, country and BCP (hour)</b>	<b>Corridor</b>	<b>2020</b>	<b>2021</b>	<b>Change</b>
	Overall	18.9	24.0	+5.1
	1	27.9	51.6	+23.7
	2	22.4	11.7	(10.8)
	3	6.8	5.0	(1.8)
	4	8.1	25.7	+17.7
	5	40.2	25.2	(15.0)
	6	14.0	11.8	(2.2)
<b>Cost incurred to clear a border crossing point, by corridor, country and BCP (\$)</b>	<b>Corridor</b>	<b>2020</b>	<b>2021</b>	<b>Change</b>
	Overall	202	323	+121.3
	1	422	1083	+660
	2	116	103	(13)
	3	91	79	(12)
	4	97	85	(12)
	5	300	279	(20)
	6	136	123	(13)
<b>Logistics Perception Index (LPI)</b>	<b>Country</b>	<b>2016</b>	<b>2018</b>	<b>Change</b>
	Afghanistan*	2.14 [150]	1.95 [160]	(0.19)
	Azerbaijan	-	-	
	PRC	3.66 [27]	3.61 [26]	(0.06)
	Georgia	2.35 [130]	2.44 [119]	+0.09
	Kazakhstan	2.75 [77]	2.81 [71]	+0.06
	Kyrgyz Republic	2.16 [146]	2.55 [108]	+0.39
	Mongolia	2.51 [108]	2.37 [130]	(0.13)
	Pakistan	2.92 [68]	2.42 [122]	(0.50)
	Tajikistan	2.06 [153]	2.34 [134]	+0.28
	Turkmenistan	2.21 [140]	2.41 [126]	+0.20
	Uzbekistan	2.40 [118]	2.58 [99]	+0.17
<b>Roads and Road Asset Management:</b> Improvement on the CAREC Road Asset Management maturity model*				
	<b>Corridor</b>	<b>2020</b>	<b>2021</b>	<b>Change</b>

<b>Average speed of traffic without delay (SWOD; km/hr)</b>	Overall	42.9	41.6	(1.4)
	1	69.5	63.5	(6.0)
	2	46.6	49.7	+3.1
	3	41.2	39.4	(1.8)
	4	33.8	36.0	+2.2
	5	28.4	27.5	(1.0)
	6	40.6	39.6	(1.0)
<b>Perception of highway quality improved (World Economic Forum Global Competitiveness Index)</b>	<b>Country</b>	<b>2018</b>	<b>2019</b>	<b>Change</b>
	Afghanistan*	-	-	-
	Azerbaijan	4.78 [34]	5.16 [27]	+0.38
	PRC	4.58 [42]	4.58 [45]	0.00
	Georgia	3.79 [80]	3.79 [81]	0.00
	Kazakhstan	3.23 [106]	3.59 [93]	+0.36
	Kyrgyz Republic	2.81 [118]	3.05 [113]	+0.24
	Mongolia	3.14 [110]	3.08 [112]	(0.06)
	Pakistan	3.94 [69]	4.04 [67]	+0.09
	Tajikistan	4.53 [44]	4.49 [50]	(0.04)
	Turkmenistan	-	-	-
Uzbekistan	-	-	-	
<b>Railways: Improved service level and operation efficiency of railways</b>				
<b>CPMM average commercial speed, SWD (km/hr)</b>	<b>Corridor</b>	<b>2020</b>	<b>2021</b>	<b>Change</b>
	Overall	16.8	12.1	(4.7)
	1	20.2	14.6	(5.7)
	2	5.4	15.2	+9.8
	3	17.5	13.4	(4.1)
	4	13.5	7.5	(6.0)
	5	-	-	-
6	13.4	13.3	(0.1)	
<b>CPMM average commercial speed, SWOD (km/hr)</b>	<b>Corridor</b>	<b>2020</b>	<b>2021</b>	<b>Change</b>
	Overall	42.2	38.0	(4.2)
	1	67.3	56.2	(11.1)
	2	7.9	15.5	+7.6
	3	19.6	14.9	(4.7)
	4	18.4	14.8	(3.6)
	5	-	-	-
6	24.4	24.6	+0.2	
<b>Perception of railway quality improved ((World Economic Forum Global Competitiveness Index for railways)</b>	<b>Country</b>	<b>2016-2017</b>	<b>2017-2018</b>	<b>Change</b>
	Afghanistan*	-	-	-
	Azerbaijan	4.15 [29]	4.69 [20]	+0.54
	PRC	5.07 [14]	4.80 [17]	(0.27)
	Georgia	3.85 [38]	3.84 [39]	(0.02)
	Kyrgyz Republic	2.37 [81]	2.45 [76]	+0.08

	Mongolia	2.73 [69]	2.80 [69]	+0.07
	Pakistan	3.08 [53]	3.33 [52]	+0.26
	Tajikistan	3.74 [41]	3.74 [41]	0.00
	Turkmenistan	-	-	-
	Uzbekistan	-	-	-

\* ADB placed on hold its assistance to Afghanistan effective 15 August 2021.

## Appendix 2: Transport Sector Activities from Q4 2022 Onwards

Pillar	Type	Activities	Timeframe
Cross border transport and logistics	KPs	Developers' Guide on Planning and Design of Logistics Centers	Q4 2022
		Middle Corridor Assessment	Q4 2022
Roads and road asset management	KPs	Study on Road Funds and Road User Charges in the CAREC region	Q4 2022
		Assessment of Performance-based Road Maintenance Contracts in the CAREC region	Q4 2022
Road safety	Event	Webinar on Road Safety Engineering Manual 5 – Star Ratings for Road Safety Audit	2023
		Crash Investigation Training (Georgia, Kazakhstan, Mongolia, Pakistan, Tajikistan)	Q4 2022
	KP	Road Safety Engineering Manual 6 – Blackspot Investigation, Analysis and Treatment	2023
Railways	Event	Sixth Railway Working Group Meeting	Q4 2022
Aviation	Event	Regional Aviation Forum	2023
	KPs	Aviation Cargo Study	2023
		Low-Cost Carriers Study	Q4 2022
Overall transport	Event	19th Transport Sector Coordinating Committee Meeting	Q4 2022
	KP	2022 CAREC Transport Sector Progress Report	Q3 2022