

Asset Management

The PAS55 journey in Highways England Area 10

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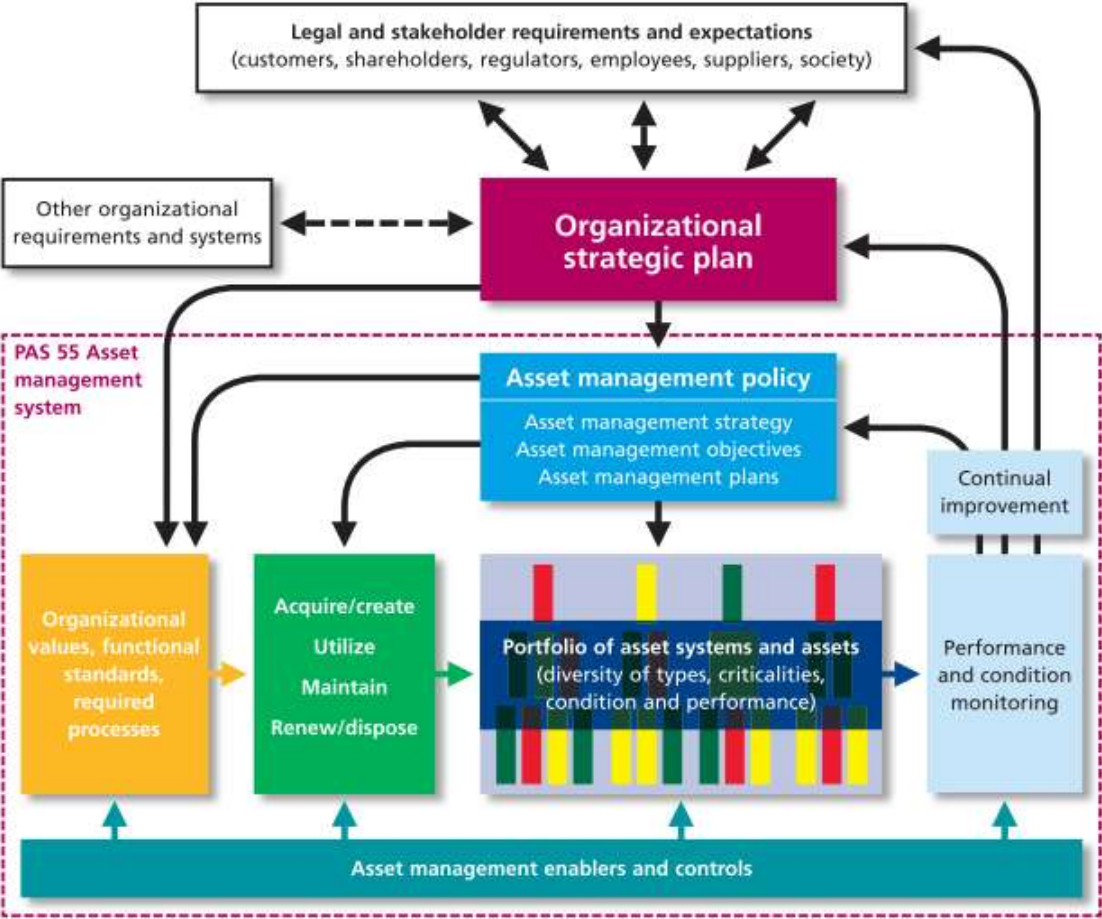
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Industry Context

- The growth of asset management through the IAM promotion of PAS 55 and now ISO55000.
- An overriding need to understand what the asset is and more importantly what condition it's in – underpins the best use of available funding.
- Asset management moving more to the fore in the highways sector
 - Highways England are driving for the strategic road network
 - HMEP are leading for local authority networks.
- Highways England is on a journey to become a high performing asset management organisation
- Local Authorities are being driven by government to adopt AM through incentivised funding.
- This presentation concentrates on the PAS 55 journey for BBMM and hopefully helps to answer the question “Why bother”

What is PAS55



BSI PAS 55-1:2008
Asset Management

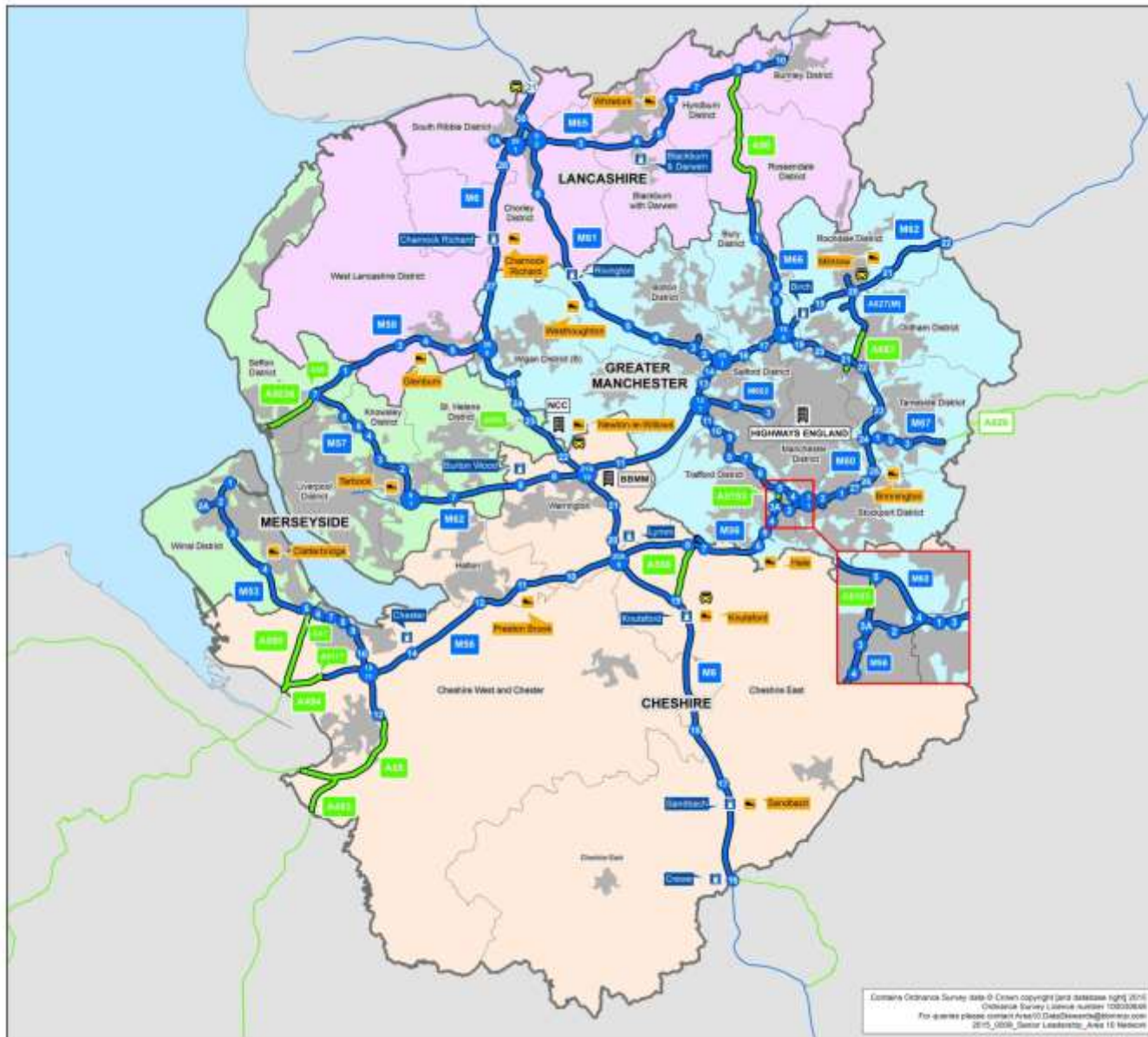
“Optimising the delivery and performance of physical assets”

The Institute of Asset Management (IAM)

PAS 55 Maturity levels



Maturity Level 0	Maturity Level 1	Maturity Level 2	Maturity Level 3	Maturity Level 4
<p>The elements required by PAS55 are not in place.</p> <p>The organisation is in the process of developing an understanding of PAS55.</p>	<p>The organisation has a basic understanding of the requirements of PAS55.</p> <p>It is in the process of deciding how the elements of PAS55 will be applied and has started to apply them.</p>	<p>The organisation has a good understanding of PAS55.</p> <p>It has decided how the elements of PAS55 will be applied and has started to apply them.</p>	<p>All elements of PAS55 are in place and are being applied and are integrated.</p> <p>Only minor inconsistencies may exist.</p>	<p>Using processes and approaches that go beyond the requirements of PAS55.</p> <p>Pushing the boundaries of Asset Management development to develop new concepts and ideas.</p>



The Area 10 Strategic Road Network.

Highways England Area 10 key Assets

Structures	2223 inc 964 bridges and 720 gantries
Pavement	1304 c/way km (1161 km m'way)
Lighting Columns	16,9954
VRS	1182 km
Boundary fencing	769 km
Gullies	32,741
Traffic Signals	23 sites
Piped drainage	3,152 km
Traffic signs	11,650

Area 10 asset management requirements

- Asset Support Contract
- Outcome-based Asset Maintenance and Operational Requirements (AMOR)
- Risk-based approach to integrated asset management
- Dedicated specification for Integrated Asset Management
 - Defines asset management framework
 - Requires competent people (IAM framework)
 - Defines asset data criticality and management
 - Requires minimum Competency Grades - PAS55 maturity level 2 within six months of commencement and maturity level 3 within 2 years
 - Defines Employer systems interfaces and data update requirements

PAS 55 - the journey



- Mapped processes between HE/ Service Providers onto PAS 55 Elements
- Trial application in Areas 2 and 4 in 2010-11
- Area 10 ASC defined asset management in terms of the maintenance contract (contract commenced Nov 2012)
- Highways England accept IAM endorsed assessor April 2013. (Area 10)
- Built on initial Area 4 trial and achieved accreditation Nov 2013. (not a contractual requirement)
- The first highway maintenance service provider/organisation to achieve PAS55
- Gap analysis in Area 10 Sept 2013 (applied key learning from Area 4).
- Full assessment in Area 10 Dec 2013 leading to confirmation of accreditation to maturity level 3 May 2014
- Surveillance audits and continuous improvement continues

PAS 55 – the process

- Preliminary Assessment - Methodology
 - Advance planning meeting with key people and advance request for Evidence – focused the contract team on the PAS55 journey
 - Interviews – cross section of 9 staff highlighted line of sight and key communications
 - Capture data in adapted PAS55 Assessment Methodology (PAM) format (modified to HE contract elements) - contract Annex sub-set of 69 questions (out of a possible 121), covering 18 elements (out of 28 possible)
 - Preliminary Assessment Report - initial PAM score and Gap Analysis with required actions

PAS 55 – the process

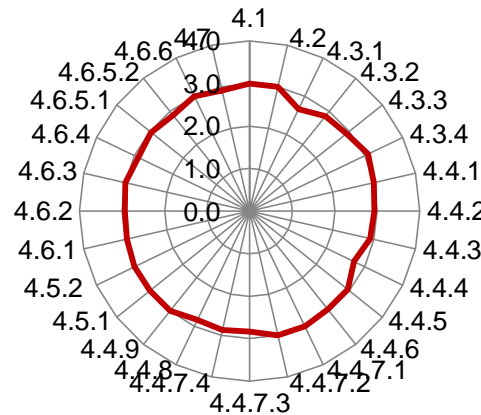
- Full Assessment - Methodology
 - Request for updated and additional evidence – fully prepared the assessor and contract teams
 - Interviews – full cross section of key roles and functions (mainly people *not* involved in preliminary assessment) – 23 people
 - Excellent and open cooperation – key success factor
 - Capture data in adapted PAM format - available as ‘Annex 25’ contractual coverage and full coverage
 - Reviewed updated evidence post-interviews – confirmed and enhanced some scores

PAS 55 – the final assessment

- Full Assessment Report
 - PAM scoring plus Summary Report text – specialist sector views
 - Range of Element scores 2.8 to 3.1 - Mean score 3.0
 - 9 Elements scored 2.8 to 2.9 – improvement actions agreed

No.	Clauses
4.1	General requirements
4.2	Asset management policy
4.3.1	Asset management strategy
4.3.2	Asset management objectives
4.3.3	Asset management plan(s)
4.3.4	Contingency planning
4.4.1	Structure, authority and responsibilities
4.4.2	Outsourcing of asset management activities
4.4.3	Training, awareness and competence
4.4.4	Consultation, participation and communication
4.4.5	Asset Management System documentation
4.4.6	Information management
4.4.7.1	Risk management process(es)
4.4.7.2	Risk management methodology
4.4.7.3	Risk identification and assessment
4.4.7.4	Use and maintenance of asset risk information
4.4.8	Legal and other requirements
4.4.9	Management of Change
4.5.1	Life Cycle Activities
4.5.2	Tools, facilities and equipment
4.6.1	Performance and condition monitoring
4.6.2	Investigation of asset-related failures, incidents and nonconformities
4.6.3	Evaluation of compliance
4.6.4	Audit
4.6.5.1	Corrective & Preventative action
4.6.5.2	Continual Improvement
4.6.6	Records
4.7	Management review

Assessment Page



The RADAR chart shows the average score range per clause

What did this mean for BBMM?

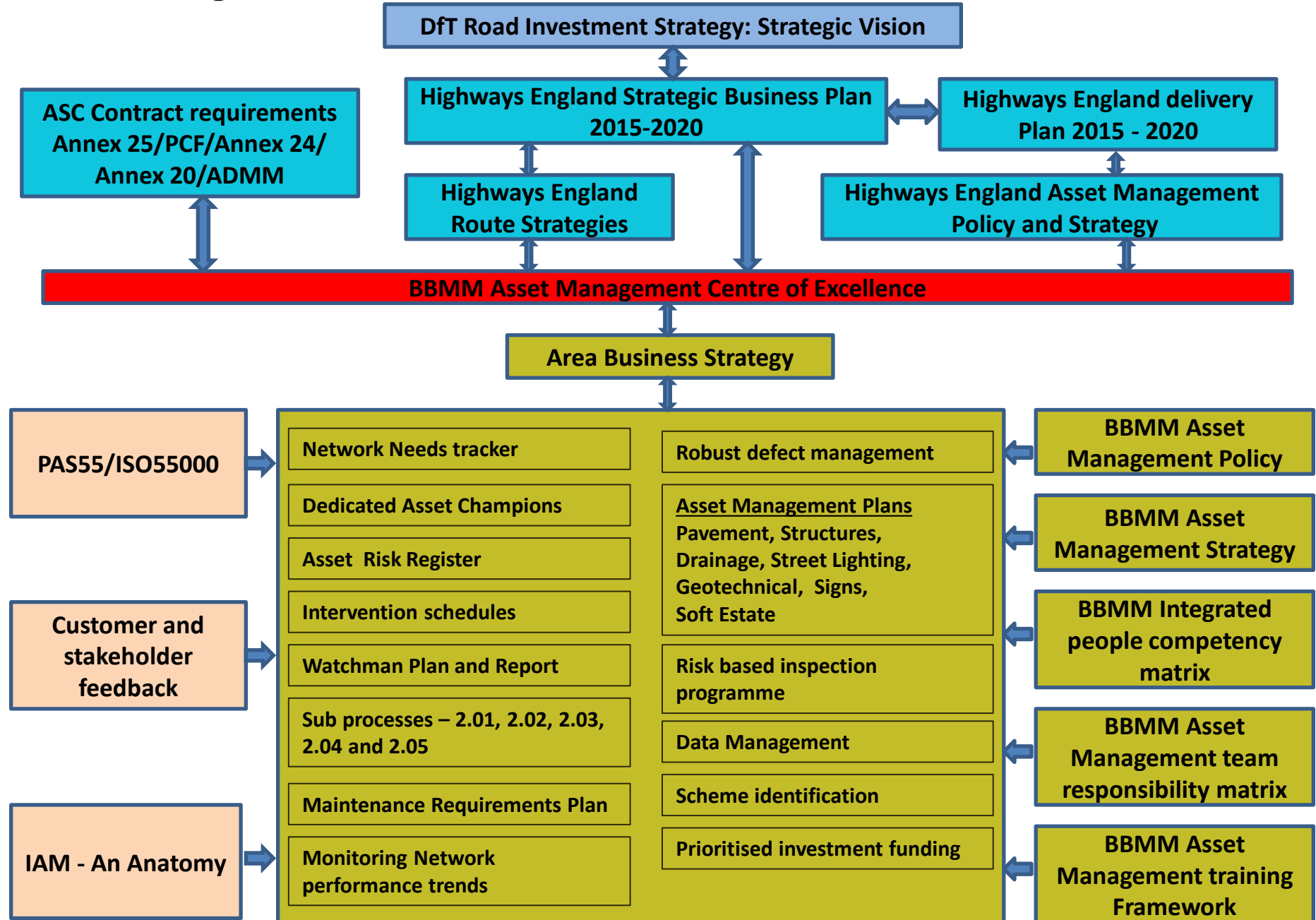
- Senior leadership buy-in to *'asset management as a core business function'* (quality submission promise)
- Resourcing structure with asset management at its centre (Business model)
- Business Strategy – *'to become recognised as the Highways England's leading service provider; delivering HE's strategic outcomes through excellent professional service in collaboration with our supply chain partners to provide a safe, serviceable and reliable strategic road network for the benefit of customers and stakeholders...'*
- Introduction of Asset Champions
- Developed:
 - AM Policy Statement
 - Strategy Framework
 - Centre of Excellence
 - People Competency framework
 - Network Risk Model
 - Network Needs process

Asset Champions



- Key asset group Champions: Pavements, Structures, Street Lighting, Traffic Signals, Geotechnical, Drainage, Environment, Signs, Line markings, VRS, Fencing, Technology
- Own individual asset groups and develop/maintain intelligence led asset strategies – *effective asset stewardship and stronger governance*
- Develop risk based inspection and survey programmes
- Developed Asset Management Plans
- Asset data analysis - *needs based scheme identification*
- Risk manage defects through Lump Sum or Renewal Schemes
- Determine the appropriate solution at Value Management – *justified life cycle need*
- Determined routine maintenance activity

Asset Management in BBMM



The benefits of PAS 55 to BBMM

Added value to the client through

- A PAS 55 recognised and integrated system from network needs through scheme identification to best solution delivery ([asset management framework](#))
- Clear identification of network asset needs
- Analysis and mitigation of asset risks
- A robust long term programme of work aligned to available investment
- Ability to adapt the programme to changing priorities. ([through the asset champions](#))

Future Challenges - for the industry and strategic highways



- Highways England continued transformation as a Government Owned Company in first 5 year roads period:
 - Strategic outcomes - Objective to provide a 'capable asset'
 - Licence requirement – improve asset information quality.
 - HE asset management framework and process development
 - Implementation of IAMIS (Integrated Asset Management Information System)
 - New HE delivery model (ALDM)
- Transition from PAS55 to ISO55000
 - need to clarify the business case – what are the implications?
 - confirm the mandatory and 'nice to have' requirements
 - embed the 'line of sight' into service provider contracts
- Incentive funding for local authorities
 - Need to adopt asset management approach to maintenance
 - Need to be able to demonstrate adoption of asset management approach

Future Challenges - for BBMM

- Implementation of ISO55000 – what will it mean, mapping our journey to asset management excellence?
- Helping Highways England become a more mature high performance Asset Manager – within existing and future contracts
- Contract duration - possible extension and what comes next.
- Continuous Improvement (development of key processes and tools):
 - Development of GIS based asset data solutions – intuitive intelligence
 - Smarter working – Drones, BIM
 - Intervention schedules – 10 years and beyond

Thank you for listening

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