# Asset Management Data Standard

Capital & Renewal Forward Works AMDS Candidate Release Overview 14 March 2023



New Zealand Government

# **Opening Karakia**

Ka rongo tātou i te reka o te korero Ko ngā tikanga Ko ngā kawa Ko te whanaungatanga Ko te manaakitanga Ko te kotahitanga Hei korero ma te hinengaro, ma te wairua, ma te tinana, mā tātou, te whanau o te Waka Kotahi. Kaikarakia (leader): Tūturu whakamaua kia tina Katoa (all): Tina Kaikarakia: Haumi ē, hui ē, Katoa: Tāiki e



### What's Included

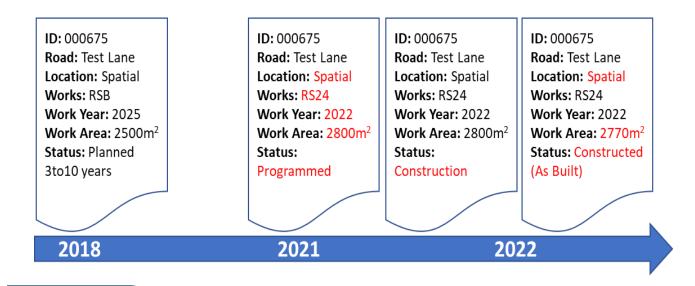
#### Planning intent – 30yr plan vision through to continuous programmes

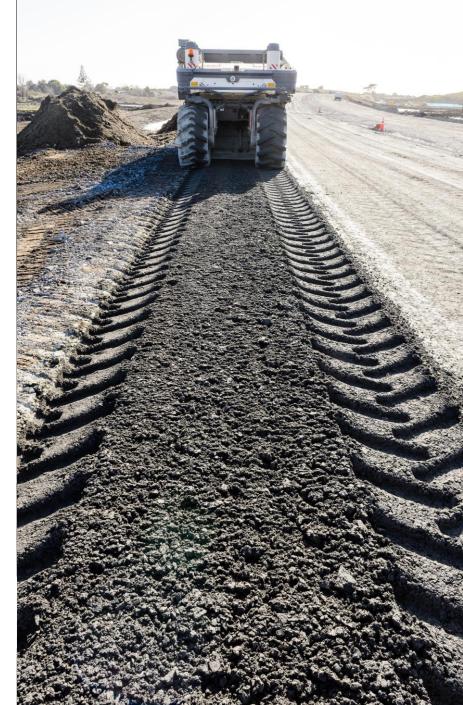
- Existing transport network planning
  - Safety Improvement Programs including multimodal access & safety, widenings, roundabouts and associated upgrades
  - Transport Renewals (all assets including pavement, surfacing, bridges, etc)
  - Resilience initiatives (climate adaptation etc)
- Future transport network planning
  - Greenfield Capital Programs (including revocation or disposal of existing infrastructure)
  - Subdivisions and other spatial planning developments including Mode Shift, walking, cycling and PT initiatives. Works programs only for appropriate works items
  - Resilience initiatives (climate adaptation etc)

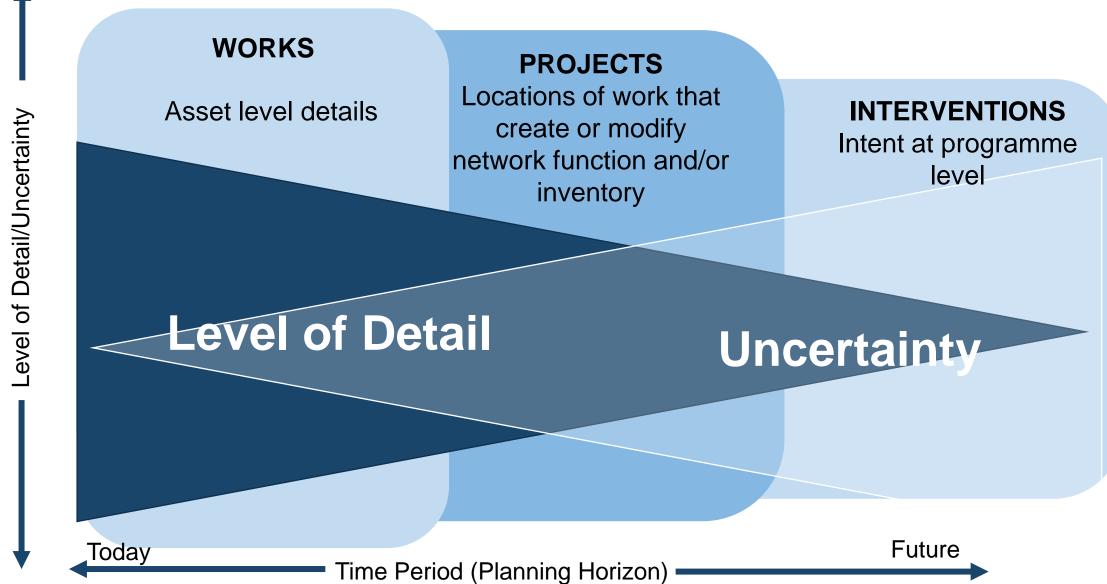


#### **Core Features**

- Asset Inclusive: Structured to accommodate all assets.
- **Status Tracking**: Each element will be tracked through its life from identification through to completion/closing. A status flag will identify the key stage of the element at any point in time.
- **Temporal**: Ability to roll back the clock to view historical information







# **Planning Workflow**

#### **INTERVENTIONS**

#### Vision of intent

- Primary Outcome
- High Level
   Programme
- Categorisation (committed, planned or possible future)
  - Indicative Budget
    - TIO link
    - RLTP link
  - Indicative
     Timeframe
  - Location
- Owner
- One to Many relationship

# CONTINUOUS PROGRAMMES

#### Vision of work

- Location
- Budget, AC & WC
- Timing, Duration
- Main Works & Associated Risks
- Approvals, Reasons
- Delivery Contractor
- Carbon
- One to Many
- relationship IMPROVEMENT PROGRAMMES

#### WORKS

#### Asset level

- Location, Extent/Quantity & Timing
- Work Category & Type

**ANCILLARY** 

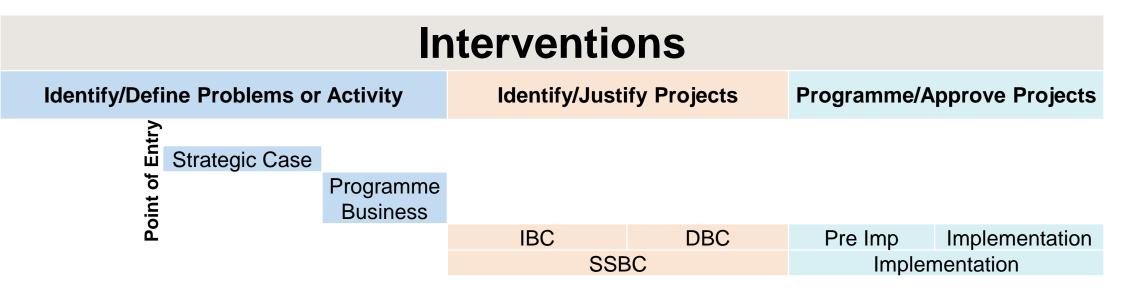
ITEM

**INVENTORY** 

- Cost & Source
- Status
- Approvals/Justification

### Interventions

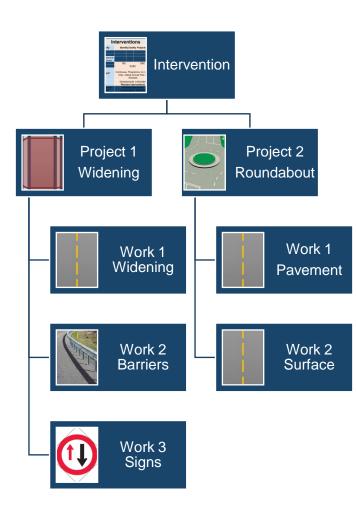
Vision of intent – Possible Future, Planned, Committed



| Possible Futur                   | e Interventions                   | Planned Interventions                            | Committed Interventions |
|----------------------------------|-----------------------------------|--|-------------------------|
| problems and risks<br>Identified | problems/outcome<br>types defined | Preferred Intervention types/projects identified | Intervention committed  |

## **Projects**

Vision of Work



- Single or groups of assets or activity
- Capital projects Intervention to Project at single stage business case
- Renewal projects primary planning table
- Information captured at this level includes general location, what the project is, estimate timing, duration and confidence of delivery and capture of project level decisions. A project is not linked to any infrastructure, however the record remains active until all associated Works are completed.
- One to many links to Works items
- Aggregate information up from Works items to provide visibility of
  - Assets involved
  - Quantity of Work
  - Cost of Work

#### Works

| Project<br>Type: Resurfacing<br>Location: Polygon<br>Timing: 2025 to 2028<br>Confidence: Approved<br>Value: \$80k<br>Delivery Contract: NOC | Works<br>Asset Class: Drainage<br>Asset Type: Channel<br>Name: Test Road<br>Location: Polygon (x2)<br>Side/Lane: Both<br>Works: Reshape SWC<br>Work Year: 2025<br>Work Area: 1000m <sup>2</sup> | Works<br>Asset Class: Roadway<br>Asset Type: Surface<br>Name: Test Road<br>Location: Polygon<br>Side/Lane: Both<br>Works: RSB<br>Work Year: 2025<br>Work Area: 2500m <sup>2</sup> | Works<br>Asset Class: Drainage<br>Asset Type: Channel<br>Name: Test Road<br>Location: Polygon<br>Side/Lane: Left<br>Works: Reshape SWC<br>Work Year: 2024<br>Work Area: 200m <sup>2</sup> | Works<br>Asset Class: Roadway<br>Asset Type: Surface<br>Name: Test Road<br>Location: Polygon<br>Side/Lane: L1<br>Works: RS24<br>Work Year: 2025<br>Work Area: 1350m <sup>2</sup> |
|---|---|---|---|--|
| Longer Term   |   |   |   | Term   |

# **System Alignment**

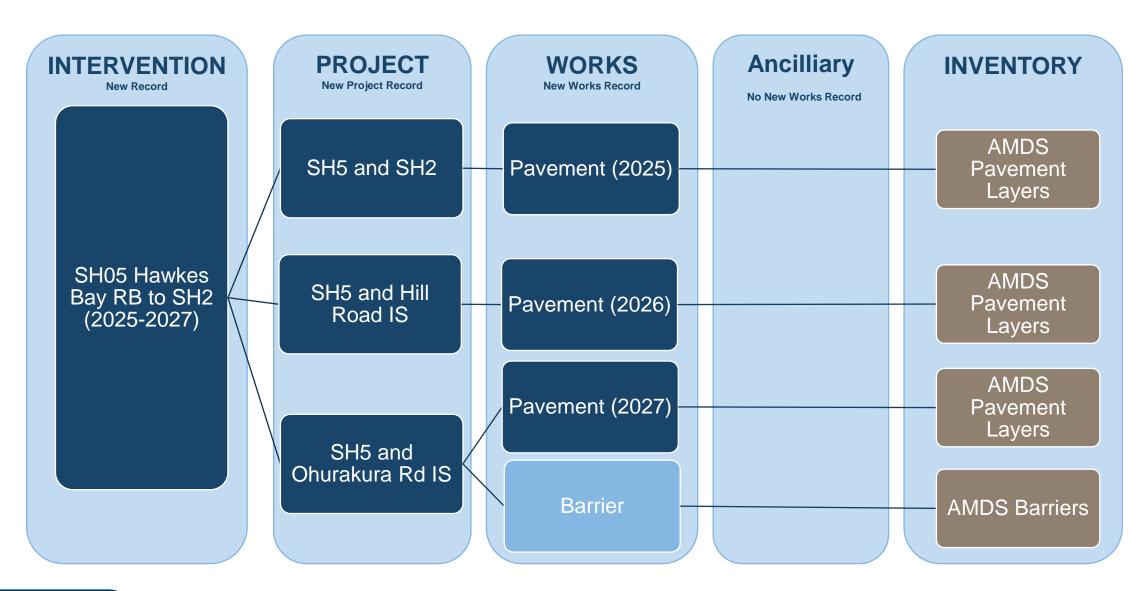
anzta.govt.nz/planning-and-investment/planning/30-year-plan/baseline-network-version/network-map/ Taup 41 (1 of 7) ▶ 🗆 X SH5 Hawkes Bay RB to SH2 Activity ID 148968 Waka Kotahi Region Central Local Government Hawkes Bay Region Intervention Name SH5 Hawkes Bay RB to SH2 Intervention Owner NZTA (Hawkes Bay) Intervention Status Planned Healthy and Safe Primary Outcome People Secondary HAWKE'S Outcome BA Secondary WATU-WHANGAN Outcome 2 Cofoty improvements Zoom to ... Eagle Technology,

| Transpor            | t investme | nt Online    |            | AGENCY        |          |      |
|---------------------|------------|--------------|------------|---------------|----------|------|
| lome                | Activities | Reviews      | Claims     | Reports       | More ▼   |      |
| mn                  |            |              | Not Yet    |               | Claim    | ning |
| rogramn<br>rategies | (38) Packa | iges (2) App | roved (68) | Approved (39) | Complete | (7)  |

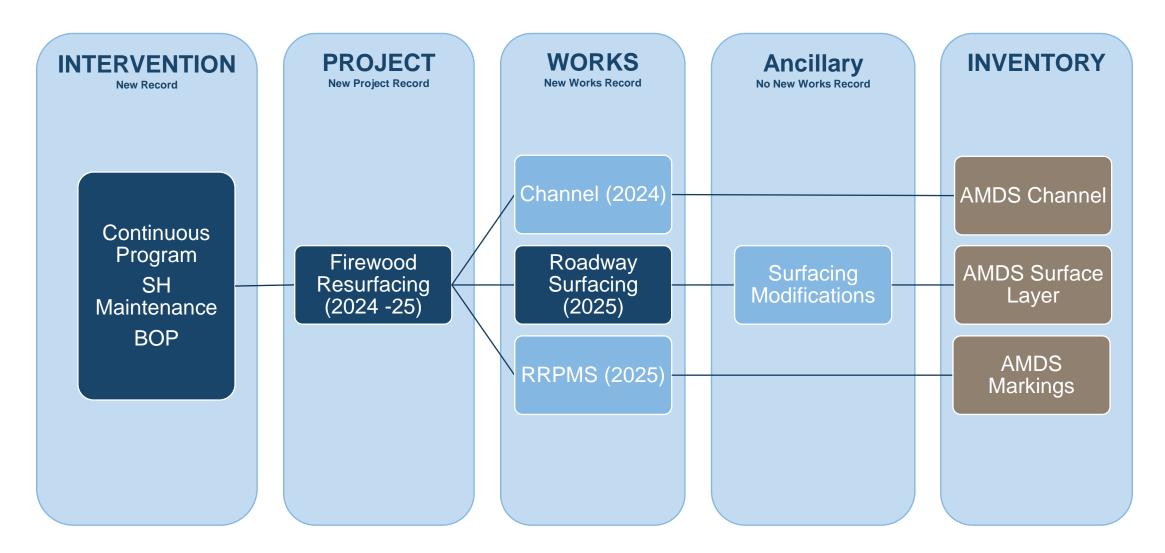
<u>Activities</u>  $\rightarrow$  <u>All</u>  $\rightarrow$  NZTA (Hawkes Bay)  $\rightarrow$  SH5 Hawkes Bay RB To SH2

| Improvement activity<br>outline   | Improvement activity outline  |
|---|---|
| Benefits and measures   | Unique identifier - Activity ID ?   |
| Geospatial information  | 146306  |
| Economic and Financial<br>Summary   | *Activity name     SH5 Hawkes Bay RB to SH2   |
| NZTA assessment of<br>business case                                       | SAP initiative name   |
| Investment<br>Prioritisation Profile                                      | SH5 Hawkes Bay RB to SH2  |
| Supporting documents  | SAP initiative id 148722021   |
| <u>Phases summary</u>   | Public name ?<br>SH5 Hawkes Bay RB to SH2   |
| <u>Pre-implementation* -</u><br><u>SH5 Hawkes Bay RB to</u><br><u>SH2</u> | Your reference ?  |
| Implementation - SH5<br>and SH2 IS  | NZTA safety identifier ?  |
| Implementation - SH5<br>and Hill Rd IS                                    |   |
| Implementation - SH5<br>and Ohurakura Rd IS                               | Business case outline   |
| Implementation - SH5<br>Matea Rd to SH2                                   | This section provides a link to the earlier development stages of the Business Case.  |
| Property - SH5 Hawkes<br>Bay RB to SH2                                    | Activities included in the NLTP should be linked to a programme business case. Where the activity does not link to a PBC, a completed PoE will need to be uploaded for funding approval.                  |
|   | See the <u>Business Case Approach Guidance</u>  |
|   | Select the programme business case this activity arose out of   |
| History of changes  | Road to Zero Speed and Infrastructure PBC V Show details  |
| Print record  | Upload any supporting information for the inclusion of the activity into the NLTP.<br>Where the activity is not linked to a PBC, upload any supporting information for the inclusion of the activity into |
|   | the NLTP (such as completed record of PoE document) Choose File No file chosen  |
|   |   |
|   | *Strategic context ?  |
|   | Hawkes Bay Packaged Projects Delivering safety related improvements   |
|   | What is the particular transport problem / opportunity of the programme business case (should it be a component activity) that relates to this activity?  |
|   | Reduction in 40% DSI Over 10 Years  |
|   | Project Investment Story  |

### Planning Workflow – Capital v2



### **Planning Workflow – Renewal**



### **Treatment Lengths**

- Two groups for assigning treatment extents.
  - Linear assets: Treatment Lengths or Treatment Segments (equivalent to start/end location)
  - Point assets: Full Asset
- Linear asset Activities (Pavement, Surfacing, Pathways, Drainage, Shoulder, Barriers/Railings) have associated TL definition.
  - Different TL segmentation for each asset type
  - Base TL segmentation established using industry accepted practice for each asset type
  - First Treatment: Changes to Work Extent (start and end on the first treatment on a site) will drive changes to TL segmentation.
  - Subsequent Treatments: Work Extents will auto update to match the TL or first Work on the site.
  - Lane or Side definitions accepted



### Attributes

#### INTERVENTION

#### UUID Intervention Name Source Intervention Owner Intervention Status Intervention Type Total Expected Capital Cost Start Estimate (delivery phase) TIO Extract TIO Activity Name

TIO Activity ID Programme Business Case Name Programme Business TIO Activity ID Strategic Case Name Strategic Case TIO Activity ID Region RCA Link RLTP Link RPTP Link Geometry Primary Outcome

#### PROJECT

#### UUID **Project Name** Network Section UUID Network Section Name Geometry **Project Status Project Approval Status Primary Activity Class** Primary Work Category Implementation Start Financial Year Implementation Start Month Implementation Duration **Total Estimated Capital Cost Bottom-up Calculated Value** Main Treatment /Intervention Category Main Treatment /Intervention Type Associated Risks - Owner Associated Risks -Tmt Associated Risks -Asset Embodied Carbon Reason Contract Awarded? Associated Main Contract Associated Main Contract UUID Contracted Party

#### WORK

Work Item UUID Geometry Linked Project UUID Linked Project Name Network Section UUID Network Section Name Work Item Category Work Item Type Asset UUID **Teatment length UUID Treatment Length Name** Treatment Length Type Side Start m End m Lane m Activity Class Work Category Main Work Type Work Start Financial Year AMDS Inventory Class **AMDS Inventory Type** Quantity Quantity unit Treatment Cost Cost Source On-Cost % Unit Rate

#### ANCILLARY

Ancillary Item UUID Ancillary Item Name Ancillary Item Type

Linked Work Item UUID Linked Work Item Type Linked Project UUID Linked Project Name Quantity Quantity unit Cost Cost Source Unit Rate

# Wrap Up

- Candidate release Friday 17th March 2023
- Feedback will be received through <u>AMDS@NZTA.govt.nz</u>
- Subscribe to the AMDS e-newsletter for first notice of when the slide pack, candidate release and webinar recording are available on our website:

https://www.nzta.govt.nz/roads-and-rail/asset-management-datastandard/updates-and-stories/

#### Acknowledgements

- AMDS Working Group: Michaela James & Leah Watts (AMDS), Robert Choveaux & Hine Hausman (Waka Kotahi), Mike Tapper (Beca), Carol Mā (HEB) Pam Fletcher, Kyran Fergusson (Downer), Kris Garner (Fulton Hogan), Elke Beca, Stephen Martin (WSP)
- AMDS RCA Working Group



#### Hei konā mai Visit the AMDS website for updated information:

https://www.nzta.govt.nz/amds



New Zealand Government

# **Closing Karakia**

Kia whakairia te tapu Kia wātea ai te ara Kia tūruki whakataha ai Kia tūruki whakataha ai Hui e, tāiki e

